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PUBLISHER of TIMELY KNOWLEDGE

Handbook of Research on Representing Health and Medicine in Modern Media

Gülşah Sarı
Bolu Abant İzzet Baysal University, Turkey



A volume in the Advances in Linguistics and
Communication Studies (ALCS) Book Series

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Media and Health Communication Campaigns	1

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Health communication campaigns are a significant attempt that makes people aware of health risks and aims to inform the public about numerous issues that threaten public health. Media is the totality of communication channels and tools used to collect, store, and convey information or data to the public. Also, the media shape the behavior of the public through advertising and entertainment in the way it uses language and images. Within this framework, media is arguably one of the most utilized and efficient tools in terms of spreading public health messages and endorsing disease prevention. As its name would suggest, health communication campaigns are a vital part of the health promotion programs and strategies. In this sense, the media have many benefits for developing great health communication campaigns. Briefly, the purpose of this chapter is to discuss the use of media in health communication campaigns and campaign processes.

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Esra Fener, Mugla Sıtkı Kocman University, Turkey & Istinye University, Turkey

In today's technology age, our communication style has changed and social media channels that provide remote and mutual interaction on digital platforms have become an important communication tool. In this digital communication age, when the need for remote communication has increased and is needed more with the pandemic period, it is seen that health information is shared more and more on social media platforms. In this process, it is seen that the health ministries of all countries, especially the World Health Organization (WHO), actively use social media channels as well as media channels for sharing health information. In this chapter, basic information about social media, social media channels, health communication, health communication in social media, and the effect of this communication on health literacy will be explained. For this purpose, the relevant social media platforms and studies have been examined and conveyed.

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The content presented in the media, especially with the element of fear, appears to be the most important factor in the formation and spreading of phobias related to diseases. Especially when it comes to epidemics, the influence of the media increases remarkably. Individuals now use digital media as the initial reference source, especially on issues related to their health, and tend to see social media as a reference platform. However, uncontrolled information, conspiracy theories, and information pollution spread through social media make the subject difficult to understand; online shared manipulative news, excessive and unfounded information cause fear and panic. These posts about vaccines affect the perception and attitude towards vaccines. In this study, the comments and social media posts will be analysed using content analysis and discourse analysis methods in order to reveal the effect of social media in vaccine rejection and hesitation.

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The concept of health communication has transformed into the concept of ‘strategic health communication’ in the 21st century, especially with the increasing inclusion of the private sector in health communication practices. Changes and transformations experienced in the 21st century have differentiated the perception of health and illness. In this regard, the biomedical model based on health has given place to the social model, gained a health-based definition, and started to be regarded as a whole well-being from a physical, mental, and social aspect. In this chapter, considering that the concepts such as ‘health’ and ‘illness’ do not exactly refer to the biological realities and health is a social and universal institution, the reflections of the new paradigm in question on the disciplines of communication and public relations will be analyzed and scrutinized with regard to the health and illness paradigms that have changed and updated with the COVID-19 pandemic.

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Seyida Erkek, Necmettin Erbakan University, Turkey

Social media networks have become platforms that the private and also public sector health corporations use for communicating with their patients and also finding solutions for their needs. To establish a healthy health communication in between the patients and the health organisations and facilities and also to cover the needs of patients to reach true information is very important. Because of this, the performers using the social media must be examined. In this study, the authors examine and study the targets and the communication strategies of medicine companies by using the social media and also their medicine specifications to make a harmony in between these organisations and their products. In this study, the content analysis method is used to examine the Facebook page of Pfizer company in September and October 2020 posts. As a result of this Facebook page study of the company, the authors saw that 50% of the posts are acknowledgments, 31% about treatments of illnesses, and the rest (19%) are greetings.

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Mehmet Karanfiloglu, Faculty of Communication, Hatay Mustafa Kemal University, Turkey

In the digitalized world, the use of social media is increasing and spreading to many areas. Moreover, the process of digitalization of everything transforms the media tools and fits mass communication into digital coding together with interpersonal communication. Health communication ensues between doctors, patients, and other healthcare professionals, and its strength is important. Health institutions, doctors, and patients can now communicate through new media and discuss health-related issues through these channels. Many phone applications have transformed health into e-health by digitizing the patient-doctor relationship. On the other hand, the coronavirus (COVID-19) pandemic, which spread from China to the whole world and affected almost every country in a short time, forced the world to a more isolated lifestyle. This study investigates the role of new media opportunities in health communication during the pandemic. In this context, the literature research is examined.

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Precede: Proceed Model for Health Communication – An Analysis of COVID Coverage in Indian
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Archana R. Singh, Panjab University, India

Priyanka Ohri, Panjab University, India

Coronavirus was declared a pandemic on 11th March 2020. Since then the events around the world have unfolded quickly, and by August 2020, India was emerging as a COVID-19 hotspot. With increasing threat to the people around the world, it became pertinent to evaluate health communication pertaining to the pandemic. Consequently, this chapter analyses the applicability of PRECEDE-PROCEED Model (PPM) on the newspaper coverage of COVID-19 in India in two leading newspapers, with the unit of analysis being the headlines on front pages. Results of the analysis show that the coverage of COVID-19 witnessed a gradual increase in the both the newspapers, and the coverage was aligned with the model in terms of disseminating new and evolving information to create awareness and facilitate adoption of new behaviour. However, the coverage faltered at times as far as assessment of administrative policy was concerned.

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Health Risk Communication and Media..... 123

Banu Kumbasar, Istanbul University-Cerrahpaşa, Turkey

Risk communication is a concept defined by many organizations like World Health Organization (WHO) and Centers for Disease Control and Prevention (CDC). Effective risk communication is a complex process. It is an interactive process of exchange of information and opinion among individuals, groups, and institutions. Risk communication is part of the risk management process, with the primary aims to promote awareness and understanding of risks. In the risk management process, risk communication is at the center. There are a number of approaches to the process of risk communication and its components, including how messages are sent and received. The management of public health outbreaks has always included a specific communication component in the form of warnings, risk messages, evacuation

notifications, messages regarding self-efficacy, information regarding symptoms, and medical treatment, among many others. Media can play a significant role for raising awareness of the health issues. But the difficulty is to find the right channel of communication for the target audience.

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Risk Communication and Media in Pandemics 140

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Pandemics as global crises affect our daily routines and practices nowadays. On 11 March 2020, WHO announced the COVID-19 as a pandemic. As the COVID-19 is a communicable disease, public health practices constitute the major preventive mechanism as primary protection besides treatment. Risk communication is essential for public awareness, preventive measures, and containing the outbreak during the pandemic. In a broader aspect, “crisis and risk communication” corresponds to a greater frame that consists of urgent crisis communication, empowering the decision-making process, and building a communication network between the experts and the common. The media plays an important role in conveying information amongst the risk communication experts, administrators, and the common. Pandemic is a dynamic period. In this period, changes are possible in human perception, sensitivity levels, and behaviors. Uncertainty is present in this course. To overcome this uncertainty, correct risk communication with media collaboration is essential.

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Hikmet Tosyalı, Maltepe University, Turkey

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The new form of coronavirus disease (COVID-19) was declared a global pandemic by the World Health Organization on March 11, 2020. Then, the citizens were required to stay in their homes. In this process, social media has become the users’ window to the global village. With the prolongation of the isolation process, the use and importance of these platforms in communication, entertainment, socialization, and access to instant information about the pandemic have increased. People and institutions responsible for pandemic management have started to frequently benefit from social media platforms in risk communication activities to create public awareness about the disease and reinforce individuals’ beliefs to comply with the precautions. In this study, the person responsible for COVID-19 pandemic planning and response in Turkey, the Minister of Health’s, Twitter account was analyzed. The posts shared by the Minister of Health were subjected to content analysis, and the messages conveyed to the citizens were examined from the perspective of the health belief model.

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Role of Media in Health Literacy 172

Seçil Özkan, Gazi University School of Medicine, Turkey

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The World Health Organization defines health literacy as the cognitive and social skills which determine the motivation and ability of individuals to gain access to understand and use information in ways which promote and maintain good health. Health literacy improves the life expectancy and quality and removes health inequalities. Health literacy includes the stages of reading, listening, analyzing, participating, and

making decisions and adapting to life. An infodemic is an overabundance of information. It includes deliberate attempts to disseminate wrong information to undermine the public health response and advance alternative agendas of groups or individuals. Mis- or disinformation can be harmful to people's health, threaten precious health gains, and lead to poor observance of public health measures, thus endangering countries' ability to stop the pandemic. Media is one of the important sectors in health and health literacy. The concepts of infodemic became a current issue with the COVID-19 pandemic and revealed how important the role the media plays in intervening the health problems is.

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With developing technologies surrounding human life, communication practices have increasingly become digital, and communication patterns have started to continue as an extension in these digital environments. Communication networks have become crucial platforms in disseminating information with the spread of social media networks via Web 2.0 and the participation of individuals in these networks globally, and these networks play an active role in the dissemination of information. Thanks to the interactive nature of social media, users can actively participate in the process, comment, and create content. Having so many content producers or resources leads to misinformation in an abundance of information, which in turn causes an infodemic. In this context, this study conceptually addressed the misinformation that individuals were exposed to through social media during the Coronavirus pandemic and the infodemic it caused, and the information, skills, and advice people might need in order to become health literate were included in order to overcome it.

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It is stated that the media is the most influential social tool on creation/shaping of health behaviors of children and adolescents. Most of the individuals that pose into the media tools are misinformed about numerous facts that are either wrong or manipulated about health, and this information adversely affects the health behaviors. In this study, a compilation was conducted with the aim of both raising the awareness of media literacy approach in health promotion concept and emphasizing that the usage of educational methods implemented in the media literacy might also be used by nurses.

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Vahit Çalışır, Iskenderun Technical University, Turkey

Disinformation as an activity of disseminating misinformation finds its justification from the beliefs of individuals. These beliefs are like psychological barriers in minds to see the reality due to naive realism. The power and information relationship triggers authority seekers to produce their own truth. This truth mainly resembles what people want to believe. The post-truth era is proceeding to destroy the truth through making individuals skeptical to the truth. And their means to convey those misinformation is social media. In this chapter, the relationship among the post-truth era, naive realism, and disinformation is focused in terms of COVID-19.

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Sevilay Ulaş, Near East University, Cyprus

This study reveals the role of social media tools and applications in disseminating information about COVID-19 in the COVID-19 process. While discussing the role of social media in the ongoing COVID-19 pandemic process, it will be evaluated with the applications of different institutions. In the study, which will be considered from a public relations perspective in general, it is aimed to reveal a general perspective on the communication activities of the institutions with the target audience and their followers through social media practices. In this study, which is a compilation in this direction, the changing motivations of the followers and the role of social media in this process will be revealed.

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Levent Kiylioğlu, Zonguldak Bülent Ecevit University, Turkey

AIDS (acquired immunodeficiency syndrome) caused by the human immunodeficiency virus (HIV) is one of the deadly epidemics that affected millions of people, especially in poor sub-Saharan Africa. Sexual intercourse is the most important transmission route of HIV. Condom and mutually faithful sexual relationships are accepted as the main methods of protection against HIV risk today. Media is an important tool that informs, enlightens, and affects the public. Scientific studies have revealed that the media has important functions in prevention from HIV. This study focused on the media's role in HIV prevention. Today's media is generally divided into mass media and social media. Exposure to mass media programs about HIV prevention topics generally can help increase HIV/AIDS awareness and reduce risk behaviors. Social media, even if not used sufficiently in countries where HIV is common, has also an important role in informing and educating people about HIV/AIDS, its transmission, and prevention.

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Mine Halis, Bolu Abant İzzet Baysal University, Turkey

Selma Tepret, Kocaeli University, Turkey

Zafer Çamlıbel, Sakarya University, Turkey

Muhsin Halis, Bolu Abant İzzet Baysal University, Turkey

For people who want to be healthy, contemporary developments have made it possible to meet this need from other countries. It is the distinctive feature of medical tourism that those who want to be treated outside their own country for various reasons travel for treatment purposes. The aim of this study is to evaluate the medical tourism potential for Kocaeli. For the research, 15 health facilities, including one public university, two public health facilities, and 12 private health facilities which have deserved Health Tourism Certificate, have been determined in Kocaeli. In addition, officials from the accommodation sector and public bureaucracy who are competent, and decision-makers on medical tourism were interviewed. The medical tourism potential of Kocaeli has been determined in terms of competitiveness criteria by analysing the data collected as a result of the interviews. As a result, even if the government puts emphasis on health tourism in Turkey, it has been observed that there isn't enough competitiveness in public hospitals.

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Uğur Gündüz, Faculty of Communication, Istanbul University, Turkey

Nilüfer Pembecioğlu, Faculty of Communication, Istanbul University, Turkey

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The Relationship Between Organizational Culture and Organizational Commitment: A Research in Private Health Institutions 308

Mine Halis, Bolu Abant İzzet Baysal University, Turkey

Muhsin Halis, Bolu Abant İzzet Baysal University, Turkey

Organizational culture fulfills the most important functions in order to reach organization goals. At the same time, the existence of the relationship between organizational culture and organizational commitment has been determined by many academic studies in the past. With this study, suggestions were presented to the organizers of the health sectors which should have strong organization structure. In the introduction part of the chapter, there is a brief description of what the purpose of working is, how it is to be done, and in which context it will be completed. Organizational culture in the first part and organizational commitment in the second part are discussed literally. Then the findings obtained based on the research data were included, and the study with the conclusion and suggestion was completed.

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Melike Boztilki, Uskudar University, Turkey

Çiğdem Uludag Guler, Istanbul University, Turkey

Sedanur Demir, Kocaeli University, Turkey

Abdulkadir Senkal, Kocaeli University, Turkey

Turkey has been fighting against Coronavirus since March of 2020. During this period, healthcare workers who have been at high risk of becoming infected and transmitting the virus to their relatives were prohibited from resignation and going abroad. In the context of these prohibitions, this study aims to reveal how the stress levels and compulsory citizenship behaviors of healthcare workers were affected during the early stages of pandemic. According to the results of the study, middle-level stress, low-medium compulsory citizenship behavior, and high dissatisfaction with the income level and working conditions have been identified among healthcare workers. In addition to this, intention to quit or stay in job has not been changed during the first three months of the pandemic.

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Gülşah Tamer, Istanbul Gelisim University, Turkey

While some segments of society may want to be promoted and informed about products and services, some segments argue that most of the advertising activities can negatively affect human health due to poor control. Considering that the advertisements will mislead individuals and affect the health of the society in a positive way, the existence of advertising bans is considered an accurate decision to protect public health. Due to its advertising structure, it turns healthcare into a commercial commodity and sells healthcare. This situation disrupts the social structure of the health service and makes the service a subject of competition between institutions and individuals. It is seen that obstacles are put in this regard and serious sanctions are imposed. Health personnel also have important duties to prevent health from being a commercial good and to provide a respected health environment.

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Isabell Koinig, Alpen-Adria-Universität Klagenfurt, Austria

The literature describes a pandemic as a unique form of health crisis that requires intensive communicative efforts. The primary aim of this study is to investigate how COVID-19 health communication campaigns are designed on three continents to get individuals to comply with the proposed actions and measures. Results indicate that the prevalence of emotional messages correspond with previous research findings, which demonstrated that similarity with a testimonial and narratives can be useful tools to increase message effectiveness. Hence, government officials are advised to invest in message presentation.

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Gülşah Sarı, Bolu Abant İzzet Baysal University, Turkey

Rengim Sine Nazlı, Bolu Abant İzzet Baysal University, Turkey

Mass media are important mechanisms of influence that affect individuals' attitudes as well as their purchasing behavior. During COVID-19 pandemic process, many brands and service sectors on television, which is one of the important communication tools that people receive information and follow, have appeared on television screens with their advertising themes emphasizing that they are with the public during the "social isolation" period. In this study whether the advertisements broadcast during the COVID-19 process are found sincere by the audience and whether COVID-19 is considered as a commercial competition by the brands were evaluated with the reception analysis performed on Turkcell GSM operator sample. As a result of the study, although the participants thought that the brand turned the crisis into an opportunity, it was determined that the messages "togetherness," "longing of our loved ones," and "the need to wait patiently during this period" placed in the advertisement text were decoded by the audience by dominant reading.

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Investigation of Social Media Sharing Attitudes and Practices of Individuals With Different Mental Structures in COVID-19 Outbreak Process 402

Murat Cem Acaralp, Near East University, Cyprus

Nuran Öze, Near East University, Cyprus

This chapter explores the effects of the stress caused by the epidemic on the individuals of the society with the effects of decisions taken during the pandemic and social media on people with different mental structures. The perception of stress/discomfort and insufficient self-efficacy in individuals were measured using the electronic questionnaire technique, and the perceived stress scale (PSS) was used to ensure a clearer perception of items. An online survey was conducted between 25/06-15/07/2020 by reaching 167 people. Awareness of the COVID-19 outbreak, their thoughts on the process, and the effects of the news they encountered in the media during this process were measured using the PSS scale. According to the research findings, the knowledge and awareness level of the participants about the epidemic process and the virus was found to be very high; as the age level increased, the stress/discomfort level increased, and the insufficient self-efficacy level remained at a lower level; the insufficient self-efficacy level is higher in younger ages than in older ages.

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Impact of Social Media on Pandemic COVID-19 Outbreak 422

Ranjit Barua, CHST, Indian Institute of Engineering Science and Technology, Shibpur, India

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Nibedita Bardhan, Calcutta University, India

There are lots of social media tools that are accessible for medical or healthcare professionals, which include different social networking blogs, microblogs, media-sharing sites, wikis, virtual reality. All these different media tools can be utilized to develop or improve specialized networking and organizational promotion, education, patient education, patient care, and different public health agendas. But they also can perpetuate the risks to patients and healthcare professionals regarding the circulation of low-quality information, violate the patient privacy, and also have legal issues. To prevent all these risks, professional organizations and healthcare institutions have introduced a few guidelines. These guidelines were established to deliver emergency medicine residency programs control with leadership and best perform in the suitable practice and guidelines of social media but are valid to all residency programs that desire to create a social media presence. In this chapter, the authors describe how social media made their impact on this pandemic COVID-19 situation.

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Ayşe Konac, Healty Science, Turkey

Yuksel Barut, Healty Science, Turkey

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Ferihan Ayaz, Gaziantep University, Turkey

The COVID-19 pandemic has reached a level that threatens the health of the whole world. This study aimed to prevent misinformation on this subject by examining the death-related dimension of COVID-19 disease. In the study, the internet archive of three newspapers (Sabah, Hürriyet, and Sözcü) with the highest circulation as of October 2020 was searched with the keywords “corona death” and “COVID-19 death.” A total of 120 contents in three newspapers (40 items from each newspaper) were selected by a simple random sampling technique and all of them were subjected to content analysis. As a result, the COVID-19 disease was handled in a panic-inducing manner. This situation reflected the images. The deaths will increase even more in the winter months of 2020. Although there are initiatives regarding vaccination, not all people can benefit equally in the short term. Measures are often emphasized, especially by the Minister of Health. While COVID-19 deaths are increasing all over the world, how are they so low in China? This is a question in the contents.

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Analysing Digital Media Contents Representing COVID-19 Pandemics With “21-K Method” 461

Elgiz Yılmaz Altuntaş, Galatasaray University, Turkey

Nebahat Akgün Çomak, Galatasaray University, Turkey

COVID-19 was originated in Wuhan city of Hubei Province, China in December 2019 and has seen many countries ask people who have potentially come into contact with the infection to isolate themselves at home or in a dedicated quarantine facility. In the study, the authors aimed to analyse the context of news and informative scientific discourses of World Health Organization and Turkish Ministry of Health published in digital media with “21-K” method, which is a content analysis method developed by the authors. The categories to be used in the “21-K” method and their discursive examples are as follows: Topic; Heroes: Primary Heroes, Secondary Heroes, Living Heroes, Dead Heroes; Contrasts; Culture; Intersection; Intent; Adoption; Word/Word Games; Rules; Badness; Fight; Proving; Fear; Crisis; Cunning; Anger; Anxiety; Loss; and Codes.

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The Use of Twitter for Informing the Public in the COVID-19 Epidemic: Example of Health

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Nural İmik Tanyıldızı, Fırat University, Turkey

İlkay Yıldız, Bingöl University, Turkey

The coronavirus disease (COVID-19) has influenced the whole world from the moment it appeared. The epidemic had implications in many different areas of all countries of the world. Turkey is among the countries affected by the COVID-19. In this study, the uses of Twitter and the levels of informing the public of COVID-19 Science Committee Members in Turkey were examined. In this process, it was thought that the public needed more information about the epidemic. In this study, 10 COVID-19 Science Committee Members were determined by drawing lots. Their tweets on Twitter were investigated using both qualitative and quantitative content analysis methods. These tweets were analyzed within the categories determined according to content analysis. This study found that the Twitter posts of members of the scientific committee were important in informing the public.

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Precaution or Stigma? Older Adults in the Turkish National Press During COVID-19 Pandemic 495

Nilüfer Pınar Kılıç, Faculty of Communication, Ankara University, Turkey

Coronavirus disease (COVID-19) has led to an increase in stigmatizing and discriminatory discourses against older individuals in the community. Explaining that older adults are the highest risk group, labeling individuals based on chronological age instead of personal characteristics, restrictive measures taken, and the way these measures are framed and presented in mass media resources for these individuals reinforced negative stereotypes such as “illness,” “mental decline,” “uselessness,” “isolation,” and “poverty.” In this chapter, news media, as one of the sources leading to the circulation of negative messages about individuals of older age, is reviewed; stigmatizing and discriminatory statements and applications upon the appearance of older adults in Turkey in the national press (Sozcu, Hurriyet, and Sabah newspapers) are discussed, and solution have been made.

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Subir Sinha, Dum Dum Motijheel College, India

COVID-19 is the cause of the greatest pandemic of the century that affects almost every nation of our globe. In India, mass media has played a significant role in this pandemic situation. The media coverage revealed fearlessly the condition of COVID-19 and provides a pictorial view of the situation in front of the readers and viewers. The main objectives of these fearless journalistic works were to provide the public valuable authentic information, create awareness among the public, eliminate fake propaganda and fake news, highlight the problem face by the ordinary public, and to provide the government a medium to speak with the public for the public interest. Mass media served as a vital weapon to fight against COVID-19. The valuable information and instructions provided by mass media created awareness among the public and which played a major role to deescalate the graphical representation of active COVID-19 cases. The outbreak of COVID-19 and the dogmatic approaches of the mass media in the pandemic situation have recalled the concept of media as the third pillar of democracy.

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Being Autistic in Turkey and the Representation of Autism in Media 522

Tuğba Demir, İzmir Kavram Vocational School, Turkey

Autism is an innate or developmental difference that occurs in the first years of life. While the number of individuals with autism in the world is increasing day by day, the importance of what should be known about autism also increases. However, it is still not possible to say that this information is sufficient. The definition of individuals with autism and their health problems, what autistic individuals do to express themselves, and who the individuals with autism are and their representatives are important. Some basic points such as how to raise awareness about the lives of individuals with autism have still not been overcome. The main theme of this study is how the media addresses the issue of individuals with autism, their problems, and needs. The research question of the study is how to read the reflections on autism through the media.

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Foreword

The Magnificent Süleyman, who ruled the world centuries ago, inherited the importance of health to human beings by saying “There is no valid object in the public like the state; the state is like a breath of health in the World”. Since those days, many studies have been carried out in order to be healthy and stay healthy. Health communication also performs an existential service on behalf of human beings while building a bridge between health and communication.

The transformation in traditional media and developments in digital communication have caused many communication applications to take new forms and the emergence and of strengthening of health communication field. The interactive nature of digital communication has enabled the health communication’s stakeholders and the relationships between stakeholders to progress in a healthy and rapid manner.

The media, has extremely important functions such as promotion, awareness raising, warning, and taking precautions in health issues that can be classified under many headings, from people with a simple cold to deadly cancers, people with serious infectious diseases such as jaundice, AIDS, Covid-19, to people with disabilities. After media’s informing, taking precautions and forming public opinion tasks, it undertakes the task of the 4th Force. Today, people can easily access the content they want on social media with their internet-based smart devices; social media content providers have the opportunity to announce epidemic news, risky areas, measures taken, medicines found, and vaccines developed by overcoming the problem of time and space as well. A serious health service can be provided to the society through online conferences that are open to the society and even the world by healthcare professionals through social networks. Websites of formal and informal organizations inform people around the world about health.

Especially in these days when the Covid-19 epidemic is prevalent all over the world, it supports the public with both traditional media and social media broadcasts, providing financial and moral support.

This study you are holding makes a significant contribution to the field of health communication in today’s world where strategies and practices for traditional and digital health communication are discussed, economic planning is made accordingly and large budgets are spent, and great efforts are made to keep humanity healthy.

Studies giving examples from Turkey, China, India, Australia and Austria arises the importance of the field of health communication worldwide.

We would like to thank our colleagues who have inspired us in the studies that contribute to the field of health communication from traditional and new media from the west to the east and wish you pleasant reading.

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Preface

The importance of media is obvious in the face of people's needs such as getting news and being informed. After the global Covid-19 pandemic in the world, the importance of media in health has once again been seen. People remained in quarantine in their homes as a result of the pandemic, and during this period, television, newspaper and social media channels were the media where they received news and information. Media consumers get information from social media in the fastest and most intensive way. Making sure which one is correct and reliable among the information that circulates throughout the day highlights the importance of media literacy. Factors such as the channels through which media consumers obtain information in particular, the accuracy of the information presented, and the circulation of information are among the issues discussed in this book.

The book titled *Handbook of Research on Representing Health and Medicine in Modern Media* attempts to discuss health communication in two contexts. First, the media, which provides critical health information such as Covid-19 pandemic, discusses the methods of media consumers' obtaining information through modern digital channels and the information provided in terms of media literacy. The second context seeks to develop critical thinking about health communication.

The main topics highlighted in the book titled *Handbook of Research on Representing Health and Medicine in Modern Media* are infectious diseases, health communication campaigns, media ethics, health literacy, risk communication, digital platforms such as television and social media in health communication, and the impact of media on individuals and society.

In the first chapter titled *Media and Health Communication Campaigns*, the use of media in health communication campaigns and campaign processes are discussed.

In the second chapter of the book, under the title of *Social Media and Health Communication*, basic information about social media, social media channels, health communication, health communication on social media and the effect of this communication on health literacy are discussed.

The third chapter of the book is titled *Social Media and Health Communication: Vaccine Refusal / Hesitancy*. In this chapter, comments and social media posts are analyzed using content analysis and discourse analysis methods to reveal the effect of social media on vaccine rejection and hesitation.

In the fourth chapter titled *Health Communication Concerning The Novel Coronavirus Pandemic*, the concept of health communication, the history of health communication, methods used in health communication, health promotion strategies and health literacy are discussed especially in the context of the modern media of the new age.

In the fifth chapter titled *Health Communication and Social Media: A Study About Using Social Media In Medicine Companies*, the goals and communication strategies of pharmaceutical companies are discussed in the context of social media.

The sixth chapter titled *The Role of Social Media Use in Health Communication: Digitized Health Communication During COVID-19 Pandemic* examines the role of new media in health communication during the pandemic.

The seventh chapter of the book examines how Covid-19 pandemic is featured in two important newspapers of India with the title *Precede - Proceed Model for Health Communication: An analysis of Covid coverage in Indian newspapers*.

In the eighth chapter titled *Health Risk Communication and Media*, basic concepts and processes related to risk communication are explained.

In the ninth chapter titled *Risk Communication and Media in Pandemics*, behavioral models and risk perception of society in pandemics are examined and risk communication strategies and the role of the media are defined.

In the tenth chapter titled *Risk Communication and Social Media: COVID-19 Pandemic Planning and Response in Turkey*, twitter account of the Minister of Health of Turkish Republic, who is responsible of planning and intervention of Covid-19 pandemic, is examined. The tweets shared by the Minister of Health are subjected to content analysis and the messages conveyed to the citizen are examined in terms of the Health Belief Model.

The eleventh chapter, entitled *Role of Media in Health Literacy*, discusses the role of media in health literacy.

The twelfth chapter of the book is entitled *Health Literacy Against Misinformation and Infodemic Spread In Social Media During The Coronavirus (Covid-19) Pandemic: The Lie Epidemic Caused by Misinformation*. The misinformation that individuals are exposed through social media during the coronavirus epidemic and the infodemia it causes are mentioned.

In the thirteenth chapter titled *Could There Be An Alternative and Method of Media Literacy in Promoting Health In Children and Adolescents?: Media Literacy and Health Promotion*, a compilation is conducted in order to raise awareness of the media literacy approach in health promotion and emphasize that education methods applied in both media literacy can be used by nurses.

In the fourteenth chapter titled *Disinformation, Post-Truth and Naive Realism in Covid-19: Melting The Truth*, the relationship between post-truth period, naive realism and disinformation is discussed in terms of COVID-19.

In the fifteenth chapter titled *The Role of Social Media on Dissemination of Information During Covid-19 Pandemic: Social Media, Dissemination of Information, Covid-19*, the changing motivations of social media followers and the role of social media in this process are revealed.

The sixteenth chapter titled *Media and Public Health In The Context of HIV / AIDS* discusses lack of information about how epidemics spread through media is addressed.

The seventeenth chapter titled *Competitiveness in Medical Tourism: An Evaluation On Kocaeli Medical Tourism Market* assesses medical tourism potential of Kocaeli, a city which is in the West of Turkey.

In the eighteenth chapter titled *Case Study of Gender and Career Choices: Being and Becoming Medical People*, information is given about the status of being a woman in the medical field and encountering gender inequality related to this choice.

In the nineteenth chapter titled *The Relationship Between Organizational Culture and Organizational Commitment: A Research In Private Health Institutions*, recommendations are made to health sector organizers who should have a strong organizational structure.

Preface

The twentieth chapter titled *Compulsory Citizenship Behavior and Perceived Stress Level in the Pandemic Process A Research on Healthcare Professionals* reveals how healthcare workers' stress levels and compulsory citizenship behaviors are affected in the early stages of the pandemic.

In the twenty-first chapter titled *The Role of Advertisements In Promoting Healthcare Services and Their Effects On Corporate Image*, the role of advertisements in the promotion of health services is discussed.

In the twenty-second chapter titled *Designing COVID-19 campaigns to achieve individuals' compliance: Examples from Austria, the U.S. and Australia*, how COVID-19 health communication campaigns are designed on these three continents to enable individuals to adhere to recommended actions and measures is put forward.

In the twenty-third chapter titled *Opportunity or Togetherness? Reception Analysis For Advertisements Published In Covid-19 Process: Turkcell Case*, whether the advertisements broadcast during the Covid-19 process are found sincere by the audience and whether Covid-19 is accepted as a commercial competition by the brands are evaluated with the reception analysis conducted in the example of Turkcell GSM operator.

In the twenty-fourth chapter titled *Investigation of Social Media Sharing Attitudes and Practices of Individuals with Different Mental Structures in Covid 19 Outbreak Process*, with the decisions taken during the epidemic, the effects of social media on people with different mental structures and the effects of stress caused by the pandemic on the members of the society are tried to be understood.

In the twenty-fifth chapter titled *Impact of Social Media on Pandemic COVID-19 Outbreak*, how social media has had its impact on the Covid-19 outbreak is discussed.

In the twenty-sixth chapter titled *The Role of Social Media in Preventing the Covid-19 Pandemic*, the role of media in preventing the spread of COVID-19 is reviewed and a number of key ideas and examples from previous scientific studies is summarized.

In the twenty-seventh chapter titled *Covid-19 Deaths on the Digital Media*", the death-related dimension of Covid-19 disease and preventing misinformation on this subject are aimed.

In the twenty-eighth chapter titled *Analysing Digital Media Contents Representing Covid-19 Pandemics With "21-K Method"*, news and informative scientific discourse which are broadcast on digital media of World Health Organization and T.R. Ministry of Health are analysed with "21-K" Method, content analysis method developed by the authors themselves.

In the twenty-ninth chapter titled *The Use of Twitter For Informing the Public in the Covid-19 Epidemic: Example of Health Science Committee of Turkish Ministry*", Covid-19 Scientific Committee Members' use of twitter and these members' level of how they inform the public are examined.

In the thirtieth chapter titled *Precaution or Stigma?: Older Adults in the Turkish National Press During COVID-19 Pandemic*, stigmatizing and discriminatory statements and related applications against the elderly in Turkey about their taking part in national press (Sözcü, Hürriyet and Sabah, three national newspapers being sold much in Turkey,) are discussed and solutions are presented.

In the thirty-first chapter titled *Covid-19 and the Mass Media: A Scenario of the Pandemic in India*, the relationship between the mass media in India and the Covid-19 pandemic has been studied.

In the last chapter titled *Being Autistic in Turkey and the Representation of Autism in Media*, how media addresses autism and problems and needs of individuals with autism are discussed.

In conclusion, this book is very important in terms of offering detailed interdisciplinary data for journalists, reporters, researchers, practitioners, public health officials, social media analysts, researchers, academicians, and students interested in health and medicine and the impact of the media on health and medicine.

Acknowledgment

As an editor, I owe a great debt of gratitude to my dear academics who wrote chapters for this book. This book will shed light on researchers, students and academics interested in the field thanks to the contributions of valuable authors. I would also like to express my gratitude to the academics of the editorial advisory board who provided full support in the constitution of the book.

Finally, I would like to thank the IGI Global publishing house for giving me the chance to publish this edited book.

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Chapter 1

Media and Health Communication Campaigns

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ABSTRACT

Health communication campaigns are a significant attempt that makes people aware of health risks and aims to inform the public about numerous issues that threaten public health. Media is the totality of communication channels and tools used to collect, store, and convey information or data to the public. Also, the media shape the behavior of the public through advertising and entertainment in the way it uses language and images. Within this framework, media is arguably one of the most utilized and efficient tools in terms of spreading public health messages and endorsing disease prevention. As its name would suggest, health communication campaigns are a vital part of the health promotion programs and strategies. In this sense, the media have many benefits for developing great health communication campaigns. Briefly, the purpose of this chapter is to discuss the use of media in health communication campaigns and campaign processes.

INTRODUCTION

As a way of introduction, this chapter of the book will compendiously describe the overall approach to health communication campaigns and highlight the role of media in terms of designing health communication campaigns.

Health communication is a young and applied discipline that examining the delivery of health services and health promotion (Kreps, 2015). In light of this, health communication research is characteristically problem-focused and aims to identify critical communication issues that degrade the quality of healthcare services and adversely affect health promotion programs, strategies, and campaigns.

Transmitting a broad array of health messages to a broad range of patients or audiences is compelling. Within this context, the role and responsibility of media (e.g., radio, television, newspapers, magazines, billboards, social networking sites, films, posters, leaflets, smartphone applications, and the internet)

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is essential (Wakefield, Loken, & Hornik, 2010). Media is the collection of means and technologies that use entire institutionalized structures, interfaces, forms, and formats to disseminate emblematic content. Media as a term or word is meant to be narrower than the concept of communication, however much broader than the media that have made up conventional media (Couldry, 2012). In this sense, the media must inevitably be a part of nowadays health communication campaigns. Health communication campaigns and programs concentrated on health promotion and prevention are on the agenda of many countries in the world. However, more attention and investments are required better to comprehend the best way to make health communication campaigns successful (World Health Organization [WHO], 2013).

Mass media plays a pivotal role in people's daily lives (Berger, 2007). Its significance is apparent in the amount of time people spend reading newspapers/magazines, watching television/movies, surfing the internet, listening to music, and playing computer games. The dissemination of information by way of mass media is immediate and accessible around the clock. The quick global spread of information and communication technologies (ICTs), and especially the proliferation of smartphones, personal digital assistants (PDAs), computers, and internet-enabled televisions lend to the ubiquity of the media in everyday life. From this point of view, the integrated approaches of health communication campaigns, social marketing, and media focusing on public health and behavioral change can form in more stable and consistent health behavior changes.

Social marketing is an approach used to change people's opinions, attitudes, and behaviors. In addition to this, social marketing is a proven tool to increase people's perceptions and awareness of health-related issues. Moreover, it stands out as a sustainable and cost-effective method. Therefore, this marketing approach has unique potential in terms of eliminating significant public health problems when used correctly (Evans, 2006). For example, health communication campaigns, including social marketing techniques, were first used in the 1960s to encourage the use of birth control pills in planned parenthood and to preventing tobacco use and facilitating smoking cessation (Mendelsohn, 1976).

In brief, proper use of the media tools and social marketing methods in terms of health campaigns by governments, healthcare providers, and other authorized organizations in the context of health promotion will contribute to gaining a significant advantage in fighting diseases and bad habits.

LITERATURE REVIEW

Many scholarly articles and books on health communication campaigns have been written and published in the last decades and mass media tools were commonly used as the main component in these studies. Because experimental evidence indicates that large-scale media-centered health communication campaigns to be effective in changing people's thoughts, feelings, and behaviors related to health (Becker, Rogers, & Sopory, 1992). In addition to this, the contributions of media to health communication campaigns are well-documented (Davis, et al., 2008). Another detailed evaluation of the campaign literature finds that evidence for campaign impressiveness may be deemed strong in some issues like road-traffic safety and tobacco use, modest in others like nourishment and sporting activity, and weak or nonavailable in still others like breastfeeding and excessive alcohol consumption (Wakefield, Loken, & Hornik, 2010). On the other hand, the results of some studies in the literature also demonstrate that a series of health communication campaigns continue to fail due to adhering to dominant campaign design principles and concepts (Noar, 2012). Alduraywish et al. concluded in their study that doctors are the most frequently used resources for acquiring health information. Besides, they also reported that social media and health

campaigns are the least used resources by individuals to obtain health information (Alduraywish, et al., 2020). However, if health communication campaigns are strategically designed and supported with appropriate communication principles and theories, the rate of achieving successful results increases in direct proportion to this (Atkin & Rice, 2001). On the one hand, new communication technologies are being used progressively in health communication and related fields (Whitten, Kreps, & Eastin, 2005). In parallel with this, Neville, Greene, and Lewis reported in their studies that patients started to adopt new technologies instead of traditional communication ways when communicating with general practitioners (Neville, Greene, & Lewis, 2006). For example, although many patients opt that doctors use electronic mail (e-mail) as an additional tool of communication, particularly for routine affairs, the Masters's review put forwarded that a small number of physicians do (Masters, 2008). To sum up, according to a short literature survey, health communication campaign design needs to be responsive to the characteristics of the target audience.

THE CHALLENGE OF HEALTH BEHAVIOR CHANGE

Human behaviors and lifestyles play a vital role in health and disease. For this reason, behavioral initiatives actively enhance the quality of living. Health communication campaigns are also a forceful tool for familiarizing society with a healthy lifestyle. Besides, behavioral interventions such as healthcare communication campaigns improve disease management and can lower healthcare costs (Fisher, et al., 2011). Such campaigns and interventions are crucial to the efficient operation of public health and clinical medicine and can be characterized as a whole range of harmonious activities to change people's habits for better health. For example, the fundamental principles of health behavior theories suggest that the diagnosis of long-term illness should promote daily routine changes for good health. Various social, perceptual, sentimental, and cognitive determinants are related to behavioral changes (Schwarzer, 2008), and mental state is one of the paramount elements that affect social functioning and daily life activities (Drozd, Lehto, & Oinas-Kukkonen, 2012). The course of behavioral and attitude change contains many phases, each of which offers its own difficulties and requests that have to have come through. Persons' reliance on their capability to make alterations to their accustomedness, together with their understanding of obstacles to these alterations, can radically affect to stick to the management plan till the end. In this direction, examining individuals' experiences and perceptions of health behavior change obstacles can efficaciously help health communicators in the design of health communication campaigns.

MEDICAL MISINFORMATION

Open or free access to the medical information on the World Wide Web and through other readily approachable digital databases and published/unpublished sources has ensured new chances for healthcare providers and patients. However, the reliability of most of this information is questionable or not scientifically proven yet. The major problem with receiving health information from unacknowledged studies, untrusted websites, or unreliable health blogs is that it is not usually easy to decide what is believable. For example, J. Sybil Biermann and colleagues from the University of Michigan found on one website that the fatality rate for a specific type of osteosarcoma was shared at 5%. However, in truth, this rate is about 75%, according to the studies of Bierman and his colleagues (BMJ, 2000). This kind

of misinformation spread in the media can cause people to lose their health and even die. Furthermore, A study conducted by Vosoughi and colleagues showed that misinformation spreads faster and farther than accurate information on virtual platforms (Vosoughi, Roy, & Aral, 2018). On the other hand, four iterations of Health Information National Trends Survey data, gathered in 2003, 2005, 2008, and 2012, were examined to determine the entire population trends the current incidence of internet-based health communication activity. Findings displayed that internet use has increased consistently, with approximately 80 percent of American adults online in 2012. Also, 70% of adults use the internet as the primary source of health information (Prestin, Vieux, & Chou, 2015). Briefly, based on the information mentioned above, millions of people could potentially be affected by distorted health information in the media. Accordingly, the perspective of health information seekers towards a disease, therapeutic approaches, or any health-related procedure can vary significantly. Ultimately, one of the main challenges for health promotion and disease prevention is the dissemination of incorrect or erroneous health information in the community. In that regard, mainstream audiovisual media is a potentially robust way for the dissemination of health information (Thomas, et al., 2018). Besides, as digital health information resources continue to expand, poorly educated people and low-income households will begin to have difficulty accessing health information. In this connection, benefiting individual networks and providing information in versatile formats, resources, and domains will help make health messages easy to access, trustworthy, and influential (Evans, 2006).

GENERAL APPROACH TO HEALTH COMMUNICATION CAMPAIGNS

Just a few decades ago, there were few sources where people could access health information, but information channels for health communication have altered considerably after the 2000s. Within this framework, in the industrialized countries, mass media are among the main tools used in organizations and activities purposed at affecting the medical knowledge and way of thinking of societies (Quattrin, Filiputti, & Brusaferrro, 2015). On the other side, second-generation internet-based applications (i.e., Web 2.0) that offer two-way communication to users emerged in the United States in 2004. Later, in the 2010s, third-generation network technologies (i.e., Web 3.0) started to be developed. It appears that these technologies, which have emerged in the past 20 years, have the potential to dramatically advance promotional efforts in health communication campaigns. Web 2.0 implementations can straightforwardly integrate into the creative mechanism by both generating and delivering information by way of content sharing, collaborative writing, unification, social bookmarking, and social networking. In this context, due to the novelty and potential effectiveness of Web 2.0 and Web 3.0 based informatics and e-learning technologies, the dependence of health promotion implementers on conventional communication channels will decrease (Thackeray, Neiger, Hanson, & McKenzie, 2008).

Communication campaigns are generally described as goal-oriented attempts to inform or affect attitude and behaviors in large masses within a certain period using an arranged set of communication actions and featuring an order of mediated messages in various press (newspapers, newsmagazine) and broadcast (radio, television, internet-based online newspapers, blogs, online video-sharing platforms, etc.) media channels usually to generate non-profit benefits to individuals and public (Zhao, 2020). Also, it is worth emphasizing that definitions of health communication campaigns are considerably uncertain and previous researchers/academicians have commented on the frequent ambiguity in the use of tags like communication campaigns, intervention, mass media campaigns, information, or awareness

program. From another standpoint, campaigns are usually a constituent of large-scale marketing programs. Social marketing is the implementation of commercial advertising thought to support overcome societal and health issues. In other words, social advertising/marketing and campaigns are synonymous with each other (Andreasen, 1994). In a word, social marketing practices consummate communication exertions with other campaign elements. For example, a social marketing intervention to promote early ages inoculation might fulfill a community communication attempt to encourage vaccination uptake with monetary aid in the price of vaccines and an effortless system for procuring vaccines (National Academy of Sciences, 2002).

Health communication labeled campaigns or interventions differ greatly based on their matter focal, design, activities, and strategy, and this is indicated in the scope of instances identified. The range of approaches to study design involve: methodical and exploratory investigations, result-oriented and affordable empirical study, content analysis, a before-after cross-sectional analysis, and cost-effectiveness. Criticism of these examples discloses evidence of the following: weak work designs, lack of theoretical framework, lack of control groups, inadequate use of process evaluation, etc. Besides, as a result of the consensus of researchers, there are four principal assignments health communication campaigns should undertake. These can be listed as follows: setting campaign goals, developing powerful message strategies, delivering campaign messages over convenient channels, carrying out a scientific investigation to inform and assess campaign activities (Zhao, 2020).

Raising people's awareness on issues such as preventing excessive alcohol consumption, controlling tobacco use, fight against drug abuse, sexual health, chronic diseases, mental health, cancer, maternal and child health are only some of the main goals of health communication campaigns. This list can be further extended, with headings such as vaccination, nutrition, physical activity, obesity, and supporting disabled individuals. However, it would not be wrong to state that minimizing the morbidity and mortality rates is the essence of health communication campaigns. In this sense, the first step in designing a practical, thought-provoking, and successful health communication initiative is to define the target audience of the campaign. The reason is that preparing campaign messages in line with people's healthcare needs and lifestyle may be more advantageous than campaigns with no specific target audience. In this connection, it is possible to categorize individuals as baby boomers, Gen Xers, Gen Y, female-male, mother-father, or employee-employer. Accordingly, preparing campaign messages in line with people's healthcare needs and styles will be more advantageous than campaigns with no specific target audience. From this vantage point, it is necessary to use many different communication channels to convey health messages to people with various backgrounds and social status. In conjunction with this, some ways to draw attention to health communication campaigns are parody, humor, fascinating facts, suspense, wordplay, striking expressions, sensuality, vivid visual display, lively language, worth remembering slogans/images, and utilizing top quality creative text, graphics, visuals (Public Health Ontario, 2012). It is significant to strike an issue in health communication campaigns, and the communication and persuasion matrix confirms this. Communication and Persuasion Matrix, developed by William J. McGuire in 1989, is one of the famous theories used to evaluate health campaigns. McGuire is one of the pioneers of research on how mass media messages persuade people, and according to his theory, communication and persuasion matrix displays that attracting an audience's attention and interest is the initial phase towards changing health behaviors (McGuire, 1985).

Although the campaign budget amount is not very high, it is possible to develop campaigns that will affect the attitudes and behaviors of the people and protect public health. In this context, following a

strategic and well-organized path by using language and techniques that will resonate with the target audience will contribute to the success of the campaign in many ways.

USEFULNESS OF MEDIA TOOLS AND IMPACTS ON HEALTH CAMPAIGNS

Over time, media technologies have altered people's relationships. Therefore, within the scope of health communication campaigns understanding how to use media is critical for reducing failures of healthcare systems, saving time, well-managing campaign resources, and expanding campaign capabilities. Besides that, nowadays, there is a wide range of media tools and devices that can be employ as a component of an integrated health communication campaigns. These tools and devices range from wired and wireless hardware and software, readily downloadable mobile applications, and various social surroundings.

According to the Centers for Disease Control and Prevention (CDC), the use of social media channels (such as Twitter, YouTube, Facebook) to spread public health messages has grown markedly and continues to tendency ascend. Using social media platforms has become an effective way to deliver scientifically proven health messages to large audiences in the fastest and most cost-effective routine (Centers for Disease Control and Prevention, 2011). At the same time, online media platforms allow people to decide for themselves when, where, and how they want to reach health-related messages, news, announcements, and advertisements. Briefly, it enhances the usability of content and could affect gratification and reliance on the health messages transmitted. For such reasons, media tools can help spread crucial and informative health messages faster and improve health-related decision-making. In this context, integrating interactive media platforms into health communication campaigns enable health communication professionals to leverage community dynamics/structure and networks to encourage attendance and dialogue.

World Health Organization's predictions for 2030 assert nearly 52 million deaths (76% of the world death rate), proposing a plan of action depending on advancement in health attitude and behaviors (Drozd, Lehto, & Oinas-Kukkonen, 2012). Within this framework, for descriptive intentions, a few remarkable health communication campaigns performed in the United States will be shortly outlined below. When looking through public health campaigns labeled health communication run by the National Institutes of Health (NIH), it is seen that various campaign programs are in different branches. For example, a weekly radio program called Healthy Moments is hosted by the NIH and the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) to improve public knowledge and understanding of diabetes (National Institute of Diabets and Digestive and Kidney Diseases, 2020). Besides, the official Twitter account of NIDDK regularly shares informative tweets. From this point of view, in this campaign program, media communication tools that allow two-way interaction in interpersonal communication are actively used. Similarly, another campaign called Mind Your Risks is conducted by the National Institute of Neurological Disorders and Stroke (NINDS), one of the National Institutes of Health. The content of this campaign program summed up as an intervention designed to inform people about diseases such as high blood pressure, heart attack, and stroke. Many patients with hypertension aware that they may face serious life-threatening health problems such as strokes and heart attacks. However, the vast majority of people still do not show enough sensitivity to control their high blood pressure. In this connection, the main goal of the Mind Your risk campaign is to prevent the risk of stroke in middle age (from the ages 45 to 65) group and to reduce the risk of developing dementia in later life. In a nutshell, educating people about the importance of controlling blood pressure is at the forefront of this health

communication campaign. Printed advertisements, brochures, posters, digital media images, and social media networks are the main media resources used by the Mind Your Risks campaign. Over and above this, various websites, podcasts, downloadable PDFs, handouts, Google hangout videos, animated videos, and slide shows are also other media-based tools used in the Mind Your Risks campaign (U.S. Department of Health & Human Services, 2017). Another crucial communication medium where new media technologies are influential in terms of health communication is online support groups. As Wright's (Wright, 2004) study program and various other scientific inquiries have proved, a considerable number of persons have participated in online support groups and notify obtaining a lot of benefits and experiences from them (Chee, et al., 2017).

The Truth Initiative is a well-known organization that runs a variety of health communication campaigns on tobacco use and nicotine addiction. Also, it is America's largest nonprofit public health organization. The EX Program is one of the corporate tobacco cessation programs designed by the Truth Initiative. This program is a digital tobacco cessation initiative for healthcare strategies and employers. For this reason, it is managing through electronic media channels. The running of The EX program on digital media channels allows the participants to choose the ways they want to get support. In this context, the EX program also personalizes the tobacco cessation process for each participant. Within the framework of The EX program, the privatized support that tobacco users need for the behavioral, social, and physical aspects of tobacco addiction is provided by interactive digital media tools, webinars, virtual educations, tailored e-mails, and text messages regarding the participant's quit status. As a result, it stated on The EX Program's website that approximately 1 million people participated in this program. Furthermore, shared statistics are that 34% of the participants quit smoking within nine months, 96% found this initiative useful, and 93% could recommend this program to people around them (The EX Program, 2020).

THE MESSAGE FORCIBLENESS OF MEDIA BASED HEALTH COMMUNICATION CAMPAIGNS

According to a study undertaken in April 2020 in the USA, the daily media consumption of the average American adult by format is as follows. In terms of mean time spent each day, digital media is the most popular form in the United States with adults spending 451 minutes. This is followed by television with 229 minutes, radio with 95 minutes, newspapers with 9 minutes, and magazines with 8 minutes. (Watson, 2020). In a few words, Americans aged 18 and older spend at least 12 hours each day using consumer media. In addition to this, as of October 2020, the number of active internet users worldwide is 4.66 billion. Also, as of October 2020, there are 4.28 billion mobile internet users, 4.14 billion active social media users, and 4.08 billion active social media users worldwide (Clement, 2020). Considering the statistics given above, it is possible to deduce that the media is an indispensable part of life for many people. Therefore, health institutions aim to use the power of media messages most efficiently while designing health communication campaigns. For example, the CDC has made many important initiatives to improve access to health messages and audience participation in campaigns. The Health Communicator's Social Media Toolkit is a guide developed by the CDC Electronic Media Branch in this context (Centers for Disease Control and Prevention, 2011). In terms of campaign design, this toolkit informs health communicators how to use various popular media channels such as video sharing sites, blogs, RSS (Rich Site Summary) feeds, and mobile apps.

Social media-supported healthcare communication campaigns can help reach people regardless of where they are because of millions of young and old alike use at least one social media platform. According to the Pew Research Center, while only 5% of American adults were users of at least one social media platform in 2005, this ratio increased to 72% in 2019 (Pew Research Center, 2019). In a word, media technologies are also effective in an individual's connections. Although physicians, nurses, and other healthcare personnel remain the primary source of information for the majority of people with health problems, networked resources containing advice from blogs and webinars are also seen as a significant source of medical information in the United States. Two driving forces fundamentally affect online health dialogues. The first factor is the presence of social media tools, and the second is the desire of people who struggle with long-term illnesses to communicate with people in similar situations and other people (Fox, 2011).

Today, media has become a form that can connect billions of people and allow instant communication. Therefore, a world without media is unthinkable. Also, in the 21st century, the media has begun to be seen as the linchpin of the modern information society. In this context, some of the roles assumed by the media in health communication are as follows (World Health Organization, 2015); inform and educate, ensure right and demanded information, interpret information, correct mistaken information, reach a wide range of target audiences, get the story out rapidly, cool down a nervous/curious public, perform a duty as a public watchdog, help frustrate redundant fear and anxiety, seek moral and material support, promote healthy behaviors, attract listeners and viewers. By looking at the information given above, it can be understood more clearly that the media can be an effective message delivery tool when used correctly in health communication campaigns. In short, the omnipresent character of the media, especially, makes it a magnificent tool for drawing attention to particular affairs. In parallel to this, The Institute of Medicine (US) Committee on Assuring the Health of the Public has identified the media as one of the most important actors in the public health system in the 21st century due to its role in shaping public opinion on health-related issues (Committee on Assuring the Health of the Public in the 21st Century, 2002). Within this direction, in recent years, the media has started to be seen as an integral component of health communication campaigns by governments, national health organizations, international bodies, and healthcare professionals within the scope of eliminating incorrect, contradictory, and manipulated information on issues that threaten public health.

The unfolding news coverage of Acquired Immunodeficiency Syndrome (HIV/AIDS) shows a fine example of how a significant health affair can be out of sight to the public eye till the media uncover it (Committee on Assuring the Health of the Public in the 21st Century, 2002). Bertrand et al. analyzed the impressiveness of the 24-health communication campaign on changing AIDS-related information and behaviors in middle income and low countries. At least half of the investigations did indicate an affirmative influence of the media tools in the improvement of the knowledge of HIV infection and decrease of risky sexual attitudes and behavior (Bertrand, O'Reilly, Denison, Anhang, & Sweat, 2006). On the other hand, the media is also a powerful channel to raise essential queries. For instance, the well-known prime time American drama television series ER mostly acts as a platform for health information, with episodes treating the subjects like birth control, childhood vaccinations, and violence (Brodie, et al., 2001). Consequently, news and entertainment media can play a substantial role in solving many health problems.

Health consumers obtain health information from a broad range of sources. In comparison with conventional roads of acquiring health-related information from television, radio, magazines and, newspapers, the internet is cheap, easily accessible, and transfers multifarious ideas. In other words, the growing

number of Internet users and the proliferation of the internet have offered healthcare consumers many excellent alternatives in their health pursuit. Besides, various studies have reported that the internet can potentially affect consumers' decisions to change their health-seeking behavior. For example, Hsieh et al. performed a survey study depending upon an accidental sampling gathered in Taiwan to investigate the correlation between an individual's internet utilization and her outpatient service usage. They discovered that a person with more often utilization of the internet was highly likely to take advantage of more medical care as demonstrated by outpatient clinic visits (Hsieh, et al., 2016).

However, it is worth noting that, web-based health information may not always be as accurate as information contained in academic journals and textbooks. Moynihan and colleagues (Moynihan, et al., 2000) examined media coverage of the risks and advantages for three medicaments in leading national television channels and prime newspapers in the United States. They found that media stories and news about medicines involved unsatisfactory or imperfect information regarding the risks, benefits, and prices of the medications. The theme that emerges from the above two studies (Hsieh, et al., 2016 and Moynihan, et al., 2000) is that the media can sometimes be beneficial and sometimes harmful to people in health-related issues. However, in any case, it is possible to state that the persuasive power of messages delivered to people through media channels is considerably high. In this context, it can sometimes be difficult for people to be sure of the accuracy of the messages displayed in various media channels. The main reason for this is that people's ability to analyze and evaluate any message is different. Therefore, individuals may not always equally benefit from the health content delivered to them through media channels, or some people are more vulnerable to insufficient health information in the media. Health communication campaigns come into play at this point because they are among the primary resources for both health promotion and connections between patients and providers.

Media's forcefulness in health communication campaigns lies in effective written, verbal, and visual communication strategies and policies that can influence the public perception of wellness and increase health literacy (Mheidly & Fares, 2020). In this connection, according to the results of a study conducted by Dutta-Bergman, entertainment-based broadcasts are a more suitable option compared to media organizations with a traditionalist broadcasting approach in terms of health communication campaigns. In addition to this, another striking output from the same work is that interpersonal networks, press media, and the internet are the best tools for disseminating health information to active healthcare prosumers (Dutta-Bergman, 2004). Instead of trusting merely on mainstream styles of communication, some health communication campaigns have used methods containing less customary frameworks like rock concert events, sports player cards, short-films, cinema spots even bar/drink coaters to disseminate health messages (Asogwa & Esimokha, 2018).

SOLUTION AND RECOMMENDATIONS

The healthcare industry is progressively gravitating towards social media to assist, promote, and enhance the disseminate of information and data with the purpose of advance both individual and public health practices. For the reasons stated above, public health entities, international medical and health organizations should take advantage of social media platforms to strengthen health communication campaigns and combat erroneous information and rumors circulating on the internet.

The people who design health communication campaigns have considerable expertise in the areas of health behavior they seek to change. However, specializing in specific health areas does not mean that

these people can create resounding success in health communication campaigns. Cause those who manage the campaign design processes must have advanced skills in subjects such as rhetoric, audio-visual techniques, and media production. For this reason, campaign designers should receive training to use television, radio, and social media networks in the most efficient way throughout the campaign period. At the same time, it will be useful to inform health communicators, physicians, and nurses about how they can improve their interpersonal communication skills by organizing training, seminars, and conferences.

With the development of technology, the use of the internet and social media has become widespread worldwide. So, it is possible to talk about the plethora of advantages offered by social media. Firstly, many applications have developed for social media networks that can be easily used by almost all ages. In this context, healthcare professionals and social workers have become accessible to more people in a shorter time. Currently, websites and mass media are the leading canals for connections between patients and providers. Therefore, it would be beneficial to consider websites and social media platforms as permanent components of health communication campaigns. In summary, social media-based tools allow health communication campaigns to be present to individuals according to their characteristics, needs, and demographic structures. In other words, personalized campaigns have a higher potential to contribute to the emergence of more successful outcomes than traditional campaigns in terms of behavior change. Lastly, private television and radio stations and cable providers should devote more time to broadcasting public service advertisements prepared as part of health communication campaigns and increase the time they donate to the community service.

FUTURE RESEARCH DIRECTIONS

Healthcare providers, state employees, journalists, editors, and broadcasters usually do not fully understand each other's approaches, perspectives, techniques, and targets (Committee on Assuring the Health of the Public in the 21st Century, 2002). This lack of understanding between people leads to the emergence of communication disorders. Thus, health communication campaigns may fail. As a result, it may become more and more difficult to establish effective communication with the public and to ensure equality of opportunity in health care. Because of that, public health authorities and territorial and international entertainment media should be in cooperation to change people's strategic decision-making mechanisms on health-related matters. In summary, in the foreseeable future, it will be beneficial to carry out comprehensive, applied, and scientifically-based studies that will pave the way for media actors, medical professionals, patients, public health communities, and technologists to understand each other better. Furthermore, it will be beneficial to carry out detailed studies on the creation of updated communication models that will improve the innovation network between the healthcare communications industry and entertainment media in terms of health communication campaigns.

CONCLUSION

In this digital age, electronic media tools such as websites, electronic newspapers/newsletters, and social media platforms have started to replace brochures and posters. Therefore, digital media tends to outpace traditional media in delivering health messages. Within this framework, the collaboration between health communicators, media actors, and public health researchers to develop evidence-based case scenarios

will facilitate the integration of media tools into health communication campaigns. The mass media can inform, educate, and strengthen communities with accurate and timely health communication campaigns. Therefore, the public health system and health communicators must gain more skills to improve health and keep up with the communications revolution. Consequently, health communication campaigns have made great contributions to the progress of public health all around the world and they are becoming more and more momentous in terms of health promotion, disease prevention, and control.

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KEY TERMS AND DEFINITIONS

Health Promotion: Health promotion is the process and requirements that allow people to have more control over their health to lead a healthier life.

Health Prosumer: In this communication age, with the increasing personalization of health, people have begun to take more responsibility for their own health. Correspondingly health prosumer means that individuals are both suppliers and consumers of their own health and care needs.

Information and Communication Technologies (ICTs): In its simplest form, ICT refers to the whole of technologies that facilitate communication for people. Accordingly, ICT comprises digital and telecommunication technologies/devices such as the internet and internet-enabled devices, satellite, television, radio, mobile phone, and personal digital assistant.

Public Service Announcement (PSA): A PSAs is an advertisement and promotion broadcast on public/private television, radio, or other communication media for community welfare. PSAs are used to raise awareness in health communication campaigns and other public health promotion initiatives.

Prime Time: Most watched hours of television. Disseminating informative health messages on televisions during prime time is beneficial in terms of delivering health communication campaigns to large masses.

Social Media Toolkit: A social media toolkit is a kind of guide with the information needed to make a media campaign more effective. It contributes to the teamwork of health communicators and health service providers in the design process of online health communication campaigns.

Watchdog: Some people working in the media sector, such as journalists, producers, and film-video editors, consider themselves watchdogs of government agencies or various other organizations. Therefore, they expect the authorized institutions to act transparently towards the public in terms of important decisions to be made in the field of health. If these people are restricted from access to information on some issues, they start to behave skeptically. As a result, they begin to investigate personal, political, and economic reasons that may cause the information to withhold from the public. In this study, the term watchdog is used to mean the role played by the media in health communication campaigns.

Chapter 2

Social Media and Health Communication

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ABSTRACT

In today's technology age, our communication style has changed and social media channels that provide remote and mutual interaction on digital platforms have become an important communication tool. In this digital communication age, when the need for remote communication has increased and is needed more with the pandemic period, it is seen that health information is shared more and more on social media platforms. In this process, it is seen that the health ministries of all countries, especially the World Health Organization (WHO), actively use social media channels as well as media channels for sharing health information. In this chapter, basic information about social media, social media channels, health communication, health communication in social media, and the effect of this communication on health literacy will be explained. For this purpose, the relevant social media platforms and studies have been examined and conveyed.

INTRODUCTION

As a result of the increase in social media platforms and the widespread use of it by all individuals, our communication style has changed and digital channels are used on many issues. In terms of health communication, patients, relatives of patients, chronic patients with certain diseases use social media channels to obtain health information. Health institutions and healthcare professionals also use social media platforms to share information on issues such as increasing health literacy, health education, treatment recommendations, new treatment methods, measures to protect health, and healthy living.

In today's pandemic period, remote digital communication has become much more important, and it is seen that social media platforms that provide instant interaction as well as traditional media channels are used by both public and private health institutions as a need. Besides, it is seen that the recommendations for the protection of public health, healthy living, and protection from infection are mostly

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shared on social media platforms. At the same time, it is observed that the health policy decisions taken regarding the Covid 19 pandemic, the disease prevalence across countries, the rate of disease increase and decrease, and the measures taken by countries to protect public health are also on social media channels.

Social media channels, which do not limit time and space in communication, provide important information and access to users who want to benefit from health services such as health seeking behavior, hospital and physician research, treatment possibilities of health institutions, performance and price comparison, and consulting health-related information. Promotions made on social media platforms that allow global access thanks to their different language features also enable international health tourism, allowing treatment opportunities and options across countries.

Health communication on social media has an important role in improving public health, raising public awareness about health services and healthy living, as well as improving health literacy.

SOCIAL MEDIA

The term social media generally refers to web-based tools that allow individuals and communities to communicate and share content such as information, ideas, personal messages, images, and collaborate with other users simultaneously (Peck, 2014). Social media is a medium that enables community building, socialization and sharing with interconnected networks, as well as opportunities for activities such as learning, acquiring information, purchasing and promotion (Tuten & Solomon, 2015).

With the development of the internet infrastructure and the introduction of the Web 2.0 platform, which is defined as the second-generation internet services, to the world-wide user service, it has gone from one-way information sharing to two-way and simultaneous information sharing. With this transition, everyone has got the right to write and publish their ideas in electronic media. The shared contents have been enriched and have started to be shared as visual, audio contents, videos, movies, clips, songs, etc. as well as written sharings (Boyd & Ellison, 2008), (Kaplan & Haenlein, 2010), (Maness, 2006).

The most important feature that distinguishes and differentiates social media from all other platforms is that it allows people to create and share original content, as well as bringing people together by removing space and time restrictions. Social media channels such as blogs, social networks, content posts, wikis and forums are mostly cost-free environments where people can share their ideas, feelings, happiness and sadness, likes and dislikes, and experiences (Thackeray, Neiger, Hanson, & McKenzie, 2008).

In today's world where the masses are mobile and online, social media can also be considered as a tool that creates a free discussion platform for individuals and institutions, and enables individuals to communicate with each other and with institutions, without the limit of sharing and communication. Social media platforms also have benefits such as being used for public relations, brand and institution positioning, and increasing corporate reputation (Fener, 2016).

Unlike traditional media, social media is a dynamic and living platform. Its biggest difference from newspaper, TV and other print media is that it provides interaction. Social media is a user-oriented platform where everyone has an equal say, and everyone can express their opinions regardless of status. Along with the fact that the use of social media has many positive aspects such as individually participating in different platforms and communities and exchanging information interactively, it is a very important platform for creating brands within organizations and promoting institutions. Social media environments allow sharing without cost and these shares to reach large masses.

Internet technologies, which are used as new communication tools, offer businesses the opportunity to reach new markets, communicate with customers and suppliers, share and interact with low-cost communication. Social media is an important tool for today's businesses to reach their target audiences, interact, communicate, identify customer expectations and maintain customer satisfaction. Social media are online tools that provide many opportunities such as communication, cooperation and sharing among individuals, communities and groups through the internet and technological developments.

Development of Social Media

The Internet was first started as a military project in the USA. This project called Arpanet, in which computers developed by the US Department of Defense are connected to wide area networks, was implemented in 1970 (Mowery & Simcoe, 2002). Developed in the 1980s, the network was opened to researchers alongside its purpose of military use. National Science Foundation in USA in 1985 (*National Science Foundation-NSF*) started creating the internet infrastructure called NSFNET and it was provided to serve universities firstly. In 1990, with the transfer of ARPANET to NFSNET, the network was used as a wider civilian structure and the name "Internet" was used (Auter, 1998), (Rogers J., 1998). With the development of the "World Wide Web" protocol in the early 1990s, the Internet started to spread rapidly.

In the development process of the Internet, communication is addressed in three parts: Web 1.0, Web 2.0 and Web 3.0. Web 1.0 allows a one-way communication from the site owner to the user by creating one-way content and sharing it with the target audience. It covered a period during which the user could not give any feedback. In the web 1.0 period, which existed for more than ten years, almost all institutions and organizations created a website and started to use this site as a promotional medium. Web sites where promotions with content such as audio, video, and photographs directed towards the target audience are done transformed into e-commerce sites in some institutions over time.

In the Web 1.0 period, in addition to e-commerce sites, one of the most important developments was the emergence of the social media platform. Facebook. Facebook was established in 2004 by Zuckerberg and his friends for students in Harvard University to be able to communicate and share information with each other and by becoming widespread in a short time, it included a great number of users within its structure. In this period when web 1.0 and web 2.0 coding were experienced together, both individual users and companies that own e-commerce started to create internet-based social media accounts. This new mechanism of commerce on the internet started to work, especially because of the importance of likes, stars, and recommendations of friends in online shopping (Kaplan & Haenlein, 2010).

The Web 2.0 era covers a period in which users can create content and allow shares such as information, photographs, audio, videos, as well as websites that provide unilateral communication. This technical infrastructure, which allows the content created by users to be liked, shared with third parties, commented on, tagged, etc., allows the rapid dissemination of information, enabling mutual interaction and communication (Berthon, Pitt, Plangger, & Shapiro, 2012).

After the social media phase, coded as Web 2.0, Web 3.0 has taken place with which the huge amount of information accumulated on these platforms is processed, making life easier for users with artificial intelligence programs, automating various processes and making decisions and implementing them. After the transition from one-way Web 1.0 communication to two-way Web 2.0 communication, Web 3.0 technology, where people communicate with machines, is on the agenda. Web 3.0, also known as the semantic web, includes the interpretation of the content created by the users by enabling interaction between devices, the interpretation of the information according to the data provided by the users and

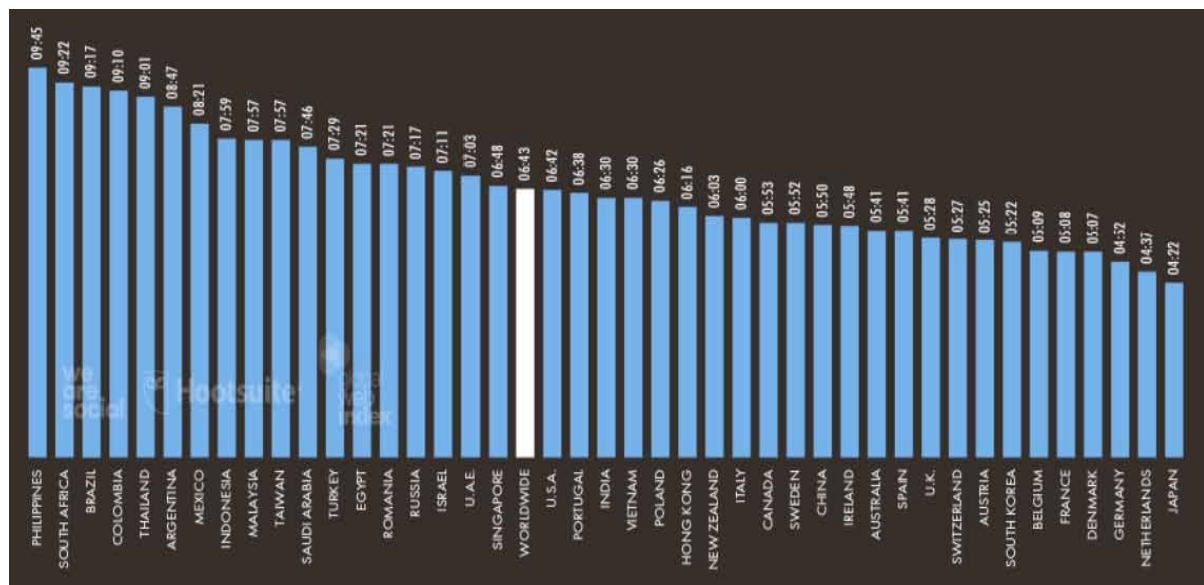
the presentation of the information in accordance with the needs and characteristics of the user. Web 3.0 technology, with its new applications and platforms, provides users with the opportunity and cooperation to search the web intelligently and create data (Barassi & Treré, 2012).

Social media helps users to interact with each other by sharing their opinions, criticisms and experiences. With a broader definition, it is a set of platforms where sharing and discussion are essential, without time and space limitations (mobile-based). Accordingly, smartphones, tablets and similar devices that emerged with the addition of internet technologies to advanced communication tools have made social media mobile. Today, consumers carry social media with them, express their opinions about any brand message, product or service without hesitation, and use the opportunity to communicate, share and interact (Hanna, Rohm, & Crittenden, 2011).

According to the data of January 2020, in the report published by We Are Social on internet and social media use, more than 5.19 billion people out of a total population of 7.75 billion globally use mobile phones, while the number of internet users is 4.54 billion and there are 3.80 billion social media users (We Are Social, 2020). In the table below, the time spent on the Internet in a day globally appears to be 6 hours and 43 minutes on average. The development of internet technologies changes our communication style and shows that we spend significant time in online communication channels in this age of digital communication.

Figure 1.

Source: (We Are Social, 2020)

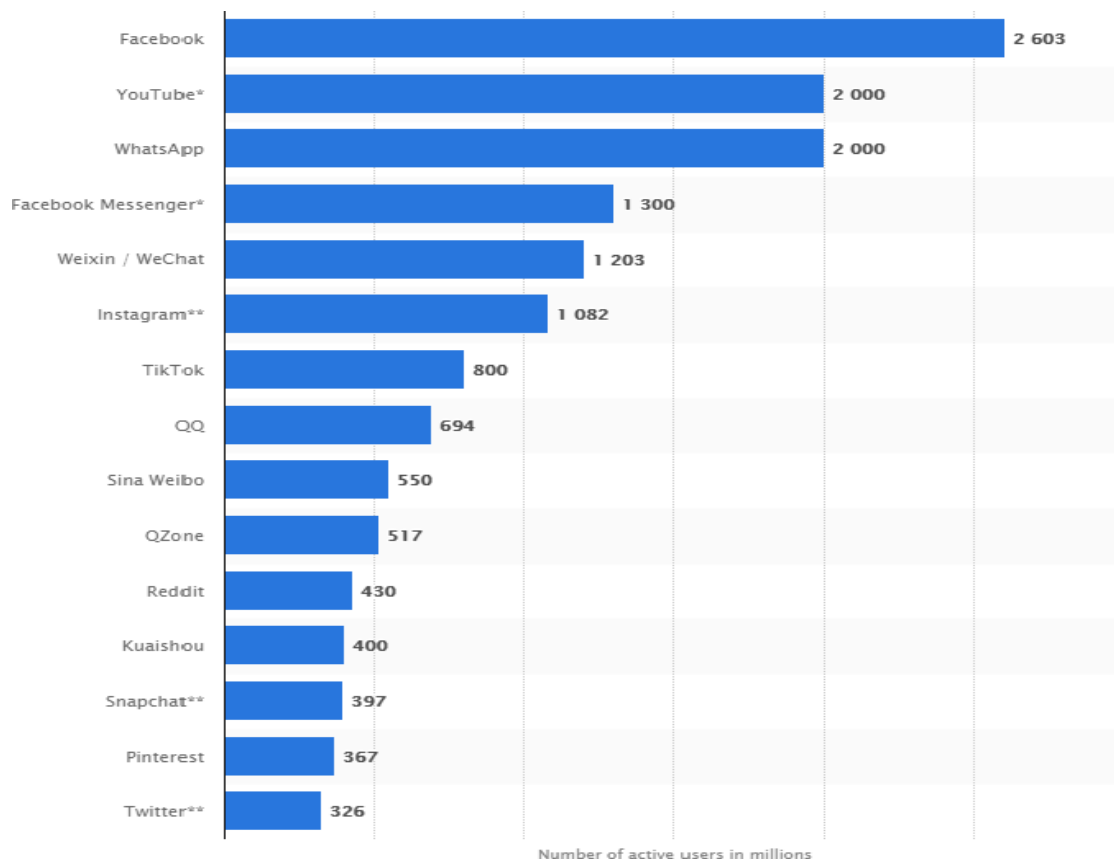


When Statista (2020) data is examined, the most used social media channels are Facebook, YouTube, WhatsApp, Facebook Messenger, Weixin / WeChat, Instagram and TikTok, respectively. It is seen that Facebook Messenger and WhatsApp platforms, which are used as low-cost communication tools and where only the internet infrastructure is needed even in international calls, are at the top due to these features. TikTok, which appeared under the name Douyin in 2016, is a music and social media applica-

tion that has attracted a lot of attention in China first and reached millions of users. With TikTok it is possible to share everything such as photos, videos, music, location, lecture notes. Video content sharing is increasing on social media platforms. It is seen that the TikTok application, one of the newest social media platforms, is rapidly in demand and ranked seventh among the most used social media platforms. It is seen that video shooting and live video sharing such as YouTube and TikTok are becoming increasingly common on social media platforms.

As of July 2020, the Most Popular Social Networks Worldwide are Ranked by Number of Active Users. (In Millions)

Figure 2.
Source: (Statista, 2020)



Features of Social Media

Social media can be defined as web-based software and services that allow users to come together on online platforms to receive, share, comment, like, and interact with content such as text, audio, image, video (Ryan & Jones, 2009). Social media are web-based technology and mobile environments in which individuals and communities engage in activities such as sharing, creating, discussing and presenting the

content created by users through interactive platforms (Kietzmann, Kristopher, McCarthy, & Silvestre, 2011). As a result of technological developments, they are online platforms that allow individuals, groups and communities to share in a common medium, provide communication and cooperation, and allow the creation of social network groups.

There are some features of social media platforms with various definitions. These features are (Mayfield, 2008):

Independence from time and space: Access to social media platforms can be achieved with any computer, tablet, smartphone and similar tools that can be connected to the Internet. In addition, users have the opportunity to produce content for social media platforms at all hours of the day. Social media is a communication medium where sharing and discussion between individuals is essential without time and space limitations (Komito & Bates, 2009).

Participation: It encourages everyone willing to contribute and give feedback. In today's age where the use of social media is increasing as a trend, the possibility of shooting videos, increasing the number of likes, taking advertisements within videos and earning money through advertisements makes the relevant channels more attractive for more people to participate in social media platforms.

Ease of use: There is no precondition or obstacle to participate in social media platforms where participation is done through membership system. The fact that everyone literate can participate, share experiences, sounds, photos, information, content, and it is easily enabled to share with third parties by commenting on the shared content enrich social media user content. With new web technologies, it is extremely easy for consumers and businesses to create their own content and publish them (Zarrella, 2010).

Openness: Many of its services on the platform are open to feedback and participation. They encourage voting, interpretation and information sharing. There are generally no barriers to entry in content sharing and variety.

Mutual dialogue: A two-way communication and interaction environment is provided. It enables the sharing of comments by instantly returning to the content created about all kinds of information, products, services, brands and places shared on social media platforms. There can be likes, reactions, criticisms and comments about any content created (Ye & et al., 2011).

Community: They can create communities and get together around common interests. Those with certain illnesses, those with certain hobbies, those with certain educational experience, those who support certain views can create a community and share up-to-date news and information to everyone in the community.

Connectedness: Many of the social media sites improve their connectivity and provide traffic by giving links to other sites, resources and people. Directing to different channels can be done by link sharing. In addition, mergers between social media platforms were provided through purchases, allowing a share to be broadcast simultaneously on more than one platform. For example, after Instagram was bought by Facebook, a content can be shared on two platforms at the same time.

User Content: Social media is a platform based on user content, and the definition of media created by the consumer is also used. Social media includes content sharing, advice, evaluating products, services and brands, discussing agenda topics, following interests and sharing experiences (Ryan & Jones, 2009). Comments, tags, additions added to the shares enable sharing of the information increasingly. Currently, a wide variety of content on similar topics is produced on various social

media channels. Structural and emotional ties between users enrich social media content (J.Kushin & Yamamoto, 2010).

Measurability: Social media is an Internet-based entity and all social media activities such as the shares, likes, comments and how often they are used by each user are stored in a database. Information such as liked and disliked content, interests, how long has one been a user and which pages are followed can be recorded and measured. Through social media, it is possible to collect information about users' preferences such as products, services, brands, political parties, and then make personalized targeting to the relevant users (Van Dam & De Velden, 2015).

HEALTH COMMUNICATION

The concept of health communication emerged as a discipline for the first time in the United States of America (USA). The leading institution in this regard is the Cancer Information Service of the National Cancer Institute, which bases its work on the start of the National Cancer Act in 1971. (CIS-Cancer Information Service). Using the National Cancer Movement, one of the longest running health communication programs in the USA, CIS aims to inform the public, scientists, doctors and other healthcare professionals through communication science, respectively, to uncover the causes of cancer, prevent and treat the disease. After many years of work, CIS has become an indispensable part of the "US Healthy People 2010" program prepared with the aim of the year 2010. The first activity within the scope of the subject was carried out in 1972 under the leadership of the International Communication Association (ICA) and many conferences were organized by ICA at universities. After the publication of various editions and books on health communication, it has gained a more multidisciplinary dimension. In 1985, the Speech Communication Association (SCA) established the first health communication commission. After the increase in health communication activities and the importance attached to the work done, the two associations merged in 1992 (ICA-SCA) and the importance of research in the field of health communication increased (Rogers E., 1994).

Health communication was defined in the Healthy People 2010 program developed by the Ministry of Health's Office of Disease Prevention and Health Promotion as

"The use and examination of communication strategies in informing and influencing the individuals and society and in their decisions for the development of health." (Geist-Martin, Ray, & F. Sharf, 2002).

Within the scope of "Healthy People 2010" targets, the topic of health communication was included for the first time. In the titles developed within the scope of the "Healthy People 2020" project, which aims for a healthier society in 2020, the subject of "Health Communication and Health Information Technologies" was included in the project for the first time. In the aims of the project to strengthen the communication between the patient and the healthcare personnel, increasing the number of individuals using the Internet, increasing the number of quality websites related to health, increasing the rate of easy access to health information and increasing the number of crisis and emergency risk messages to protect public health are included (Centers for Disease Control and Prevention, 2015)

The increase in academic studies on health communication has enriched the definitions on this subject. Castello (1977), in his study, explained health communication as obtaining information about health

and ensuring that positive health behaviors take place in social life. Castello, explains the importance of health communication as:

“Communication about health and illness constitutes the most vital experiences of human experience. No other human phenomenon is as essential as health and illness; it is not as directly related to human life, it cannot bind us to our desires this much, and it cannot confront us with our boundaries so clearly. Moreover, when we consider the dynamics of experiences directly related to human life and especially their effects on the human body, soul and society, health communication is the most beneficial, difficult and complex branch in academic research fields.”

Cassata (1980), in an article he published, defines health communication as a discipline that includes the communication levels at every stage of the health field, and these communication skills and methods. Gary L. Kreps and Barbara C. Thornton (1984) defined health communication as any interaction provided to supply and demand in healthcare providers. Reardon (1988), on the other hand, described it as a communication to increase awareness about health and to carry out protective, preventive and improving activities for increasing the health quality of the society and for people to gain positive health performance. Lupton (1994), in his definition, states that health literacy is a force that combines the concepts of health promotion, pharmacy sector, mass and individual communication under a single roof. In the definition by Ratzan (1999), it is defined as a form of communication that emerges through the realization of information and thoughts required to raise awareness of individuals on health through communication tools.

Health communication, in line with the health promotion approach, includes all kinds of communication by health professionals to inform, direct, influence and motivate individuals and society about important health problems. Through continuity in knowledge, beliefs, attitudes and behaviors, it aims to improve behaviors and encourage social changes, and ultimately, to improve health (Mahmud, Olander, Eriksén, & Haglund, 2013), (Redmond, Baer, Clark, Lipsitz, & Hicks, 2010). Health promotion is a process that increases control over the determinants of one's own health and health status, targeting individual, social and behavioral changes (Tang, Beaglehole, & O'Byrne, 2005).

SOCIAL MEDIA AND HEALTH COMMUNICATION

The use of Facebook, YouTube, Twitter and other social media tools in the sharing of various health related messages has increased significantly in recent years and it continues to increase day by day. Studies show that developing information technologies and especially social media platforms have a health-enhancing effect with their use in health care and health communication, as well as the benefits of accessing information, sharing and forming social groups and support groups, supporting the cooperation and participation of similar industry stakeholders, enabling interactive participation of users (Antheunis, Tates, & Nieboer, 2013).

The main purpose of health communication can be explained as improving health, raising awareness of the society, encouraging healthy living behaviors, raising awareness of individuals about basic diseases and health issues, raising individuals who can comply to the treatment given by the physician correctly, and improving the level of health literacy. Behavior, lifestyle and habits have an important role in improving health status. Patients who receive support from health services and receive treatment

should primarily include healthy lifestyle habits in their lives. On the basis of many chronic diseases also (COPD, Coronary Artery Diseases, Cancers), healthy living conditions and health habits play an important role. One of the most important factors in patient treatment is the patient's going along with the treatment and compliance with the doctor's recommendations. Raising societies that have an important role in improving health and health services and aiming healthy living conditions, and protecting health are among the main purposes of health communication and health literacy.

When researches within the scope of health communication are examined, it seen that the following headings are included basically (Wright, Sparks, & O'Hair, 2013) :

- Individuals' attitudes, feelings and beliefs regarding general concepts and shares related to health
- Communication between healthcare professionals and patients
- Communication within health institutions, communication between the management and health personnel
- Understanding and beliefs that vary by cultures regarding health and diseases, treatment methods and options
- To ensure the development of health communication and campaigns in media channels to develop positive health behavior
- The role of mass communication channels in understanding special health-related issues
- Sharing health information, communication of individuals with similar health problems and the use of developing communication technologies to improve patient communication

Social media is changing the nature and speed of healthcare interaction between individuals and healthcare organizations. Generally, society, patients, relatives of patients and healthcare professionals use social media to communicate about health problems (Thackeray, Neiger, Hanson, & McKenzie, 2008), (Dawson, 2010). In the United States, while 61% of adults search online, 39% of those use social media platforms such as Facebook for health information (Moorhead, ve diğerleri, 2013). Rates of use of social media vary by country, personality traits, gender and age.

Correa T. et al. (2010) reported the relationship between personality traits and social media participation in their study. When analyzed in terms of gender, it is seen that extroverted men and women use social media equally. While extroversion is an important factor, especially for younger users, openness to new experiences can become more difficult for older users (Correa, Willard Hinsley, & de Zúñiga, 2010). Lenhart et al., in their research between 2006 and 2010, among adolescents and young adults in the United States, found that 73% of 18-29 year olds used the Internet while 39% of the 30 years and over users used the Internet. The rate of internet usage of the new generation born in the digital communication age is almost twice that of those aged 30 and over (Lenhart, Purcell, Smith, & Zickuhr, 2010).

The adoption rate of social media by health institutions in European countries also varies. While social media usage rates are low in German hospitals, approximately 45% of Norwegian and Swedish hospitals use LinkedIn. In addition, 22% of Norwegian hospitals are observed to use Facebook for health communication (Heidelberger, 2011). When the UK was examined in another study, Facebook was reported as the fourth most popular source of health information (Dawson, 2010). The World Health Organization (WHO), which has more than 11,700 followers on Twitter, has given place to social media posts on many topics from clinical practices to medical applications, from general information to informing healthcare workers during the influenza A (H1N1) epidemic (McNab, 2009), (Eyrich, Padman, & Sweetser, 2008), (Green & Hope, 2010), (Giustini, 2006). Today, the number of Twitter followers of WHO has reached

approximately 8.5 million and the number of Facebook followers is over 35 million. During the Covid 19 Pandemic period also, it is seen that WHO and the Ministries of Health are actively using social media platforms for information on many issues such as medical practices, disease prevalence, precautions to be taken, decisions regarding prevalence, and raising awareness on issues that need attention. It is observed that live video sharing, which has developed in social media channels in recent years, was widely used in the Covid 19 pandemic period.

Searching Health Information

Today, with the increase in the acquisition and access of information, the focus of individuals on managing their own health and prevention from diseases has made the search for information in the field of health interesting (Manafa & Wong, 2012). The behavior of seeking health information is an activity aimed at obtaining the needed health information and it is a behavior that satisfies the active need with health information obtained from various sources such as the media (Jung, 2014). Seeking health information can also be defined as the process of actively gathering specific information in the face of a health event, arising from anxiety or need (Anker, Reinhart, & Feeley, 2011). Since health information seeking behavior means the return of the sought information about health, it is the area where health communication studies are concentrated with its determinants and results. Accessed and correctly used health information are extremely beneficial in lifestyle factors affecting health, early diagnosis and screening, coping with diseases, management of symptoms, participating in active medical decision making, understanding different treatment options and finally overcoming the fact when faced with the end of life (Galarce, Ramanadhan, & Viswanath, 2011).

Social media is used heavily to search for health information online. Social media is also widely used by physicians and medical students, and can be a primary source of reference even in a subject such as health that individuals are very sensitive to (Denecke & Nejd, 2009). Thanks to social media, patients who receive treatment for certain diseases can share their disease experiences and treatment options among patient communities, and have the opportunity to communicate with physicians and obtain detailed information about their diseases. On the other hand, physicians are increasingly using social media both in their personal lives and professionally (Mansfield, ve diğerleri, 2011). Social media is also used for the exchange of information between physicians, sharing professional problems and clinical experience (Prasad, 2013), (Hyman, Howard, & Sechrest, 2012), (Anikeeva & Bywood, 2013).

Access to health-related information and communication online provides information on better lifestyle options and improves adherence to the physician's recommendations (Mesch, Mano, & T. Samir, 2012). In addition to the advantages of using the Internet in health communication, such as this wide information capacity, interpersonal communication and social support, there are also disadvantages such as cost, inequalities in access, use of medical language, transience of information, excessive information, risk-promoting messages and addiction (Rice, 2006).

The use of social media in health communication brings some risks and ethical problems. Concerns from medical professionals and internet users, especially about the quality and understandability of health information for the public, were frequently raised (Berland, ve diğerleri, 2011), (Cline & Haynes, 2011). It can often be difficult for patients to distinguish the correct and sound medical information, which is often obtained by electronic sources, from the baseless and false information circulating around (Lehmann, Ruiter, & Kok, 2013). The number of baseless and uncontrollable health posts apart from official sources and health professionals is high. At the same time, the communication between patients and

physicians in both social media and public places brings with it some risks and can lead to speculation and misunderstanding (Hyman, Howard, & Sechrest, 2012).

Covid 19 and Social Media

COVID-19 first emerged as a respiratory illness of unknown origin in Wuhan, China on December 31, 2019, and was declared a pandemic by the World Health Organization (WHO) on March 11, 2020, as the number of cases increased 13 times worldwide. In this dynamic process, governments and the World Health Organization have been in an effort to announce the constantly updated information to the public, while considering the measures to be implemented and the next step to be taken. The ongoing COVID-19 pandemic, which has wreaked havoc around the world, has put enormous pressure not only on public health systems but also on crisis communications. The main task in crisis communication is to help people put up with this situation and to act wisely in the face of intense emotions in a state of panic. Since social media is the primary medium for information consumption, it has played a key role in dealing with such an epidemic by providing clear, end-to-end crisis communication with different target groups.

Pandemic (epidemic) is a particular crisis as it is a crisis of collective responsibility that requires rapid activation of adopted communication techniques. (Saliou, 1994). If the local population has access to reliable information, they are more likely to recover in pandemic crises. Locals with immediate access to a reliable source of information will be able to act immediately without having to spend time verifying information; so people will adapt to the situation more securely (Longstaff & Sung-un, 2008). Social media, a group of Internet-based applications built on the ideological and technological foundations of Web 2.0 and allowing the user to create and modify content (Kaplan & Haenlein, 2010), at this stage, offers opportunities to establish real-time dialogue with the target audience, build trust and motivate them (Tirkkonen & Luoma-aho, 2011).

In the first phase of a crisis, social media plays an important role as a source of information sharing to calm the public, dispel fears and prevent crisis escalation (Vann der Meer & Verhoeven, 2013). Timely, accurate and effective communication is essential during the crisis. The use of social media makes it possible to give an early and rapid crisis response to the vast majority of stakeholders (Ngai & Jin, 2016). With the changing communication technologies, the way people access and spread information has also changed significantly; social media has become an important figure in information gathering and dissemination over time. Considering the interest of generations Y (born in 1980-1999) and Z (born in 2000-2009), which are considered as social network generations, in devices such as smartphones and tablets and the fact that they are quite active on social platforms during the day, not to operate in these channels in crisis situations will be a major lack of communication.

While social media offers significant advantages in public health communication, it has some drawbacks. With the statement of General Director of WHO that "*we are fighting not only a pandemic but also an infodemi*", "infodemi" became a globally popular concept during the Covid 19 outbreak (Eysenbach, 2002). In his article titled "Infodemiology: The epidemiology of (mis) information", Eysenbach defines infodemiology as studies on the distribution and determinants of health information and misinformation, inspired by the definition of epidemiology (Eysenbach, 2002). It is very easy to access all kinds of information in the field of health in today's world where access to Internet is very common. It is controversial, however, to what extent the information flow on the Internet is correct and reliable (Caley, Philp, & McCracken, 2008). For example, in a study evaluating the information contained in the

sources encountered when searching the search engine on “protection from coronavirus” on the Internet, it was found that less than half of the information sources contained accurate information about the use of masks (Eysenbach, 2002).

A page titled “mythbusters” was opened from the web pages created by WHO where the public information were, and explanations were given about some false information that had the opportunity to wander around the society. It is stated that alcohol use, adding pepper to meals, taking a bath with hot water, eating garlic, drinking bleach do not have a protective effect from covid-19. Information that 5G waves do not have any effect on the spread of covid-19, that ultraviolet lamps cannot be used for protection from covid-19, that the covid 19 vaccine is not available yet, that a mask should not be worn while exercising, and that antibiotics are not effective against covid-19 are among other topics included. Even the contents given as examples are remarkable in terms of showing how wide the scope of misinformation circulating during the covid-19 outbreak can be (WHO, 2020).

CONCLUSION

Social media has become a very important communication network in our age, and in this sense, it will be used more effectively with the changing and growing young generation. Social media platforms that provide communication from everywhere are expected to develop more than traditional media because they allow instant communication, provide the opportunity to create original content and have a lower cost in comparison. Social media has important benefits in many socially valuable issues such as instant communication, health communication with its facilities, crisis communication, as well as daily hobbies, learning, obtaining information, maintaining social friendship ties.

In today’s Covid 19 pandemic period, it is seen that social media is actively used by the World Health Organization, the health ministries of the countries, as well as health professionals for crisis management, health policies, instant decisions such as curfews and health information. The World Health Organization presents the meetings held on the decisions that will affect the health policy decisions of the whole country in the global sense, with online live video sharing that can be watched not only by health institutions but also by the whole society. Similarly, it is seen that the health ministries of the countries actively share information on social media with live video posts in order to raise awareness of the society about important developments, measures to be taken and disease risks. It is observed that physicians who have expertise in their fields, especially during the pandemic period, also take an active role individually in informing on social media about the precautions to be taken for the disease, health information, healthy living conditions and stress caused by the pandemic, and that the shares have increased. Similarly, public institutions publish health dictionaries on their websites to improve public health, to recognize the health statements and to increase health literacy. In order to increase access to health dictionaries on websites, they are shared on social media platforms through link sharing. Collectively, information of the Covid-19 increase, decrease, prevalence and number of people who died from the disease worldwide, number of cases according to countries and global data are shared online by Facebook with the name “Covid-19 Information Center”. It is conveyed that this information on the Facebook page is shared in line with the data received from John Hopkins University, World Health Organization, European Center for Disease Prevention and Control and local health institutions.

Social media has some disadvantages as well as important advantages. Fake accounts and false information by people or institutions that are not related to health, applying wrong treatment suggestions

by not distinguishing the correct health information, prevalence of drug vendors of various unapproved medical materials such as weight loss and hair medications which are difficult to solve with medication, and the inability to prevent groups that spread wrong health information institutionally are among the issues that need to be solved. In addition, training on the use of social media for users aged 50 and over, who are unfamiliar with new technologies and have difficulty using them, may allow more users to benefit from these channels.

FUTURE RESEARCH AND DIRECTIONS

Since social media has developed as a common communication network, in-depth studies are needed to prevent false health information in mass communication.

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KEY TERMS AND DEFINITIONS

Health Communication: It is the application of communication concepts and theories to health-related interactions and processes between individuals for the purpose of improving health.

Health Institutions: It includes all institutions that provide health services.

Health Literacy: It is the ability of an individual to reach, understand and use health information for the protection and maintenance of health.

Mass Communication: It is the transmission of the message to a large and unknown audience through one or more mass media.

Network Communication: Technically, it is a system that is formed by connecting two or more computers with software and hardware components via wired or wireless communication tools.

Pandemic: It is the general name given to epidemic diseases that spread and show their effects in a wide area in more than one country or continent in the world.

Social Media: Social media is an online network where users can produce and share their own content and at the same time view the content created by other users.

Social Network Sites: These are virtual environments where users can create fully or partially open profiles, select and identify the people they will communicate with, and observe the profiles and relationships of other users.

Chapter 3

Social Media and Health Communication: Vaccine Refusal/Hesitancy

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ABSTRACT

The content presented in the media, especially with the element of fear, appears to be the most important factor in the formation and spreading of phobias related to diseases. Especially when it comes to epidemics, the influence of the media increases remarkably. Individuals now use digital media as the initial reference source, especially on issues related to their health, and tend to see social media as a reference platform. However, uncontrolled information, conspiracy theories, and information pollution spread through social media make the subject difficult to understand; online shared manipulative news, excessive and unfounded information cause fear and panic. These posts about vaccines affect the perception and attitude towards vaccines. In this study, the comments and social media posts will be analysed using content analysis and discourse analysis methods in order to reveal the effect of social media in vaccine rejection and hesitation.

INTRODUCTION

Throughout history, epidemics such as plague, cholera, and flu have deeply affected society. We are experiencing the latest example of this one-on-one with the COVID-19 outbreak. One of the ways to prevent epidemic diseases, which have become a social problem, rather than being an individual one which has an effect from economy to politics, is improving the immune system of individuals. Immu-

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nization, which means removing or reducing the susceptibility of the individuals to diseases in the long term while preventing the emergence of diseases in the short term, can be acquired either naturally by exposure to the pathogen or later through vaccination.

Especially in recent years, although it is known that it causes epidemics and mass deaths and there are media warnings, the rate of those who take an anti-vaccine attitude is increasing. This ratio includes not only those who directly refuse the vaccine but also those who are hesitant about the vaccine.

Social media, which is the most referenced source for information on any subject; is among the primary sources that individuals refer to in matters related to their own and their children's health. In this sense, the anti-vaccine posts and comments on social media were examined and their discourses were evaluated.

BACKGROUND

The "right to health", which is an individual and social right, is among the second-generation human rights and regulates the responsibilities of the state towards the individual in the field of health services. The right to health, which is included in Article 12 of the United Nations Covenant on Economic, Social and Cultural Rights, with the expression "*the enjoyment of the highest attainable standard of physical and mental health*", is defined to the individual, but the state is stipulated as a practitioner and it is expected to create the best conditions of access of the individual to the appropriate healthcare. It is thought that the use of the right to health given to the individuals occurs when they are sick. Although this idea was initially valid; today, the meaning attributed to the concepts of illness and health has changed and the individual has started to benefit from the right to health in terms of lifestyle. With this conceptual transformation in the field of health, especially starting from the end of the 19th century, the focus has been on society, and the way to reach social health is pointed out as information gathering and control of the body (Kaya, 2016, p. 96).

Health communication, which can be defined as the work of informing, guiding, persuading individuals, communities, or wider groups of people about health-related issues, also includes the analysis of health policies, as well as activities to prevent or raise awareness of epidemics. Its general purpose is to increase the quality of life of people and society. In other words, the main goal of health communication aims to improve the overall healthiness level of society. Significant gains are achieved by using social marketing, advocacy in the media, public relations, and promotion methods in the context of improving health and spreading across the country. At this stage, health communication is one of the most basic systems that play a role in providing an effective and efficient information flow to institutions and organizations that provide health services during public education campaigns. The field of health communication examines how all elements of the communication process come together on health-related issues (Becerikli, 2013, p. 26; Hoşgör, 2014, p. 51-52).

Yüksel (2015, p. 251-252) described health communication as the type of communication needed in the field of health and stated that it has five dimensions according to the usage types: (1) *Internal communication* that motivates and motivates people. (2) *Interpersonal communication*, which refers to the communication between people who provide and receive healthcare-related services such as doctor, patient, and patient relatives. (3) *Group/team communication* between healthcare professionals, patients, and inter-patient solidarity groups. (4) *Corporate communication* in health institutions, from the manager to the employees and the target audience of the institution or from the suppliers of the institution to its competitors/other institutions. (5) *Social communication* through communication campaigns, public

relations activities, and mass media, together with health-related social services and practices. At the same time, Yüksel (2015, p. 252) explains the activities carried out within the framework of activities to change the unhealthy behaviours of the public, develop healthier behaviours, protect and improve health, and raise awareness against individual and social health risks within the scope of public health and social communication.

Whether health communication takes place through interpersonal or group communication or social communication, social media affects the nature and form of this communication. Individuals (sick or healthy) and healthcare professionals use social media to get information and communicate about health problems. For example, in the United States, 61% of adults search online and 39% use social media such as Facebook to get health information. Studies conducted in the UK indicate that Facebook is the fourth most popular source of health information (cited in Moorhead et al, 2013). Being an important tool in accessing health-related information, being able to transmit health messages on social media in a right way and to be understood as “accurate and proper” by the reader will cause the health behaviour to be correctly developed (Park et al., 2013). Therefore, health communication should not be considered separately from the health literacy.

Health Communication, Vaccines, and Media

One of the issues that should be addressed within the framework of health communication is the immunization activities carried out. Immunization refers to removing or reducing the susceptibility of an individual to diseases to prevent the emergence of diseases in the short term and to eliminate infectious diseases in the long term (Altınkaynak, n.d.). Immunization contributes to the protection of the health of the person, the improvement of public health, and the health economy of the country. Immunization can be achieved naturally, either through illness or through the mother-to-baby, or it can be acquired later through vaccination (Palancı, n.d.). Vaccination is the most effective method in terms of cost and reliability in protecting the health of both children and adults, preventing infectious diseases, and providing immunity at the community level (Gülcü & Arslan, 2018, p. 34).

The best example of vaccination and immunization is smallpox. In 1966, there were about 15 million smallpox patients in more than 50 countries, and the number of people dying from the disease varied from 1.5 million to 2 million per year. As a result of the vaccination campaign against smallpox initiated by the World Health Organization (WHO) in 1966, it was announced that smallpox was eradicated on May 8, 1980, and there were no new cases in the world. According to the calculation published by UNICEF in 1996, if the smallpox vaccine had not been found, approximately 5 million people in the world would have died from this disease by that date (Aytaç & Aker, 2014). Today, smallpox, which caused the death or disability of millions of people in the past, has been erased from the world with vaccination methods, and polio has decreased to the level of eradication. The spread of diseases such as measles, mumps, rubella, whooping cough, diphtheria, infectious jaundice (hepatitis) has been largely prevented in many countries (Akova et al., 2015).

Although immunization studies through vaccination continue, diseases that are controlled by vaccination for different reasons (geographical, political, etc.) are emerging again. Among the 10 global health problems that the World Health Organization plans to resolve in 2019, “anti-vaccination” ranked as first (Gür, 2019). Anti-vaccination is defined as a pattern of behaviour ranging from being against a single vaccine to rejecting all vaccines (Kader, 2019, p. 386).

Even though it is known that it causes epidemics and mass deaths and there are many warnings regarding the issue, the number and ratio of those who refuse to vaccinate (anti-vaccines) are undeniable. The reasons for anti-vaccination are classified as those who consider the profit is less than loss, those who do not feel the need because they think they are not at risk, and those who object on religious, philosophical or, conspiracy grounds. At the same time, studies are stating that the issue of insecurity stands out among the reasons for developing anti-vaccine behaviour. (Aytaç & Aker, 2014; Aslan, 2018).

The initiation of the vaccine rejection movement is in parallel with the mandatory vaccination policies, and the issue has increased as a result of the increase in the number of printed materials in the second half of the 19th century. The process of vaccine rejection can be summarized as follows: Between 1950 and 1960, universal vaccination programs were initiated against polio, mumps, measles, rubella, and although there is still opposition to the vaccine, vaccines were widely accepted between these years. These years have been accepted as the golden age of vaccine acceptance. With a study published in the UK in 1974, the discussions on vaccination flared up again. With the publication of this research on television and newspapers, the issue has attracted more attention and the number of families who are against vaccination has started to increase. While there was a media boom about the vaccine in the late 1990s, families continued to be affected by negative media reports. In 1998, Andrew Wakefield's research in the UK in which he claimed a relationship between autism and measles-rubella-mumps (MMR) vaccine was published in *The Lancet* journal. This article was retracted by the *Lancet* due to a skew of the results in 2010 (Çapanoğlu, 2018). Media reports about the existence of a relationship between vaccines and autism caused health fears to a large extent, families' trust in vaccination and vaccination was displaced, and they caused them to avoid vaccination behaviour. As a result, there was an increase in death cases due to measles in England and Wales between 1998-2008 (National Health Service in England, 2012).

Individuals' attitudes towards vaccination and vaccination are shaped by different sources of information, including social media. (Yaqub, Castle-Clarke, Sevdalis & Chataway, 2014). The uncontrolled spread of both the news in the traditional media and the posts made consciously or unconsciously on social media is an important factor in shaping health and behaviour. In this sense, it is also used effectively by anti-vaxxers and may cause the development of negative behaviours related to vaccination (Royal Society for Public Health, 2019, p. 3; Kata, 2010, p. 1710). The fact that famous names announced that they were against vaccination to large masses through the media caused this idea to spread. With the widespread use of the Internet, anti-vaccine groups and blogs started to emerge in social media applications. The number of these groups has increased, reaching thousands of followers all over the world, including Turkey.

The most comprehensive study on vaccine rejection is a Medical Specialty Thesis named *Thoughts and Beliefs of Anti-Vaccination Parents in Turkey: A Qualitative Study*, by Salih Aslan. In the thesis, to determine the reasons for vaccination rejection, face-to-face interviews were conducted with 21 families who agreed to meet via social media. In the findings of the study, the reasons for vaccine rejection were examined and explained under the headings of mistrust/doubt, effectiveness-importance of vaccines, decision-making process-bases/grounds, law and, ethics. In the study, the parents decided not to vaccinate their next child as a result of their research; while initially unaware of the discussion topics about vaccines, it is stated that they are partially or completely against vaccines as a result of the posts on the internet and especially on social media. It is also stated in the study that social circles, internet, newspaper and TV news, domestic and foreign websites followed, social media groups and the posts made in these groups play an important role in the formation of negative thoughts about vaccines (Aslan, 2018, p. 44, p. 46). In the study, which stated that mistrust stands out among the most important reasons

for vaccine refusal. Aslan (2018) says “When we examine the findings we obtained in our study and the hesitations about the vaccines stated in the messages shared by the parents in various social media groups, [mistrust] appears to be the most important reason alone in our country for vaccine rejection and parents’ hesitation about vaccines.”.

The prevention of vaccine rejection, which WHO includes among ten global problems, should be seen as a social responsibility. In this sense, a wide spectrum, from healthcare personnel to media professionals and even politicians, should be considered within the solutions should be sought. Similarly, another study that states that the issue of vaccine rejection/hesitancy should be resolved by requiring a social science perspective and multi-disciplinary approaches, belongs to Özata & Kapusuz (2019). Similarly, a value study that states that the issue of vaccine rejection/hesitancy should be resolved by requiring a social science perspective and multi-disciplinary approaches, belongs to Özata & Kapusuz (2019). In this sense, the study emphasizes that different perspectives, especially social marketing, can contribute significantly to the subject, and it is stated that vaccine hesitancy should be focused primarily on. It is stated that in order to apply the right strategies to families in the fight against anti-vaccination, it is necessary to conduct a segmentation study with a social marketing perspective.

Another study that should be emphasized is the master’s degree thesis titled *Parental Opinions on Childhood Vaccination Refusal in Konya Province and Factors Affecting Vaccination (original: Konya İlinde Çocukluk Çağı Aşı Reddi Konusunda Anne-Baba Görüşleri ve Aşılamayı Etkileyen Faktörler)*, which was prepared by İlter (2020) to determine the opinions, knowledge and attitudes of parents who refuse vaccination. Within the scope of the study, between January 1 and December 31, 2017, families who were registered with GPs in Konya who refused vaccination or were not vaccinated for various reasons and who were able to participate in the study voluntarily were interviewed. 590 people (478 mothers and 112 fathers) were interviewed in total, İlter (2020) stated that main sources of information as follow: 70% of the parents who refused to vaccinate their babies were received information from GPs, 65.4% from internet/social media, 38.8% from religious sources, 38.5% from family or friend, 32.0% from the paediatrician, 32.0% from anti-vaccine groups and 31.9% from religious opinion leaders.

Stating that international-sourced disinformation and misinformation on social media cause an increase in the belief that vaccines are unsafe for those who have hesitations about vaccines, Wilson & Wiysonge (2020) point out that the fight against disinformation in social media is a critical point to reverse the growth in vaccine hesitation worldwide.

Stating that as a result of disinformation and misinformation, there were also failures in the polio vaccination program in Pakistan, Khan et al (2020) states that a similar situation is on the agenda for the COVID-19 vaccine. It was also underlined that the media should behave more carefully in order not to develop negative behaviour against the vaccine, and that misleading claims should not be included.

Puri, Coomes, Haghbayan & Gunaratne (2020) stated that anti-vaccine messages can spread globally as social media allows for content creation and sharing without editorial oversight, unlike traditional media, also point out that health literacy depending on concrete evidence should be encouraged to combat with anti-vaccination and pandemics such as COVID-19.

Today, when the internet and social media constitute a large part of the life of the individual, the individuals tend to see social media as a reference platform rather than the people around them (Altan, 2014). In this sense, it is an undeniable fact that they consult the opinions on social media regarding an issue related to their children’s health.

MAIN FOCUS OF THE CHAPTER

In this section, the aim and method of the study are given, and the obtained findings are explained.

Issues, Controversies, Problems

Answers to the following questions were sought in this study, which aims to examine social media posts in order to reveal the effect of social media on vaccine rejection:

- How is the distribution of social media posts?
- What kind of posts have the most comments and likes?
- How is the discourse shaped in these statements?

Two main trends draw attention in studies on news texts in the science of communication. The first of these is the positivist trend that focuses on the apparent (manifest) meaning by using content analysis; The second is the critical trend that treats the news as discourse (İnal, 1996, p. 27). Berelson, who first systematized content analysis and published his book in 1952, defined it as “a research technique that makes objective, systematic and quantitative definitions of the apparent content of communication” (Gökçe, 2006, p. 35). Today, according to the definition of Merten, which is stated to be the most comprehensive definition of content analysis, content analysis is expressed as “a method that investigates the social reality by making inferences about the unclear features of the content from the clear contents of social reality (as cited in Gökçe, 2006, p. 18)”. The steps to be followed in the application of content analysis are listed as content provision, preparation of codebook, analysis, and interpretation. Discourse analysis, which is based on discourse, and based on the examination of daily expressions, sentences, and texts in the context of being spoken, is an analysis method that tries to understand the opinion of the author of the text rather than the visible side of the text and focuses on symbols, traditions, norms and figures outside the text¹. Context and meaning relationship is important for discourse analysis. In this sense, the discourse analysis method deals with the questions about the discourse produced in a certain context is directed to whom, what it says, what effect it has, and what kind of meaning it produces (Çelik & Ekşi, 2008, p. 105; Sancar, 2008, p. 106 as cited in Keskin, 2015, p. 9; Yanık, n.d.). The method of analysis that focuses on social problems engrosses on revealing the discursive character of power relations, sees discourse as a historical, and ideological process, and tries to establish the relationship between text and society in an interpretative and explanatory framework based on this, is called critical discourse analysis. In this context, content analysis and discourse analysis methods were used together in the study.

According to the Internet and social media statistics, Digital 2019 Report by We are social and Hootsuite, 56% of the world population with 4.38 billion users use the Internet and 45% of the world population with 3.48 billion users use social media. In the same report, the chapter about Turkey states that 72% of the population (59.36 million) and 63% of internet users (52 million) are active users of social media. The most popular and active social media platforms are YouTube, Instagram, Facebook, Twitter, Snapchat, and LinkedIn according to the beforementioned report (Bayrak, 2019, February 1; Bayrak, 2019, February 6).

In this sense, due to its long-term use of social media and being active, a non-profit organization called -AYMD- *Aşı Yaptırmaya Mecbur Değilim Hareketi* ([movement of] I Don't Have to be Vaccinated, and will be referred to as **AYMD** from now on) constitutes a representative “anti-vaccine” sample of the

study by its Facebook page and posts. The Facebook page of AYMD, which was established in 2010, includes the following information, and also saying “If someone comes to your door and forces you to vaccinate your child and threatens to file a lawsuit, send us an e-mail”:

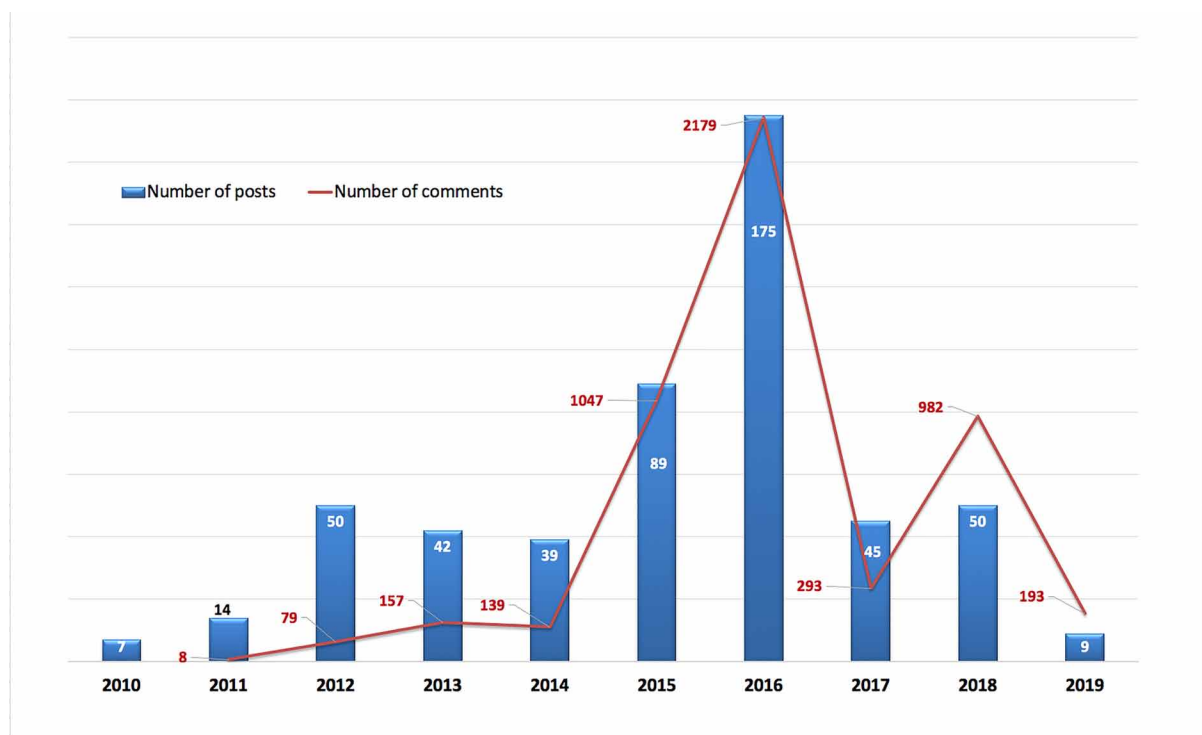
You search, I make the decision. No person can be obliged to apply a treatment method that he does not prefer. AYMD supports the right of people who do not find vaccines safe due to the risks that may arise, not to have them vaccinated by themselves and those under their responsibility, and therefore raise awareness about their legal rights that will prevent them from being subjected to pressure by health institutions (Aşı Yaptırmaya Mecbur Değilim hakkında, n.d.).

The posts examined in the study were recorded and analysed with QSR NVivo™ 12 and its extension NCapture™ software. A total of 520 posts and 5077 comments between December 2010 and March 2019 were reached and analysed using the content analysis method. Among the posts, the 3 posts “with the most comments” and “the most liked” and their comments were analysed using discourse analysis.

When the posts on the social media page of the AYMD movement, which is the subject of the study, are examined, it is seen that most of the posts are made by AYMD, not by the users. These posts include news, interviews, sections from television programs, statistical information, and articles in foreign languages. At the same time, it is possible to say that stock images of babies, children, vaccines, and measles are used frequently, and the language used is scary rather than cautionary.

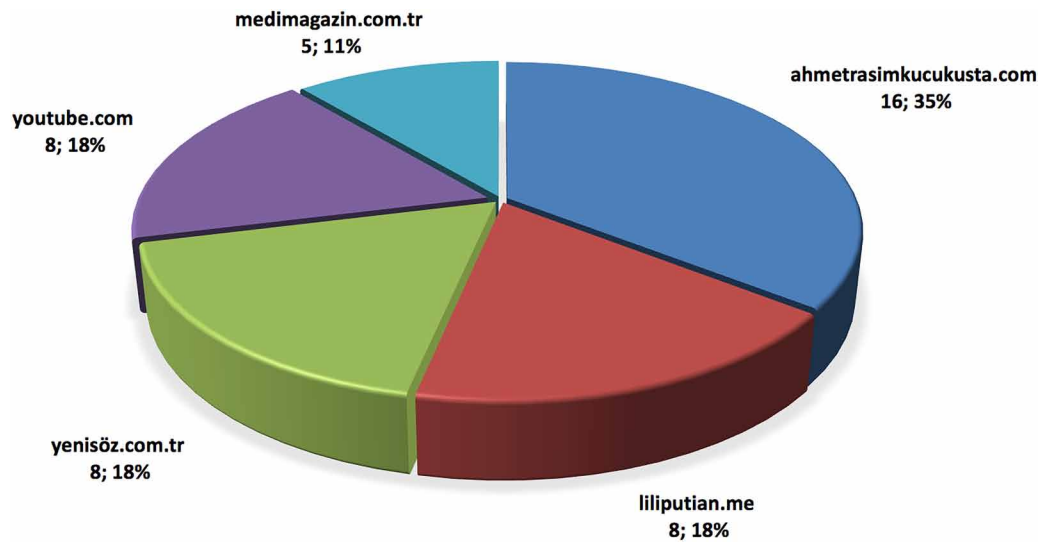
The posts and comments were mostly made in 2016 ($f = 175$) and 2015 ($f = 89$). Similarly, most of the comments were made in 2016 ($f = 2179$) and 2015 ($f = 1047$). When the distribution of the number of posts and comments made by the AYMD movement since December 2010 is examined, it is possible to say that they are (mostly) parallel. However, the year 2018 is out of this trend with the number of posts and comments made.

Figure 1. Distribution of the number of posts and comments made by years



When the sources of the links given about the information in the shares are examined, it's seen that they consist of internet pages of printed newspapers ($f = 12$), internet pages of television channels ($f = 4$), internet news portals ($f = 4$), health news portals ($n = 4$), news agencies ($f = 2$), associations ($f = 2$) etc. A total of 69 different sources were used. The distribution of the most used sources among these sources is as follows: ahmetrasimkucukusta.com ($f = 16$), an anti-vaccination website liliputian.me ($f = 8$), yenisöz.com.tr ($f = 8$), youtube.com ($f = 8$) and medimagazin.com.tr ($f = 5$).

Figure 2. Sources of the most used links in posts



When the shares are examined; The most commented ($f = 352$) and liked ($f = 770$) post was shared by Ukrainian physician Dr. Aidin Salih. There is also a post with the photo of her along with the stated article she wrote. In the post, it is stated that the article was written to raise awareness of the public about the vaccine campaign after the “so-called” Swine Flu epidemic in 2009, with the phrase “About mandatory and pressured vaccines”.

AYMD / I Don't Have to be Vaccinated
25 September 2016

The article written by deceased Doctor Aidin Salih to raise awareness of the public about the vaccination campaign, which is planned to be launched in 2009 under the pretext of the so-called swine flu outbreak.

THE FACTS ABOUT VACCINES
(About mandatory and pressured vaccines)

The topics included in the article are as follows: The swine flu vaccine is in trial phase, all vaccines, including influenza vaccine, are harmful, vaccines have side effects and these can be realized after 15-20 years, the swine flu vaccine contains a wide range of substances from aluminium to swine tissue, from chick embryo to human foetus, from human sperm to canine kidney, with the DNAs used in the vaccine,

people will become chicken, cattle animal, rabbit, monkey or pig, verses in the Quran, statements by Rasim Küçükusta (another medical professional). The ailments caused by vaccines are also included in the text. These are infertility, polio, autism, muscle-bone and connective tissue diseases, nervous system diseases, Guillain-Barré syndrome, AIDS, skin blisters, brain membrane inflammation, blood structure deterioration, nerve inflammation, concentration problems in children, learning difficulties, speech disorder, seizure, epilepsy, hyperactivity, continuous and loud crying, severe allergy, sudden drop in blood pressure, fever, referral, arthritis, muscle aches, skin rash, enlarged lymph nodes, chronic fatigue, chronic headaches, loss of whole body hair, non-healing wounds, memory loss, epileptic seizures, paralysis, anaemia, mental problems, shortness of breath, chronic diarrhoea and night sweats.

Figure 3. The 1st most commented and liked post



Figure 4. Samples of the 1st most commented and liked post

Selin Keçecizade Bu yazıya katılıyorum.bende hamileyken aşı yaptırmadım.bebeyim bir yaşına girmek üzere hiçbir aşı yaptırmadım elhamdulillah.iyikide yaptırmamışım.bu yazıyı okuduktan sonra insan dehsete düşüyor.rabbim bu hainlere fırsat vermesin..sağlığımız tehlikede

Beğen · Yanıtla · 1y

1

Ozlem Sımsek Parçaoğlu Devlet eliyle bu aşılar bebeklere yapılıyor. Sağlık ocakları takip ediyor. Bundan nasıl kaçacağız. Doğmamış bebeğime hiç aşı yaptırmazsam Onu en doğru şekilde nasıl korulabilirim. Sağlam bilgilere nasıl ulaşayım? Sağlık çalışanlarına nasıl Hayır diyeyim. Yaptırmadığımda yasal bir yükümlülüğüm olur mu? Lütfen bilgi verin kafam çok karıştı....!!!31 haftalık hamileyim çok tedirginim!!!

Beğen · Yanıtla · 2y

3

Buket Van Ecin Peki çocuklarımıza aşı yaptırdık bunları bilmeden.Bu aşılardan etkisinden kurtulmanın bir yolu yok mu?? Vücudu temizlemek için bu aşılardan etkilerinden bir yol yok mu?? 😞😞

Beğen · Yanıtla · 1y

1

Nurdane Öncel Aşı detoksı yapıcaksınız

Beğen · Yanıtla · 1y

1

Nurdane Öncel Googleden araştırın.Gümüş suyu kullanan var büssürü bitki var açıklamalı olarak internetten bulabilirsiniz.Ayrıca günümüzün kitle imha silahları diye grup var oraya üye olun tüm sorularınıza cevap verirler Buket Van Ecin

Beğen · Yanıtla · 1y

1

Aynur Tekin Peki yaptıranlar nasıl kurtulacak varmi curesi

Beğen · Yanıtla · 1y

4

Fatma Zehra Uğur .

Beğen · Yanıtla · 1y

Sera Yavuz .

Beğen · Yanıtla · 1y

Sumeyye Altundag Hacamat la allahın izniyle kızım 2 yaşındayken Hacamat yaptırdım sırf aşılardan etkileri çıksın diye

Beğen · Yanıtla · 1y

2

Gül Çamlıca Bedir Madem bu kadar tehlikeli insanlar neden mecbur bırakılıyor. Özellikle çocuklar devlet eliyle aşılanıyor bizlerse çaresiz ve bilgisiz olduğumuz için kabul ediyoruz.

Beğen · Yanıtla · 1y

2

Selma Sari yaptıranlar acaba sülûkle hacamatla acilik orucları ile kurtulabilirmi?!

Beğen · Yanıtla · 1y

2

Havva Gül Kardeşlerim bu kadını tanımıyorsunuz siz bu kadının dediğinde negibi kople olsun ve bu kadın doktorlugunu bırakıp alternatip tip yani peygamberimizin metodunu uyguluyor

Beğen · Yanıtla · 1y

7

F Rabia Sezgin Özcan Benim şuan 8 aylık bir torunum var Elhamdülillah. Kızım hamileyken hiç aşı yaptırmadım. Torunum çok sağlıklı doğdu. Doğduktan sonra bebeğine hiç aşı yaptırmadım. İyi ki de yaptırmıyorum. Mümkün olduğu kadar Sünnet-i Seniyye ye uygun büyötmeye çalışıyorum. Torunum çok sağlıklı, çok huzurlu ve mutlu bir bebek. Şu ana kadar bir yada iki sefer biraz ateşlendi. O zamanlarda daha sık emzirdi ve ilaç kullanmadan geçti Elhamdülillah. Aşıların faydası varmi bilmiyorum ama maalesef zararlarının çok olduğunu kendi tecrübelerimden biliyorum. Kendi çocuklarıma aşı yaptırmamış olmayı çok isterdim. Lütfen çocuklarımız bize Allah'ın emaneti, o sebeple çok iyi araştırın. Allah'a emanet olun inşallah.

Beğen · Yanıtla · 1y

4

Şafak Şavur Yaa size sorarım bu sayılan aşılar 700-800 sene önce varmydı...ne oluyordu insanlar patır patır ölüyormuydu...yoo..bu rahmetli hanımı iyi anlayın kitaplarını iyi okuyun....

Beğen · Yanıtla · 1y

9

When the shared text is examined, although it is claimed that it belongs to Dr. Aidin Salih, it is seen that there is no evidence to prove this. When the content of the text is examined, it started with the swine flu vaccine and continued with the topic that the vaccine is harmful in general, and verses from the Quran were also included. At the same time, there are opinions expressed as the views of Rasim Küçükusta (another medical professional) in the text.

In the comments, this confusion is seen in the text, but when the comments are examined, it is seen that the people who are already undecided are afraid of the diseases listed in the text of the article and reinforce the decision not to vaccinate and question what they should do to eliminate the effect of the vaccines. For this, “vaccine detox”, cupping “etc. methods appear to be recommended. At the same time, it is seen that the comments take place in his religious discourses. In this sense, it is possible to say that they reinforce the anti-vaccination with religious references.

In the second post examined, a document with the title “*According to the Disease Control and Prevention Center (CDC) data, the contents of the vaccines and the side effect table ...*” was shared. It is understood shared document was prepared by the AYMD Movement by the logo used. Besides, although it was stated that the statement made in the share was prepared by the aforementioned institution, CDC, “*Below is the list of vaccine content compiled from the vaccine content list published by the CDC and the list showing the side effects of the vaccine manufacturer in its own publications (prospectuses).*” warning/information is included at the beginning of the document.

AYMD / I Don't Have to be Vaccinated
17 June 2015

Contents of vaccines and side effects table according to the CDC data of the Center for Disease Control and Prevention

WHAT IS IN VACCINES?

The table contains information on 11 different vaccines, such as DTaP, influenza, varicella, and MMR vaccines. In addition, in the document, some words were written in bold in order to draw attention to both the ingredients and the side effects, but the reason for this was not explained. In the last part of the same document, there is a note “* *Please see Annex 1 for the full list of the American CDC organization showing the adjuvants other than the preservatives used in vaccines and the acculturation media in which they are produced*”, however, it is not included in the specified additional list and it is not shared as a link to access the document.

When the comments made on the document prepared by the AYMD movement containing confusion are examined, it is seen that there are questions about the reliability of the posted data as well as polarization and heavy accusations among the commenting users. It is possible to observe the confusion within these posts. Unlike the comments made to the first post, it is seen that the comments made in this post have an aggressive and offensive approach towards doctors. In addition, emphasizing that it belongs to the American CDC in the shared document, this perception created another perception that a “scientific document” or “credible statistical information” was shared, which was reflected in the post and comments.

AYMD / I Don't Have to be Vaccinated
30 March 2018

Why are the damages of vaccines not explained, what kind of a bias is this? And how can someone who has no official duty find the right to speak like that on behalf of an institution just because he or she is being asked an opinion? Why does the ministry of health not prevent someone from making a statement on their behalf?

Ministry of Health Warns!

The epidemic could explode

Great danger in vaccine refusal: Epidemic may outbreak.

Figure 5. The 2nd most commented and liked post

AYMD / Aşı Yaptırmaya Mecbur Değilim 17 Haziran 2015 ·

Hastalık Kontrol ve Önleme Merkezi CDC verilerine göre Aşıların içerikleri ve Yan etki tablosu...

Not: Görselin büyük hali için; resme tıkladıktan sonra alt siyah alanın alt kısmındaki seçeneklere ve sonra da indir butonuna tıklayabilirsiniz.

AŞILARIN İÇERİĞİNDE NELER VAR?

Aşağıda CDC'nin yayımladığı aşı içerik listesinden derlenmiş kısmi aşı içeriği listesi ile yine aşı üreticisinin kendi yayınlarında (prospektüslerinde) belirttiği yan etkileri gösteren liste verilmektedir:

Aşılar (çeşitli üreticilerden)	İçindekiler (kısmi listedir)	Yan Etkileri (kısmi listedir)
DtaB (Difteri, Tetanoz, aselüler Boğmaca) Aşısı, adsorbe	Alüminyum fosfat , amonyum sülfat, Alüminyum potasyum sülfat , Thimerosal [ağırlığının%50'si cıva olan bir aşı koruyucusu], Formaldehid veya Formalin, Glutaraldehid, 2- Phenoxyethanol , Dimethyl-beta-cyclodextrin, Sodium Phosphate, Polysorbate 80	Otlizm , ateş, anoreksiya, kusma, zatürre, menenjit, sepsis, boğmaca , konvülsiyon, febril, gran mal, atebril ve kısmi nöbet/havale, ensefalopati [beyin dokusunda genelde dejeneratif değişikliklerin görüldüğü hastalıklara verilen isim], brakiyel nevrit , Guillain-Barré sendromu , Ani Bebek Ölümü Sendromu
DTaB-HepB/İPV Kombine Aşısı, Difteri ve Tetanoz Toksoidleri ile Aselüler Boğmaca Adsorbe/ Hepatit B (Rekombinant) ve İnaktive Poliovirüsü (çocukfelci) Aşısı Kombine	Alüminyum Hidroksit , Alüminyum Fosfat , Formaldehid veya Formalin, Glutaraldehid, Maymun Böbreği Dokusu , Neomycin [antibiyotik], 2- Phenoxyethanol , Polymyxin B, Polysorbate 80 , Antibiyotikler, Maya Proteinini,	Havale/nöbet, diyabet, astım, Ani Bebek Ölümü Sendromu , üst solunum yolları enfeksiyonu, anormal karaciğer fonksiyonu testleri, anoreksiya, sanlık , şok , ensefalopati , Stevens-Johnson sendromu , brakiyel nevrit
Grip Aşısı Influenza Virüsü Aşısı	Thimerosal [cıva], Cholv Böbreği Hücreleri, Yumurta Proteinini, Gentamisin Sülfat, Antibiyotikler, Monosodyum Glutamat [MSG] , Sukroz Fosfatı Glutamat Tamponu.	Ciddi solunum ve mide-barsak semptomları, havale/nöbet, alerjik astım, iştah kaybı, mitokondriyal ensefalomiyopatiye artış, kısmi yüz felci, Guillain-Barré sendromu , Bell's palsy, Stevens-Johnson

153 341 Yorum 402 Paylaşım

In the third post examined, some news was shared by the AYMD movement. The news on the website of a newspaper named Sabah, “The Ministry of Health Warns! The epidemic could boom” and the link containing the news was also shared. The following statements were made by AYMD in the post: “*Why can't the harms of vaccines be explained, what kind of bias is this? And how can someone who has no official duty find the right to speak on behalf of an institution just because he is asking for an opinion? Why doesn't the ministry of health prevent someone from making a statement on their behalf?*”

Figure 6. Samples of the 2nd most commented and liked post

Hatice Cavus Suan gebeyim, ama kesinlikle aşı yaptırmak istemiyorum. Şuan eşiimi ikna etmeye çalışıyorum. Boyle bilgiler paylaşırsanız bizim de kendimizi savunmamız daha kolay olur. Beğen · Yanıtla · 3y 2	Aysu Uygur Burada "çocuğuma aşı yaptırmadım oh çok da mutluyum" diyen insanların bencilliğine inanmıyorum. Herkes sizin gibi çocuğunu aşılatmadığında ve tek bir boğmaca vakası 1 haftada bütün ülkeyi sardığında da böyle huzur içinde facebook'tan yorum yapabilecek misiniz acaba? Halk sağlığı fakültelerini, aşı geliştirmek için sürdürülen akademik çalışmaları ve tutulan istatistikleri çöpe atalım. Çünkü iç huzur ile aşı yaptırmamayı seçmiş seçkin bir kitle facebook'tan bildiriyor. Beğen · Yanıtla · 3y 9
Zeynel Vezirkopru Aile Hekimleri 2015 itibarı ile aşı uygulamasından kaç lira alıyor bilen var mı?6-7 yıl önce 1 tl hasta başı alıyorlar. Bizim önceki aile hekiminin 7000 kayıtlı hastası vardı.7000+ maaş. Aşı cicidir demeleri çok doğal değil mi??? Beğen · Yanıtla · 3y	Sade Vatandas Ozan Dadasbilge Aşısız ve ilaçsız büyüyen çocuğun bağışıklık sistemi aşı ve her ateşi çıktığında ilaç verilen çocuklara göre daha kuvvetli oluyor, çok daha seyrek hastalanıyor ve çok kısa sürede iyileşiyor. Aşı zaten mikrobun kendisi. Aşı yapılmadığında hastalığın nasıl yayılıp ülkeyi kaplayacağı konusunda biz cahil mühendisleri aydınlatırsanız sevinirim. Çocuğunu aşılatmayan anne-babalara bir suç yüklüyor gibisiniz. Madem aşı bu kadar iyi o zaman neden korkuyorsunuz ki? Bizim korkmamız lazım esas çocuğumuz aşısız diye... Beğen · Yanıtla · 3y 6
Zeynel Vezirkopru Aile Hekimleri 2015 itibarı ile aşı uygulamasından kaç lira alıyor bilen var mı?6-7 yıl önce 1 tl hasta başı alıyorlar. Bizim önceki aile hekiminin 7000 kayıtlı hastası vardı.7000+ maaş. Aşı cicidir demeleri çok doğal değil mi??? Beğen · Yanıtla · 3y H.Havva Çiftçi Seyhan Aile hekimleri aşı uygulamasından para almıyorlar Beğen · Yanıtla · 3y	Sade Vatandas Ozan Dadasbilge İddiamın kaynağı bizzat 3 tane çocuğum, 3, 5 ve 8 yaşlarındalar. Bir tane bile aşı olmadılar. 2 yaşından sonra hiçbir ateşlenmeleri 1 günden uzun sürmedi. Yarım tane bile antibiyotik veya başka herhangi bir ilaç almadılar. Çocuğunuz aşılysa size göre zaten yeterince korunuyor demektir, neden korkuyorsunuz ki? Esas bizim korkmamız lazım sizin mantığınıza göre. Beğen · Yanıtla · 3y 3
Gizem Ozyasar İsmi hala bilemediğim kişi benim inandığım diyor kaynaklar için, hic gulecegim yoktu. Yani inanc uzarinden gidiyorsak zaten ameliyat da olmayalım, hicbir ilac kullanmayalım. İnanalım sadece, bakalım neler olacak. Bu arada kendisinin yan etkileri gosterirken inandırıcı buldugu ve istahla paylastığı bir kaynak olan CDC (amerika birlesik devletleri kontrol ve koruma merkezi) nedense bu asıları yaptırmayı öneriyor. Ancak ası onerdiginde sanırım tarafı bir kaynaga donuveriyor. Bu ne yaman celiskidir! Beğen · Yanıtla · 3y 1	Sade Vatandas Ozan Dadasbilge Çocuğuna hiç aşı yaptırmayan var, hem de sandığınızdan çok daha fazla. Aşı çocuğun bağışıklık sistemini baskılayıp tembelleştiren bir maddedir. Hiç aşı olmayan çocuklar hastalandıklarında aşıli çocuklara göre çok daha çabuk iyileşirler. Ve de çok çok seyrek hasta olurlar. Beğen · Yanıtla · 3y 11
Aysu Uygur Evet, ayrıyetten ben de CDC'nin türkçe yayın yapmadığına inandığım için bu kaynağın orijinalini görmek istiyorum eğer mümkünse. Kaldı ki otizm aşı ilişkisi DEFALARCA, DEFALARCA yalanlandı. Bu iddiayı ortaya atan sadece 1 makale vardı, düzmece olduğu gösterildi. Buradan insanları korkutmayın kendinizi önemli hissetmek için. Beğen · Yanıtla · 3y 4 Asena Devlet Ooof Aysu, hakikaten, Offit yanışması arkadaşın kendi kişisel blogunda yalanlayınca otizm bağlantısı ortadan kalkmıyor.. Hala güncellemedi mi blog yazılarını yoksa? Hayır Gorski perişan oldu CDC'den whistleblower Thompson çıktıığında, Türkçe'ye aksetmedi hala?? Çizgifilm yapmakla meşgullerdi sanırım 😊 Beğen · Yanıtla · 3y 1	Betul Karakus cocuklarima aşı yaptırmadım, cok mutluyum diyemiyorum..maalesef yaptırdım ve cok pişmanım..En son cocugumda sebebin bir türlü bulamadığımız bronşitin aşıları kestigimizden beri esamesine bile rastlamadığımızdan bundan böyle sürü eğitimi almış, yaşadığı sistemi sorgulamayan hic bir doktor musveddesi beni baglamaz, yeni dünya düzeninin farkında olan ufku geniş, diplomasına tapmayan taptırmayan gercek insan doktorlari bulup dogerlerine bir tekme basariz, beyin enfeksiyonuna asinin kendisi degil, asiya ragmen kizamik virüsünü kaparak kizamik gecirmenin sebep oldugu ne demek ? Yalan baloncuklarinizi, sıg görüşlerinizi alın, gidin sitenizde geveleyin, bizler doktor değiliz anneyiz, en güzel şekilde analizli mukayaseyi biliriz cocuklarımız söz konusu olduğunda.. Beğen · Yanıtla · 3y · Düzenlendi 4

Figure 7. The 3rd most commented and liked post



In the introduction of the posted news, it was stated that Mehmet Ceyhan who is a member of the Ministry of Health Immunization Advisory Board, stated that the vaccine refusal increased to 23%. Following Ceyhan, the words of “*The consequences of this are getting worse. Measles has also started to appear in children who have been vaccinated. We have not encountered such a picture in about 15 years. Vaccine denial finds 50 thousand outbreaks can occur in Turkey*” has been transferred as a warning. In the news text, it is stated that the increase in the number of measles cases seen in 2017 and 2018 is dangerous, and it is underlined that the need to raise awareness about vaccination and the need to be careful in anti-vaccine discourses.

Considering that the person who is the source of the aforementioned news is a member of the Ministry of Health Immunization Advisory Board, AYMD’s “*Someone who has no official duty*”, “*Why does the Ministry of Health not prevent someone from making a statement on his behalf?*” statements bring along the idea that the credibility of this movement must be questioned. It is also possible to say that this aggressive attitude is reflected in the comments. This situation is clearly seen in comments such as “*the so-called professors who make these statements are employees of international pharmaceutical companies ...*”, “*... vile elites*”, “*doctors bought by pharmaceutical companies ...*”.

Figure 8. Samples of the 3rd most commented and liked post

Fatma Ali Saklar Aile hekiminin bizzat kurduğu cümleler ; "Ben devletin verdiği hiçbir aşıya güvenmiyorum, çocuğuma daha az zararlı özel aşılar getirip vurdurdum !" Ama aşı vakti geldi mi bizim masum çocuklarımıza o güvenmediğiniz aşıları çatır çatır vuruyorsunuz. Yazık ! Ayrıca aşı yüzünden iki bebeğini kaybetmiş bir kadının torunuyum ben. İçinde ne olduğunu bilmediğimiz paketlenmiş gıdaları bile çocuklarımıza verirken tereddüt ederken içinde ne olduğunu bilmediğimiz (ki şükürler olsun artık ne kadar zararlı şeyler olduğunu biliyoruz) bir maddeyi vücutlarına gözü kapalı enjekte ettirmemizi nasıl bekliyorlar. Üstelik bunca aşı yan etkisi yaşamış insanlar karşılaştığımız ! Beğen · Yanıtla · 1y	Yusuf Taşçı Bu ve benzeri açıklamaları yapan sözde prof. lar uluslararası ilaç şirketlerinin ücretli elemanlarıdır. Aşının hiçbir yararının olmadığına, tam aksine ilgili hastalığın görülme sıklığını artırdığına dair bilimsel araştırmalar var. Hastalık etkeninin artmasının sebebi savaşlar ile sağlıksız ve yetersiz beslenmedir. Bir hastalık etkeninin tamamen ortadan kalkması diye bir şey de yoktur. Bu doğaya aykırıdır. Temiz bir ortamda yaşayıp, doğal ve sağlıklı beslenen bir birey hastalık etkeniyle karşılaşsa bile onu alt edecektir. Kaldı ki mesele sadece aşı da değil. Bu sömürgeci ilaç şirketlerinin insanlara peynir ekmek gibi yedirdiği ilaçların tamamı zararlı olup, insanları daha fazla hasta etmekte ve alınan her ilaç daha ciddi hastalıklara sebep olmakta, haliyle insanlara daha pahalı ilaçlar verilmektedir. Bu işin sonu da genç yaşta ölümdür. Bu sömürüye ve cinayete dur demeliyiz... Beğen · Yanıtla · 1y
Melek Sarıvaz Yurdakul Benim iki çocuğum var ikisine de aşı yaptırdım. şimdi 8 aylık hamileyim doğacak çocuğuma yaptırmayı düşünmüyorum. Benim sağlık bakanlığından tek ricam bu aşıların içeriğini neyden yapıldığını zararsızlığını kanıtlasın. İnsanları ikna etsin. madem bu kadar önemli aşı. kendi ülkesinde üretsin. bizi dış ülkelerin elinde oyuncak etmesin. Beğen · Yanıtla · 1y Kubra Ibrahim Yeni digan çocuğunuza aşı yaptırınız mı ... Beğen · Yanıtla · 40h Melek Sarıvaz Yurdakul Kubra Ibrahim evet yaptırdım ilk gittiğimde imza vermek istediğimi söyledim yaptırmayacaktım ama öyle ikna edici konuştular ki ikna olmamak elde değil. insallah doğru yapmışımdır. hala içimde bir şüphe var çünkü Beğen · Yanıtla · 40h	Gülün Girginer İnan Aşı karşıtları toplum bağıksıklığını önemsemiyor onu anladık... O halde kesinlikle uygulanması gereken bir şey var. Madem ücretsiz olan koruyucu hekimlik hizmetini kabul etmiyor kişi aşılatmadığı çocuğu için devletten hiç bir şekilde ücretsiz sağlık hizmeti almamalı bana göre... Ücretsiz korunmasına izin vermiyorsa her türlü hastalığın tedavi bedelini cebinden ödemeli... Hatta aşısız çocuklar aşıları çocuklarla okullarda aynı sınıflarda okumamalı bile... Beğen · Yanıtla · 1y · Düzenlendi Ayhan İmamoğlu Ben de sizin çocuğunuzla aynı okula gitmesini istemem çocuğumun, vicdansızlık, insanıyetsizlik ve aşırı hipokratik bulaşmasını asla istemem çocuğuma. Zira anneden çocuğa gen transferi yanında kişilik esinlenmesi de oluyor. Beğen · Yanıtla · 1y
Ayhan İmamoğlu Doktorlar gelirlerinin düşmesi hatta işsiz kalma pahasına aşılarla hastalıkları bitirmeyi ya da minimum seviyeye düşürmeyi amaçlayan, mikemmel varlıklardır. Hipokratın çocukları... Beğen · Yanıtla · 1y	Kutman Canay Büyük oyun için kompo kuruluyor. Önce aşıya tü kaka dedirtiyor sonra aşı vurmaman yüzünden salgın oldu diyecekler. Kitle Ölüme bahane... ALÇAK ELİTLER Beğen · Yanıtla · 1y · Düzenlendi
Adem Şahin Bizim gibi az gelişmiş ülkelerde sadece zorunlu.... ABD ..Fransa. Almanya hiç birinde zorunlu değil.. adım başı eczane hepside tika basa dolu.. sahi bu aşılar Neyden koruyodu Beğen · Yanıtla · 1y · Düzenlendi Abide Kara İlgen Aşılar Türkiye'de zorunlu değil. Beğen · Yanıtla · 1y · Düzenlendi AYMD / Aşı Yaptırmaya Mecbur Değilim Herhangi bir zorunluluk yok anayasa mahkemesi de bu gerçeği kararlarıyla tekrar teyid etti Beğen · Yanıtla · 1y	Yusuf Taşçı Gülün Girginer İnan Bir aşı ve ilaç (zehir) karşıtıyım. Sağlık hizmetlerinden yararlanmama önerinize canı gönülden katılıyorum. Ama bir şartım var: Emeğimden aylık olarak kesilen 300 kışır liralık sağlık sigortası kesilmeyip bize ödensin. Biz de gerek duyduğumuz zaman gerçek doktorlardan (ilaç şirketleri tarafından parayla satın alınmamış doktorlardan) hizmetimizi ücreti karşılığı alalım. Beğen · Yanıtla · 1y Fatma Ali Saklar Gülün Girginer İnan anlaşılan size ilaç firmaları para veriyor. Kendinizi paralıyorsunuz aşı denen o zehiri aklamak için. Yazık Beğen · Yanıtla · 1y

SOLUTIONS AND RECOMMENDATIONS

In the posts of AYMD, it is seen that their discourse is shaped by reference to religious and foreign sources and that the language used in the discourses includes anger and hatred. Many terms related to vaccines causing different diseases or the active ingredients in vaccines have been used with spelling errors. Again, in the posts, different people are shown as references, but there is no information about the confirmation of information.

It is thought that all of these posts will not only support the opinions of those who are already against the vaccine, but also cause hesitant people to develop negative behaviours against the vaccine. It is seen that the news is given as a reference in the posts. The importance of the language and discourse used by journalists in this news production process becomes clear once again.

FUTURE RESEARCH

The use of mass media and social media in informing and raising the awareness of the society about the results of scientific studies on vaccination and its effects will ensure rapid progress in the fight against vaccination.

In the fight against vaccination, it is essential that scientists should carry out scientific studies on the reasons for vaccine hesitancy-vaccine rejection, methods to increase social approval in vaccination and offer solutions in the light of these researches. Studies show that it is one of the most effective ways for physicians and healthcare professionals to establish good communication and trust with the individuals and parents to be vaccinated, to eliminate hesitations about vaccination. In addition, the use of mass media and social media in informing and raising the awareness of the society about the results of scientific studies on vaccines and their effects will provide rapid progress in the fight against “anti-vaccination”.

At the same time, how health content in the media is presented is an important point. Revealing how the discourse, language and style of content or news affect people who are hesitant about vaccination/immunization will contribute to the fight against anti-vaccination.

Health literacy, which is considered as an important concept in patient education and disease management, is seen as an issue that should be considered not only in a wide scope such as health policies and healthcare costs, but also because of its potential to affect the health of the individual. For this reason, according to Gözlü (2020), health literacy should be shaped by multi-stakeholder participation consisting of society and faith-based organizations, health institutions, academia and business communities, official institutions, educators, health communicators and the media. With this aspect, working on health literacy and vaccination, especially on social media, will contribute to the fight against anti-vaccination by raising public awareness about vaccination.

CONCLUSION

Especially in recent years, although media warnings have been given and although it is known that it causes epidemics and mass deaths, the rate of families who adopt an anti-vaccine attitude is gradually increasing. Those who refuse vaccination for different reasons affect the hesitancy and refusal of vaccines in others.

In the study, which aimed to examine social media posts in order to reveal the effect of social media on vaccination rejection, as stated in the literature review, “thought to be at risk”, “conspiracy-based reasons”, “religious discourses”, “forced by the state” expressions come out.

However, what is remarkable is that, despite the study of Wakefield that autism and MMR vaccine are related and predicts that vaccine rejection takes place on this axis, it is seen that the relationship between the measles vaccine and autism is not emphasized on social media.

It is observed that users who are hesitant to display the behaviour of vaccine refusal are guided by panic and fear as well as religious discourses, and even more, they head to aggressive and offensive discourses that shake the base trust to public institutions and public professionals/workers. It is also necessary to question how reliable the referenced sources are. Although the fact that all the posts are based on the news in newspapers is not taken into consideration by the users/posters, it is once again revealed that in the name of health journalism, it is necessary to be careful when reporting on the subject and to consider the effect it will create.

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KEY TERMS AND DEFINITIONS

Anti-Vaccination/Vaccine Refusal: It is the state of refusing all vaccinations, not getting vaccinated voluntarily.

AYMD/Aşı Yaptırmaya Mecbur Değilim [Hareketi]: [movement of] I Do Not Have to Be Vaccinated.

Discourse Analysis: It is a qualitative, interpretative research method used in applied linguistics and social sciences. Because of this interpretation activity, it is also used in the forms of “critical discourse analysis” or “critical discourse analysis”. Critical discourse analysis highlights themes such as power, domination, hegemony, class difference, gender, race, ideology, discrimination, interest, gain, reconstruction, transformation, tradition, social structure, or social order and deals with these issues as a research area.

Health Communication: It is the communication carried out towards target groups regarding health in order to increase the quality of life of the individual and society.

Immunization: It is the process of protecting the person against disease by vaccination or similar means.

Immunization Services: It is an important primary health care service carried out to prevent infants, children, or adults from catching these diseases by vaccinating them before the period when the risk of infection is highest.

Social Media: With the introduction of Web 2.0, it is a media system that enables one-way information sharing to be accessed double-sided and simultaneously. Also social media; refers to the whole of the dialogues and shares that people make with each other on the Internet.

Vaccination: It is the process of giving antigenic substances to a living thing to develop immunity against diseases.

Vaccine: Chemicals that contain very low doses, conjugated, diluted and attenuated pathogenic microorganisms (i.e., viruses, bacteria), and/or their polysaccharides, given to the body to provide immunity against certain diseases.

Vaccine Hesitancy: Although vaccine availability is possible, it means a delay in accepting the administration of some vaccines or not allowing some vaccines to be administered.

ENDNOTE

- ¹ In discourse analysis, messages that include discourse and are subject to analysis are defined as text.

Chapter 4

Health Communication Concerning the Novel Coronavirus Pandemic

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ABSTRACT

The concept of health communication has transformed into the concept of ‘strategic health communication’ in the 21st century, especially with the increasing inclusion of the private sector in health communication practices. Changes and transformations experienced in the 21st century have differentiated the perception of health and illness. In this regard, the biomedical model based on health has given place to the social model, gained a health-based definition, and started to be regarded as a whole well-being from a physical, mental, and social aspect. In this chapter, considering that the concepts such as ‘health’ and ‘illness’ do not exactly refer to the biological realities and health is a social and universal institution, the reflections of the new paradigm in question on the disciplines of communication and public relations will be analyzed and scrutinized with regard to the health and illness paradigms that have changed and updated with the COVID-19 pandemic.

INTRODUCTION

Illness, health, wellness, a balanced and healthy life, lifelong health, a balanced diet for a healthy life... It is possible to add more words and phrases like these. The phenomenon of healthy life that has been gradually increasing in recent years urges people to reconsider themselves, their lives, and their health status. Health and the importance attached to health have been increasing with the Covid-19 pandemic, which has affected the whole world and occurred unexpectedly. All of a sudden, being caught unprepared by the pandemic, people once more started to urgently ponder upon keeping a balanced diet, orderly living conditions, their immunity, and the phenomenon of a healthy body. Accordingly, they have been trying to control their lives and pull the strings by tracking the agenda and the news through both television and newspaper, but mostly through social media.

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It is obvious that the Covid-19 pandemic has left the world in a health crisis. In addition, the fact that this sweeping health crisis is transforming into a global, economic, financial, and social crisis without a moment to spare is never off the agenda. Now, the pandemic is not only a health crisis, but a factor threatening the economy, finance, and social life. Covid-19 pandemic impacts each layer of the society and this impact results in heavier outcomes considering some groups (Kara, 2020, p.26). This pandemic, which has turned both our country and the world upside down, causes a huge uncertainty in all countries; ministries of health bear a tremendous responsibility. It was expressed that the only thing that can be said about the influenza viruses is that the mutation in their patterns, when to increase and when to decrease, is completely unpredictable and no one is able to say something about how the current situation will progress (WHO, 2020). Under these circumstances, the state of uncertainty has driven people into a huge concern, crisis, and fear. People are able to control their mental health only by following the health-related news, untying the knot, and receiving information about what to do, where to do, and how to do. Taking the control into their own hands, people become more dependent on health communication.

The fact that more people, knowledge, situation, and phenomenon related to the Covid-19 pandemic are more visible and accessible compared to past pandemics thanks to the new technologies occurs as the most distinct feature of the Covid-19 global pandemic. In this regard, it is possible to mention a perceptible and different public space experience without limits in Turkey during this period in which the struggle against the pandemic continues. Mass media, especially social media creates platforms that facilitate the national and global discussion of public issues and allow all citizens to participate actively in public interactions. People gathering collectively try to overcome the imbalances of power and the negative impacts of the pandemic in this way. Individuals who can discuss their opinions on a common and vital problem have created opportunities allowing public debates and exchanges of ideas through discursive and actional interaction platforms. New phenomena of public spaces have been encountered during the pandemic and these spaces are often dynamic. Today, it seems possible to mention a public space experience in Turkey during this global pandemic period despite all the aspects that are not going well in practice (Hekimoglu, 2020, p.902).

These public space experiences that have gained more importance during the Covid-19 pandemic period has reminded the importance of the concept and operation of health communication and created an opportunity for a new consensus environment to emerge. It is deemed beneficial to discuss the health communication topics such as the concept of health communication, history of health communication, methods used in health communication, health promotion strategies, and health literacy especially on the modern media of the new age. Describe the general perspective of the chapter. End by specifically stating the objectives of the chapter.

Concept of Health Communication

Health communication may be associated with many topics related to health, illness, welfare, and well-being. However, health communication covers all topics related to communication regarding health. It includes all the steps starting from reception of a message related to health to managing the process, raising perception and understanding, transmitting knowledge and news, and the information management process.

Health communication provides important contributions in the fields covering the operations that aim for fighting the health problems and related to health promotion by using methods such as social marketing, media advocacy, and public relations. The field of communication is one of the main mechanisms

that are contributory factors in providing effective and valuable information during public education campaigns in healthcare organizations (Çınarlı, 2008, pp. 39-40). The theme of communication in health, which is a large and advancing communication sector, focuses on the necessity of conducting strong research in the field of health communication, centrality of the communication, processes in accessing the significant healthcare services, and goals in improving the health. For example; Gary Kreps and Dan O'Hair (1995) conducted studies and created strategies and programs displaying the influences of intrapersonal, interpersonal, group, organizational, and societal communications on health knowledge, behaviors, and outcomes. Similarly, in a study conducted by Sheldon Greenfield, Sherrie Kaplan, and John Ware (1985), it was emphasized that establishing a proper and healthy health communication between the patient and physician has positive influences in achieving the desired health outcomes and getting positive results by guiding the treatment. In addition, positive influences of social marketing and diffusion-based communication strategies on populations-at-risk and risk prevention behaviors in healthcare. Large-scale longitudinal communication programs continuing for many years, such as the Stanford Five City Heart Health Program and the Minnesota Heart Health Communication Program, demonstrate the positive influences of these campaigns on promoting the adoption of lifestyle changes to prevent cardiovascular disease and reducing gaps in public health knowledge. It is necessary to express that there is great potential in the healthcare field in terms of using the strategic programs in order to lend assistance to meet the needs of public health and to provide the necessary medical knowledge (Kreps, 2010, p.396).

In addition to the above-stated studies, many studies conducted in the field of health communication have detected that the communication campaigns organized in this field encounter problems in reaching the intended populations. When the health communication literature is examined closely, it is observed that the classes that benefit from the organized campaigns mostly are in fact the classes that have the most favorable opportunities in terms of health (Dutta-Bergman 2005; Viswanath et al. 2002). As Finnegan et al. (1997) emphasized, while health-themed campaigns may have an effect on the classes with high socioeconomic status, classes lacking health and information generally fall outside the influence area of these campaigns (Freimuth, 1990, pp.175-6). In this regard, the current gap between the social classes reemerges in the field of health.

Health communication is related to a wide range of fields including health status and life quality of individuals in society, preparation of national and universal healthcare programs, and development of healthcare programs. Health communication, which can be approached at the level of both mass communication and interpersonal communication, includes certain goals such as promoting healthcare services, disseminating true and necessary information about health, and changing health behaviors and attitudes. Dissemination of health messages through public education campaigns aiming for guiding the social environment towards health behaviors, raising awareness, and motivating for complying with the advised behaviors is also a subfield within health communication (Çınarlı, 2008, p.45).

Many comprehensive studies regarding health communication have been conducted during the Covid-19 pandemic. The appearance of the lead actor of the high-rating series named "Mucize Doktor", which is imprinted on the minds especially regarding health-related cases, on a public service announcement and many other persons who have earned the trust, respect, and affection of the community raising their voices in advertisements and information channels are counted as significant health communication strategies.

History of Health Communication

In the relationship model which exists since the early ages and in which the patient is passive and the physician is active, there is always a ‘father’ figure acting for the benefit of the patient. However, the evolution of concepts of health and illness, changes and transformations in the physician identity, the fact that medicine has become a discipline that uses increasingly intense technology with the concept of ‘right to health’, and patient’s autonomy and health on the role of the patient in medical decision-making have resulted in conflict between patient’s values and physician’s values. This situation is one of the most significant issues creating the conflict in communication between the patient and physician. The patient wants to direct the treatment method according to his/her own comfort and will and this situation contradicts the treatment mentality of the physician and medical ethics. This case entails a transformation into a different relationship model. Today, various relationship models, which are identified as ideals, are based on patient participation, in which the patient becomes active and takes on responsibility in treatment as much as the physician’s responsibility, are created.

According to the biopsychosocial approach, “health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” This is a definition taking the health concept of the biomedical model under protection but extending the concept after stating that health is not limited to this. The state of well-being is the state of not having “discomfort” by including the subjective perception of the individual. It is the patient’s state of feeling well as a whole (Erbaydar, 2003, p.45).

When considered from a conceptual aspect, it is observed that the most general definition of health was made by the World Health Organization (1948). According to this definition, “health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 1998, p.1).

It was stated that the definition of health presented by the World Health Organization in the meeting in Ottawa in 1986 is effective in promoting and developing health. The question that lies behind the Ottawa Charter asking how and under which conditions health potentials of humans can be developed through structural and political initiatives and personal support has resulted in two different suggestions: First is enhancing the personal competences and improving the personal health in terms of overcoming the health risks; the second is creating the social and natural environment in accordance with health in order to create good conditions for human health. Accordingly, in the first item, it is expressed that health communication becomes involved to a great extend (Okay, 2009, p.14). The concept of health communication acting with the aim of providing people with information about illness and health, increasing the general health level, and informing the patient about the treatment process as a decision-making mechanism can be evaluated as using strategic communication in the field of health (Yılmaz, 2011, pp. 11-12).

Based on these definitions, the concept of health that has been expressed since the early ages is changing in the present day. The state of well-being of the patient is not only under the initiative of the physician; many factors such as the hospital institution, physician, patient himself/herself, and public health become a part of the activity in a multiple way and everyone takes on equal responsibility in improving the personal health as a whole. Accordingly, the process of health communication is of great importance at this point. A smooth and healthy communication from beginning to end enables the patient to get through a comfortable, safe, and stable health process.

Methods Used in Health Communication

An effective health communication process starts with knowing the intended population inside out. Factors such as the identity, culture, education, language, religion, ideology, and socioeconomic status of the intended population have an influence on this process.

In order to design an effective communication strategy aiming for disadvantaged and fragile/sensitive groups as well as the whole society, it is necessary to properly determine the relationships of the intended groups with communication/information channels and identify the communication-based problems encountered in accessing the health-related messages. This principle is also effective in the field of health communication of which main goal is to inform the individuals and societies about health, raise awareness, and promote the proper behaviors (Sezgin, 2011, p. 91). At this point, the following items must be thoroughly considered: 1) determining the communication channels that are mostly preferred by the intended population in general; 2) identifying confidential social information resources regarding the health-related issues; 3) detecting mechanisms based on the variables such as age, region, socioeconomic status, gender, cultural values, and social norms, which create inequality in accessing the health-related information (Macdowall et al., 2006, p. 119).

Methods used in health communication may occur in various forms such as social marketing, media advocacy, and public relations. Reducing smoking, fighting against diseases such as cancer or AIDS, reducing traffic accidents, etc. can be counted among the aims of social marketing. Social marketing combines communication and social psychology theories with applied marketing techniques and uses these in the health communication campaigns (Cınarlı, 2008, p. 55). Typical characteristics of this type of communication campaigns are generally as follows (Okay, 2007, p. 118):

- Communication campaigns aim to provide a direct education for individuals who are expected to gain a health behavior or change it.
- Campaigns aim to influence large masses and include valuable sources in the mission (financially, voluntarily, or in cooperation with other institutions).
- Campaigns often use multi-channel and integrate instrumental channels (television, radio) with personal channels (healthcare professionals, social workers).
- Campaigns try to influence what consumers know about their behaviors, what they believe, and/or current and/or perceived social norms and to have the suggested behaviors being accepted.
- Campaigns try to change the acceptance of the suggested behaviors, what consumers believe about these behaviors, and what they know about them by influencing the reality and perceived social norms, trusting the self-efficacy skills, and changing the real skills. It is assumed that all of these influence the behavior.
- Campaigns are generally supported by governments. Sometimes these supports may be provided by the cooperation of private parties or professional organizations, or national parties and professional organizations.
- Campaigns are often the factors of a more extended social marketing program. Social marketing is the implementation of commercial marketing ideas in a way that lends assistance in solving social and health-related problems.

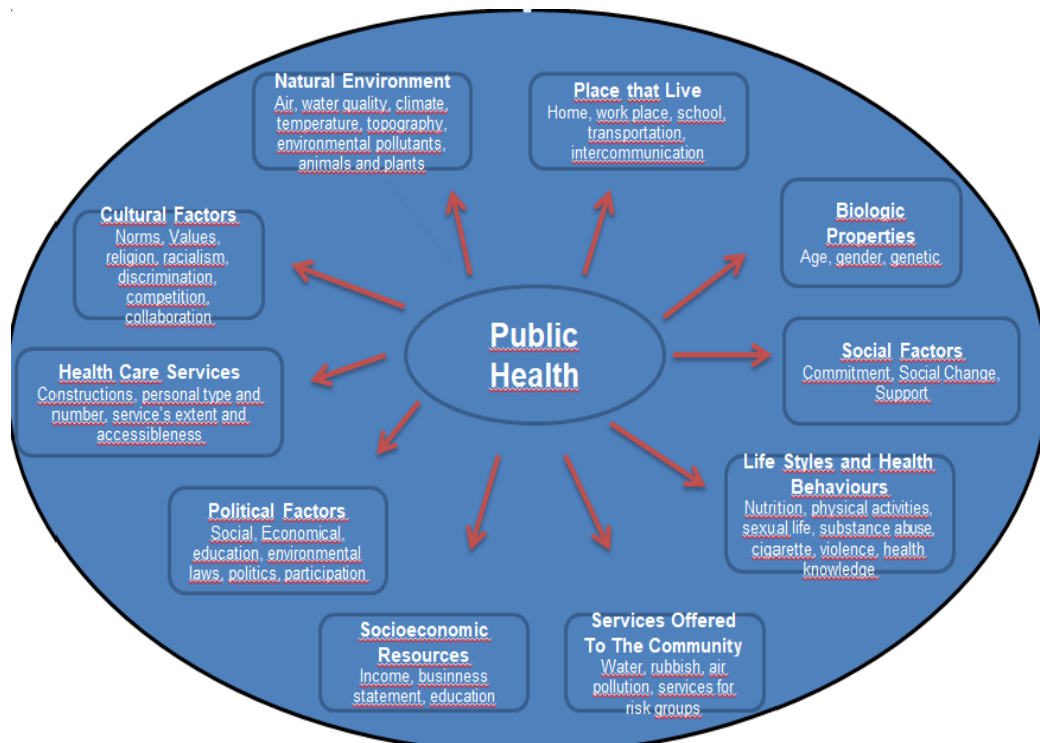
Public service announcements prepared in the field of health communication create one of the steps of media advocacy and a part of this field planned in a more extended way. On the other hand, the fact

that the control of these public service announcements is not completely at the hands of advocates and each is an expensive instrument can be listed among the constraints of public service announcements (Sezgin, 2008, p. 157). In this regard, all kinds of campaigns performed in the fields of public service announcements, public relations, direct marketing, social marketing, and digital marketing pursue an integrated marketing policy goal and aim to manage the health communication process in a holistic way.

Health Promotion Strategies

Defined as the process enabling individuals to increase their controls on the factors affecting their health in order to improve their health, the concept of health promotion focuses on developing the abilities and skills of individuals and changing the social, environmental, and economic conditions affecting the health of both individuals and society. In this regard, the key approach that forms health promotion practices is empowerment at the individual, institutional, and social levels.

Figure 1. Factors Affecting Public Health (Şimşek, 2013, p.346)



It is necessary to understand the factors that may hinder public health just as knowing the intended population well in health communication. The natural environment, the environment in which the individual lives, air and water quality, climate, and temperature are among the natural factors. Factors affecting the personal health as a whole can be listed as to whether the house, workplace, school, transportation, and communication spaces are healthy and clean, biological features of individuals such as age, gender, and genetics, social factors, family, social change, social capital, supporting environment,

cultural factors, norms, values, religion, racism, competition, cooperation, healthcare services and their structure, types and number of personnel, scope, accessibility, and cost of the service, political factors; socioeconomic education, laws on environment, policies, participation, socioeconomic rights, income, job status, education, services provided to the public; water, air, and garbage pollution, services provided to risk groups, lifestyle, health behaviors, diet, physical activity, sex life, substance abuse, smoking, violence, medical knowledge, etc.

For example; when it was decided that education is to be received online during the Covid-19 pandemic, a part of society was able to be adapted to this situation in no time while students living in the rural areas of the eastern side with no access to the internet started to receive their education on the high hills of the mountains. Students exposed to cold weather conditions, for this reason, have the risk of facing other health problems while avoiding the pandemic. Reducing these problems is possible by empowering individuals through raising awareness, empowering society, promoting the healthcare system, and capacity building.

1. Empowering individuals

Empowering individuals refers to promoting individuals' control on their health in order to help them identify their needs and increase the quality of life of theirs and the society in which they live. It is stated that the concept of health literacy was first mentioned in the discussion on health education in schools by Simonds stating that children should not be literates only in the subjects such as history and science, but they should also be literates in health, which is quite different from current meaning. American Medical Association defines health literacy as 'the degree to which individuals have the ability to read the health-related messages, read and understand the writings on the drug boxes, and understand and perform the instructions by healthcare professionals.' (Şimsek, 2013, p. 347).

2. Empowering Society

Smedley and Syme (2000, p.29) state that interventions towards individuals regarding issues such as consanguineous marriage, early marriage, violence and gender inequality, smoking cessation, and gaining healthy eating behavior are not sufficient and effective in controlling the public health problems by themselves and the social system must be intervened in order to create changes in behavior. In this way, individuals are to witness the results of early marriage, consanguineous marriage, violence and gender inequality, and an unhealthy diet and reconsider the retraction option.

3. Promoting Healthcare System

Promoting the healthcare system refers to establishing a healthcare system in which all individuals in society, especially fragile/risk groups, can access healthcare service, a qualified labor force is available, community participation mechanisms are well-constituted and well-funded, and leadership skills are advanced. There are many reasons for health problems experienced in the world such as climate change, economic crises, an increase in non-communicable diseases, and the occurrence of new infectious diseases. In many countries, individuals, who are not healthcare professionals but chosen among society, receive education on promoting healthcare in line with the goals, and establish communication with the healthcare system, are trained in order to control the health problems (Lewin, et. al, 2010).

4. Capacity building

Capacity building in terms of promoting health refers to producing information that can promote health and developing skills and leadership. In order to institutionalize the health promotion op-

erations, health promotion activities need to be integrated with financing, human resources, information management, and partnership establishing operations. This process increases the need for healthcare professionals who can establish strategic relations among health-related sectors, make changes in health-related policies, advocate for sustainable financing, and have advanced leadership skills. Therefore, it is required to prepare and implement education programs in order to increase the capacity of advancing in leadership. Countries' levels of development, which are determined by the Human Development Index, rise as their health promotion capacities increase (WHO, 2009).

When health communication is approached within the scope of interpersonal communication, especially face-to-face communication, individuals' difficulty in expressing themselves due to sociopsychological factors is emphasized. Analyses on the interpersonal communication barriers mainly focus on the defective sides of patient-physician communication and eliminating them (Becerikli, 2013, p.26). For example; Yagbasan and Cakar (2006) state that individuals may sometimes have difficulty in expressing their emotions, opinions, or feelings, which they want to reflect, to others due to some communicational barriers and factors such as rejection, offense, and communication happening in the control of other person or persons are prominent among these barriers.

One of the most significant methods to adopt in order to guide people to positive health behaviors is implementing various communication methods and techniques in the field of health. The use of communication types and methods in health practices is of great importance in terms of promoting health. The health message sent by the source reaches the receiver and creates some important behavior changes related to health in the target. The use of communication in health promotions is explained through a new concept: health communication. Considered through a general perspective, instilling health awareness to individuals and enabling them to gain various positive health behaviors are aimed through health communication (Avcı & Sonmez, 2013, p.120).

The Concept of Health Literacy as A Health Promotion Strategy

“Health literacy is linked to general literacy and entails people’s motivation and capacities to understand and appraise health-related information and messages in order to make judgments and take decisions in everyday life concerning health care, preserve, protect, and promote their health, and accessing the related information sources in order to improve quality of life during the life course.” (WHO, 2013)

It is not possible to promote health literacy in society only through the efforts of individuals or the health sector; a multisectoral approach is required in order to achieve this. Promoting health literacy can be ensured with a collective effort of various parties such as the education sector, non-governmental organizations, academic environment, media and communication sector, and business world as well as the health sector. Upon understanding society’s needs, expectations, and interest in these kinds of approaches, a plain language that is suitable for various groups must be chosen as the mean of communication. In addition, the effect of the studies carried out on this matter must be evaluated by measuring the health literacy level of society through studies conducted at intervals (Bilir, 2014, pp. 66-67). It can be expressed that prerequisites for promoting health are being a health literate person, having adequate knowledge and motivation, protecting health, and preventing diseases. In addition, since we will have knowledge of health by achieving this social awareness, this may result in minimizing the health costs that we may encounter during the disease process.

Many conceptual models of health literacy had been suggested from the first day of its identification to the 2000s and most of them are not coincide with the definition. Nutbeam developed a three-level model in 2000 and categorized health literacy as functional literacy, interactive literacy, and critical literacy. Functional literacy includes basic health literacy skills. Interactive literacy covers advanced cognitive literacy and social skills. Critical literacy involves the most advanced cognitive and social skills.

In Figure 2, the matrix model designed by Sorenson et al. from Maastricht University in 2012 is presented. According to this model, knowledge, competence, and motivation are at the center and access-understand-appraise-apply, healthcare, disease prevention, and health promotion form the rings of the matrix. Evaluating the matrix as a whole, it is observed that 4 elements of health literacy (accessing the health information, understanding the accessed information, interpreting the information, developing behavior in accordance with information) are applied to 3 different health domains (healthcare, disease prevention, health promotion). In addition, it is demonstrated that the individual level and population level interact with each other (Sørensen, et.al., 2012).

Nutbeam discusses health literacy in three levels as functional, communicative, and critical health literacy according to behavioral characteristics of individuals through which they demonstrate their cognitive and social skills. **Functional HL** is based on basic literacy skills and individuals who are at this level can read educational materials on health risks and the use of healthcare services. **Communicative HL** refers to having more literacy, social skills, and cognitive achievements and individuals can be benefited by participating in healthcare activities and adapt their knowledge in changing health conditions. **Critical HL** requires having advanced cognitive achievements and social skills and the ability of critical thinking. Individuals can evaluate their health-related knowledge critically, develop individual and social capacity, act according to social and economic determinants of health, understand the political and economic aspects of health, and interpret these aspects with these skills (Nutbeam, 2008, p. 2078). The distinction between the characteristics stated in different literacy levels in Nutbeam's classification expresses a more autonomy and personal authorization in the upper level through progressive logic. Progressing among the levels is not only based on cognitive development through training but also on the practice of encountering different information/messages (Aslantekin& Yumrutas, 2014, pp. 330-331).

Patient-Physician Communication as An Effective Form of Health Communication Solutions and Recommendations

Communication, which underlies the relationship, is defined as the act of conveying emotions, opinions, information, and ideas through speaking, writing, signs, and other symbols. Communication is of great importance in terms of health. Misunderstanding of the messages that are given towards individuals, families, and societies, especially in public health practices, may result in significant mistakes that may negatively affect health (Hacıalioglu, 2009, p. 183). In this regard, the communication skills of physicians, nurses, and midwives, especially the ones working in community healthcare, are of great importance in terms of understanding the health-related messages correctly and preventing communication-related problems regarding the public healthcare services.

In the health sector, two-way communication must be established between the professionals and patients in order to understand the expectations of both employees working in the health sector and patients. It is indicated that establishing effective communication is important in the process of considering the values of the intended population, raising awareness in healthcare services, generalizing the healthy lifestyle,

and creating behavioral changes in society. It is also stated that these developments will contribute to the creation of a positive corporate image in the long term (Taskın, et al., 2014, p. 124).

Verbal communication is of great importance in terms of health communication. Healthcare providers' ways of addressing patients and patients' relatives, understanding their requests and complaints, and expressing the solutions are all related to the verbal communication process. There are verbal communication processes without numbers happening in a day such as physicians describing the medication to be taken at home to the patients they examine or explaining the points to consider and nurses teaching to clinical patients about some issues they need to learn. The important thing in this process is healthcare personnel to establish proper and effective communication and patients and patients' relatives to give healthy feedback regarding this communication (Gunenc& Devedbakan, et al., 2015, p. 710). Non-verbal communication (body language), which is as important as verbal communication and sometimes more important than that, is of great importance in order for the physician to understand the messages that are tried to be given by the patient.

In non-verbal communication, which has great importance in interpersonal relations, individuals may have perceptions about one another and sometimes establish communication without using words by looking each other in the eye or turning their eyes away and through their ways of dressing and sitting, physical distances, body languages, signs, and spaces (Gurgen, 1997, p. 84). Most of the time, non-verbal communication can be effective as much as words, and sometimes may be more effective than words. Sometimes the non-verbal communication is used in order to give a direct message. Sometimes non-verbal expression ways accompanying a verbal message are considered in order to understand that message. Individuals send messages to each other without speaking or writing. In this way of communication, the prominent thing is what they do, not what they speak. A patient answering the question of a physician asking, 'Where does it hurt?' by pointing out that area and using facial expressions while describing the pain can be given as an example to this situation (Kasıkcı, 2009, p.13).

Interpersonal communication is a way of communication in which the source and target of the message are created by individuals and it is often performed face-to-face. Facial expressions and body language can be displayed in an intended or unintended way. Intended expressions may exhibit differences from culture to culture, just like languages. Unintended facial expressions and body language are called "emotional expressions." According to a study, there are six basic emotional expressions that are common in all cultures. These are happiness, fear, anger, surprise, sadness, and disgust (Tutar, 2003, p.76). For example; an intubated patient lying in the intensive care unit can express his/her pain by clenching fists or wincing. Then, the nurse can answer him/her by holding his/her hand after injecting a painkiller. In face-to-face communication, the source and receiver establish communication at the same time and in the same place. Face-to-face communication is the most effective communication method in human relations. Considering the health communication, all medical personnel must encourage the patient for giving feedback, and in order to receive this feedback, they must actively listen to the other person and prove that they listen (Okay, 2012, p.61). In face-to-face communication, our attitudes and behaviors towards people determine the quality and future of the communication that we will establish with them. The response we receive from other persons is related to our attitudes and behaviors towards them.

Researchers have investigated the effect of patient communication styles on various results as well as the role of body language communication styles as an auxiliary/supporter for verbal communication. Patients vary in their communication styles; they range from being expressive and communicative to being submissive and passive during the patient-physician interaction. Scholars investigating patient communication styles have discovered that there are differences in patient styles in terms of age, gender,

education, income, race, and other characteristics. For example, it is emphasized that patients with more formal education are more inclined to express themselves compared to less educated patients (Street, 2005). Studies indicate that patients with a large linguistic repertoire and informational resources for communication are more likely to participate in the medical encounter actively (Street, 2005). Patients with an internal locus of control, high levels of self-efficacy and skills are more likely to provide more information, ask more questions, and speak longer in their consultations with physicians (Duggan, 2006). The research on communication styles and communication skills has provided an impetus for the development of training programs directed at training physicians and patients on communication skills. Training programs teach a variety of skills such as data collection, interviewing, establishing relation, facilitating, checking and explaining comments, asking open-ended questions, establishing eye contact, looking for opinions of patients, presenting empathic statements, revealing patients' concerns, listening, participating in the psychosocial discussion, and investigating for patients understanding (Schiavo, 2007, p.23).

Based on this information, the most important factor in health communication is the proper establishment of the patient-physician relationship. The satisfaction of patients, who are the internal target population, will ensure the satisfaction of other partners such as the press, media, and political institutions, which are the external target population. Accordingly, physicians who are patient-centered and have communication skills enabling them to address the interest of patients and provide sufficient information requested by them will make a contribution to the health communication process of the hospital. Discuss solutions and recommendations in dealing with the issues, controversies, or problems presented in the preceding section.

FUTURE RESEARCH AND DIRECTIONS

The concept of health communication is emerging as a concept that is becoming more and more important day by day. Although there are more publications in the literature on the concept of health communication and the concept of health literacy, there is not much information and publication on how to apply it in practice. However, applied studies, projects and field researches to be carried out in these areas can help to overcome and overcome potential health communication problems in the future without experiencing a crisis.

CONCLUSION

'Health communication' and 'health public relations' are among the most current and conspicuous concepts and practices in the recent period. In parallel with the prominence of human and public health, health-related topics have been approached from a more strategic perspective and health institutions, academia, and non-profit organizations have focused on the medical products and pharmaceuticals market as well as media, health communication, and health public relations.

Health communication refers to studies conducted with the aim of informing individuals about health-related issues and creating a behavioral change. Centers for Disease Control and Prevention (CDC) (2018), which is one of the prominent international health institutions in the world, defines the concept of health communication as; "the study and use of communication strategies to inform and influence individual and community decisions that enhance health."

It is apparent how much importance health communication has gained both in print media and in digital and visual media, also both in local media and in the world during the Covid-19 pandemic period. In the simplest terms, individuals learning how to wear a face mask correctly, keeping sanitizer or cologne in their bags and cars, and paying attention to the social distance as far as possible are enabled by health communication professionals managing the process properly. The intended population, who was unconscious in the early times of the pandemic and did not know how to wear the face mask, has become aware of the importance of using the mask correctly in time.

The ability of individuals to make themselves free from wrong and implicit information and learn the correct, clear, and sufficient information by themselves through functional, communicative, and critical health literacy knowledge is regarded as an important health communication principle. The effective factors in health communication are social environment, society, media, economy, health infrastructure, natural environment, residential area, cultural factors, biological factors, and political structure as well as the individual. Accordingly, it can be expressed that there is a two-way structure with internal and external influence, not one-way. This is an interconnected chain. Consequently, a missing factor means that the whole communication process is interrupted. Being a conscious health literate person is not enough; this becomes significant when supported by external factors. Accordingly, the development and improvement of these external factors are important in terms of proper and clear health communication.

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KEY TERMS AND DEFINITIONS

Communication Practices: Being able to apply communication at the right time and place.

Communication Strategies: Plan programs to deliver communication at the right time with the right channels.

COVID-19 Pandemic: The virus first seen in Wuhan, China in 2019.

Doctor: Medical trained person to prevent and treat diseases.

Health: Physical and spiritual well-being, well-being.

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Health Communication: In order to support individuals, society, healthcare professionals, health institutions and policy practitioners, it is to transfer accurate and accessible information to the society through appropriate communication channels.

Health Literacy: To be able to get the right information about health from the right channels.

Illness: The state of not feeling the whole of the individual mentally and physically.

Patient: A person who is not feeling physically or mentally well.

Chapter 5

Health Communication and Social Media: A Study About Using Social Media in Medicine Companies

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ABSTRACT

Social media networks have become platforms that the private and also public sector health corporations use for communicating with their patients and also finding solutions for their needs. To establish a healthy health communication in between the patients and the health organisations and facilities and also to cover the needs of patients to reach true information is very important. Because of this, the performers using the social media must be examined. In this study, the authors examine and study the targets and the communication strategies of medicine companies by using the social media and also their medicine specifications to make a harmony in between these organisations and their products. In this study, the content analysis method is used to examine the Facebook page of Pfizer company in September and October 2020 posts. As a result of this Facebook page study of the company, the authors saw that 50% of the posts are acknowledgments, 31% about treatments of illnesses, and the rest (19%) are greetings.

1. INTRODUCTION

Social media platforms have transformed the information to the mass production of the knowledge system and also potential bodies carried reaching the knowledge to another extent. By using these informative pages more and more of the followers and researchers about health, the role of the health communication figures increased and become more effective. Especially the social media platforms like Facebook, Instagram and Twitter are being followed by the followers from private and public sectors.

The new studies in Public Health and private health sectors giving more importance to the health communication studies and researches (Sezgin, 2015:95) Many people first check the social media and

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internet about their health problems and health situations (Stretcher, 2011:33). But this cause problems because there have been many misinformation in these pages (Healdman et al, 2013:12) and this gives big responsibilities to the social media users.

In foreign literature, there have been many studies about the importance and usage of social media communication, and its usage. Usage of social media in marketing of health (Leyac & Osullivan, 2010), public health communication, (Heldman et al., 2013) health campaigns and behaviours (Korda & İtani, 2013; Huo et al., 2019), information about skin cancer and the importance of pandemi and all other problems and illnesses are some samples about these studies (Herrera-Peco and Terre-Montero, 2020). Like everywhere in the World, in Turkey also health communication and social media relationship become very important and the studies in this field increased. In Turkish literature, we can see that there have been many terms about social media (Ayaz ve Ayaz, 2017:148). These studies contain the studies of private and public health organisations to use the social media in a fluent way and also the influence of social media on the individuals about the health communication and also about the informative role of the social media in health (Karagöz, 2016; Kara, 2017; Tosyalı & Sütçü, 2016; Yaş, 2020). Despite all the usage of social media in health sector and also many information and facts about it, only the usage of social media in medicine sector is not a well known fact. Or very less information available about their social media usage.

Because the health is a very important issue for human life the information about health must be true and from the reliable sources. Because of this it is necessary and valuable to analyze the contents shared by pharmaceutical companies operating in the health field. The main aim of this study is to analyze these medicine companies digital health information strategies and also their social media studies and to examine them and to understand if these companies adding useful information to the health system and organisations. Later that a social media page of a medicine company in the digital platform will be examined and all the influence and addings will be studied to get the benefits of these analyzes and to see how they are using these communicative tools.

2. HEALTH COMMUNICATION TERM AND THE IMPROVEMENT OF THE DISCIPLINE

Communication as a term means that communicating each other to understand each others ideas and feelings (Tutar, 2003: 41) but when it comes to the health communication this explanation will not be enough because this is a mutual communication and more effective issue in health sector so we have to examine the health communication in a wide perspective (Göksu, 2018:1). Health service and sector is directly related to the human health and happiness so health sector is one of the service branches where quality and effective communication is most valuable. If the communication is weak between the patient and the doctors or the responsible, there can occur bad results and problems.

According to the Schiavo (2007) the health communication term gives very important responsibilities to every actor of the health system and their communication interaction and it is also an important issue to understand the ties in between these disciplines and their interaction and role which is very important and which is a must to change the misunderstandings and to prevent the misinformation (Sezgin, 2010:116). Hurealmann on the other side he mentions and explains that health communication is a mean of communicating and also establish communication in between the actors of the health sector and to help them share these informations about health (Okay, 2009:21). To establish the communica-

tion of the health workers and all the actors in the health sector like producer and the consumer and the coordination of them is possible with health communication and this is very important (Ergin 2011:5). Especially the communication between the patient and the doctor is very important to find out the right treatment model and positive results and health communication will supply this (Ha et al., 2010:40). Patient happiness and also the doctors care and happiness effects the health system and organisations (Atilla vd., 2012:23).

Health communication besides the communication between the patient and the doctor has more meaning than this. It also covers the research effect and also the role of the health communication and the role of the communication in health sector (Şengün, 2016:38). In this case, “health communication is also an art and technic to give clear information to the individuals and the public” (Parrott, 2004:751). The term of health improvement has been defined by the World Health Organization as “the process of improving health by ensuring individuals increase their control of health” (Young, 2014:601).

The final target of the health communication is, to improve health systems by improving the actors in the health sector (Redmond vd., 2010; Mahmud vd., 2013). Support to the politicians is given to improve the health system and to reach the improvements targets in Health sector and to perform the studies about this target (Tabak 2006:34). Affection, acknowledgment, action and sharing information are the strategies of the target of realizing the aim of the health communication strategies. The influence of the individual and the public realises by sharing the information and also rehabilitation of the health systems and service. In this regards the decisions taken to improve the health system transferred to the public to make them understand the system and to improve their informative mind and abilities (Schiavo, 2007:133:5).

The target of improving the individuals information and knowledge is to improve the general health of the public (Muturi, 2005:78). In addition, it is aimed to promote health-related services, eliminate health-related wrong behaviors, and develop positive attitudes (Becerikli, 2012:163). Just because of this health communication discipline consists of the importance of the public health (Schiavo, 2007:133).

It is accepted that the health communication is realized in different levels. For Thomas the communication types are based in 5 articles and these are individual, social network, organisation, society and the groups, and on the other hand Kreps collects these in 4 articles and these are individual, between individuals, in mind and in societies mind (Kreps ve Thomas’dan akt. Okay 2007:21).

As Özmen indicated, by saying that ‘the communication in health service’ is based on individual systems but ‘health communication’ or ‘the communication in health’ more refers to the social structure of the society. Like in England in many countries like America and Australia health communication, the role of health communication, the rehabilitation of health communication is used to improve the communication between patient the doctor in a very effective and positive way (Sezgin, 2010:112).

In summary the health communication has a very important role in improving the individual and also social health systems in all over the World (Koçak ve Bulduklu, 2010:6).

Recently, The health communication discipline studied by the academic environment and got the interest of many academic studies have a very young past. The meaning and the importance of the health communication term started to influence and using in United States and this was because United States gave very big importance to health communication and healthy communication between the patients and the doctors (Sezgin, 2015:96).

The conferences performed in the year 1980 sponsored by the the World Health Organization and United Nations Child Relief Fund named ‘Health for Everyone’ took positive attention and attraction and find a good way in its platform (Avcı ve Avşar, 2014:182).

While The study named 'Health for everyone in Europe' published by World Health Organisation in 1984 and emphasized the importance of the health communication and healthy life (Kıvanç, 2015:162) in a conference held in 1986 the ottawa agreement to support the health performed those days. In 1992 this two organisations named International Communication Association (ICA) Speech Communication Association (SCA) combined together and after this the studies to improve the health communication become faster (Rogers, 1994; Şengün, 2016:39; Vardarlier ve Öztürk, 2020:2).

After the debates and discussions about the role and place of the health communication disclipine by health education it is refererd to the public health, improving the public health and communication means more public communication and multi discline apporoach (Parrot ve Kreuter'den akt. Avcı ve Avşar, 2014:182).

Health education is important for improving the health organizations and sevicees and also to increase the defencive health systems and to decrease the illness rate of the patients and also the life quality of the patients (Vardarlier ve Öztürk, 2020:2).

It is mentioned that the health communication area in Turkey have become a discussion topic (Okay 2009:21). All of these applications and programs about improving the health communication systems, health communication, treatment process and also rehabilitation progress have been managed under the authority of Health Communication Department and Health Improvement Department and General Managements (Vardarlier ve Öztürk, 2020:2).

3. SOCIAL MEDIA AND HEALTH COMMUNICATION

Social media is a platform that was established based on web 2.0 technologies and these platforms give opportunity for social effects and effecting the social groups and also helps creating social groups (Akar 2010:17). It gives opportunity to reach a very large varity of a social group in a very short time (Aydinalp 2013:5). Among blogs, forums, and social network tools the most popular ones are social network websites.

According to the Kırık, social media is a common name given to the websites which give opportunity to the users to share photos videos and other documents (2013:72-76). Facebook, Twitter, Youtube and other platforms are for sharing the photos and other documents and also the other users and followers like these documents and make comments on them.

According to the 'We Are Social 2020' program and declaration which publishes social media statistics, there have been 3.80 billion social media users in the World and 54 million social media users in Turkey (www.dijilopedi.com). Just because the social media usage have a very wide range and area of usage it effects the stages in education health and other important systems like media and others and it changes many criteria in all these issues (Darı, 2017:754).

These networks give many opportunities to the users to improve themselves without any charge and because of this these networks have become a very important source (Gencer vd., 2019:42). The use of social media in health presents great opportunities for communicating with society. İt also allows health-care professionals to share insights, and information with each other facilitating (Collier & Doan'dan akt. Mendi, 2015:281).

In a very short time these social media networks help people to reach many sources and this gives many knowledge to the public and individuals and becasue of this social media become a very important

source and communication tool. Social media usage have been increasing especially in patient education, public groups, health acknowledgment and also support (Surani et al., 2017).

According to the Robledo (2012:86) are a very important support tool by applying campaigns and also helping to improve the campaigns of health systems by making the approach easier to these documents and tools. The main aim of the health communication is to make the users and the followers aware about the latest improvements and news and in this case the health improvement can be realized (Sezgin 2015:96). With the help of the social media shares health awareness improve and people can follow up the latest updates about health and health systems. So people will be more careful and will have more information about what they want to learn about health and health systems. This educates the followers and social media users. So with social marketing health systems will be improved (Uitenhout 2012:7). New media tools like these social media platforms are more useful compare to the old media tools in giving healthy information to the people (Kaplan & Haenlein, 2011:321).

The corporations have been using the social media in an effective way in recent years for health improvement. It has been proved that by using these social media platform the corporations have the opportunity to improve themselves and reach a wide range of communities with the help of social media (Demir ve Arslan, 2017:73). Social media platforms have the opportunity to give information and help followers to reach the true information. And also the corporations will have the opportunity to give better service (Gbadayan'dan akt. Öztürk ve Öymen, 2013:116).

Social media have a very impact effect in the introducing of the promotional activities of the corporations, to give opportunity to realize the corporative competition the communication between patient and the doctor promoting the health service, and to establish a trust on the health organisations and the corporations. And all of these bring a very important advantage to the Health organisations (İlgün ve Uğurluoğlu, 2016:44). On the other hand social media gives opportunity to the researchers in health to follow the updates about pandemic illnesses and to create epidemiologic studies with the help of social media (Herrera-Peco and Torre-Montero, 2020:576). By means of these tools it becomes easy to follow up the updates in health.

Besides the positive and useful side of social media there also have been harmful and also very important role of it while using (Delaney, Lough, Whelan, Cameron, 2004:72). Because besides true information there is also misinformation and these misinformations spread over very fast by the people who don't have an enough information about health and this is too dangerous (Herrera-Peco and Torre-Montero, 2020:576). It will be a risk to accept that all the information and sources as true documents and information and to prevent this the awareness of the users must be increased (Darı, 2017:756).

İlgün and Uğurluoğlu (2016:44) in their studies stressed on the importance of the controlling the misinformation in social media and the hardness of the controlling the social media like this; safety of the information, patient rights, service quality, false information existing about health organisations, and also misinformation about these health organisations. Individuals must have a very important awareness and their awareness level and education level must be increased (İlgün & Uğurluoğlu, 2016:44).

Health education has a very wide term which covers the increasing of health education level, increasing the communicative abilities of the health workers, and to give decision about the treatment for the patients, and also politics about the health service (Yılmazel & Çetinkaya, 2016:69). Health education is a must to improve the educational levels of the people and individuals and most of the important education is about the preventive health service (Yılmazel & Çetinkaya, 2016:72).

4. A STUDY AND RESEARCH ABOUT MEDICINE COMPANY'S USING OF SOCIAL MEDIA

Social media have become a platform that the health organisations communicate and contact with the patients to supply their needs in a fluent way. For health companies and organisations all the comments under their shares in social media about their newest invention and products. By following up these social media shares and posts and also the consumer interest types and also customer demands and their interests social media posts are very important. Also Customer satisfaction, and Customer complaints can also be followed up with the help of social media. Also these social media platforms give opportunity to follow up the updated demands and interests of the customers and also target clients. Company owners also can follow the process closely. Especially the platforms like Facebook and Twitter which give opportunity to chat and live chat with the clients (Tokatlı vd., 2017:54).

Health sector is a sector that all the advices and critics have always become very important and also individuals ask their advice and ideas each other to get their opinion about the service and the organisations (Tosyalı ve Sütçü:5-6). These organisations using the social media have the opportunity to improve themselves and their systems by following up these critics and comments in social media.

a. Aim of the Study

This study is about examining the social media websites, pages and platforms in digital media of the medicine companies and also their relations with their consumers and also their informative studies on health and medicine and also their interest on their followers and responsibilities to them. We are looking for the answers to these questions;

- Is the company using the social media tools in an effective way?
- Are the posts and publications of the company in social media serve to the health improvement and health sector and are they informative?
- Is there a fertile health improvement platform and environment in the web page of the company?
- Is there a risk or misinformation in the social media page and posts of the company?

b. Method of the Research

Context analyzes method used in this study. This method contains codes and these codes are commented according to these indications and analyzed (Şimşek, 2012: 186). All the posts and documents in the Facebook page of Pfizer company of September and October 2020 have been analyzed and this analyzes have made according to the likes and dislikes of the posts. The posts have examined compare to the type of the posts like informative, celebrations.

c. Limits of the Research

Social Media accounts belonging to the medicine companies cover the main aim of the research. Pfizer's page have been chosen because of the posts and documents and page management and informative information about health and health systems and the examples are suitable for follow up and also their followers are the highest remark and unit. Because of these we chose Pfizer company Turkish Facebook

page only Facebook have chosen as a social media tool and not the other tools of the company taking place in this research. The period is belonging to September and October 2020.

d. Indications of the Research

Pfizer Turkey have established in 1957 and one of the companies who submit the health products to the market and the society. Company Facebook page of Turkey have established in 20 march 2010. In the page there are limitations for the comments to the posts because of some legal limitations and also because they are not advertising or not promoting any product or service in the page and they are only publishing the ready posts and informative posts (<https://www.facebook.com/PfizerTurkiye/>).

In the table 1 below the general view of the Pfizer company Facebook page. The account of the company and the records are like this since they opened the page in 20 March 2010; There are 108.111 likes, 105.919 followers as of 2 Nov 2020.

Table 1. The Facebook Account Information of the Pfizer Company (As of 2 nov 2020)

Company Name	Pfizer
Attendance date	20.03.2010
Total page likes	108.111
Followers	105.919

In table 2 you can see the the frequency of the comments, shares and likes and dislikes of Pfizer company Facebook page in between the dates of 1 september up to 31 september. The likes number of the company in this 2 months are 12.517 and this contains the 11 percent of the like rates of the page. 30 of the shares are photos and articles and 18 of them are supported with video and texts. (<https://www.facebook.com/PfizerTurkiye/>).

Table 2. Facebook Account Information of Pfizer Company (01.09.2020 - 31.10.2020)

Company Name	Pfizer
Total likes	12.517
Total comments	252
Total shares	928
Total posts	48
Photos and article and text	30
Text and video	18
Sharing frequency	0,8 (day)

According to the posts analyzes the Facebook page of the Pfizer company the shares of the company in between 1 sep. up to 31 sep. contains illnesses as a rate of 50 percent and 31 percent taking attention

of the followers to rehabilitate the health organisations and 19 percent contains congrats and celebrations and other activities of the sister companies and projects.

Table 3. Analysis of the Pfizer Company Facebook Page Shares and Posts (01.09.2020 and 31.10.2020)

Posts	Frequency	Percentage
Informative shares	24	50
Celebration shares	9	19
Awareness shares	15	31
Total	48	100

There are samples of the shares and the posts in table 4. So we can see that the shares rate of creating an awareness are much enough and also awareness about the different types of illnesses, too.

Table 4. Sample Shares Contents of the Pfizer Company (01.09.2020 - 31.10.2020)

Content Category	Subject of the Content
Informative shares	Romatoid Artrit, osteoporoz menopoz, risk factor?, Tromboz risk? behaviour differences of the children ?, Corona virüs problem
Celebration shares	#youlivelong shares swimming contest, volleyball 29 October Turkish Republic's independence and establishment day, the day of physiotherapist.
Awareness shares	Importance of the self care of the families of the patients, the true communication of the romatoid artrit patience with their doctors, World Soul Helth, importance of the physical exercise, animal love, Kronik Miyolid and Leucemia.

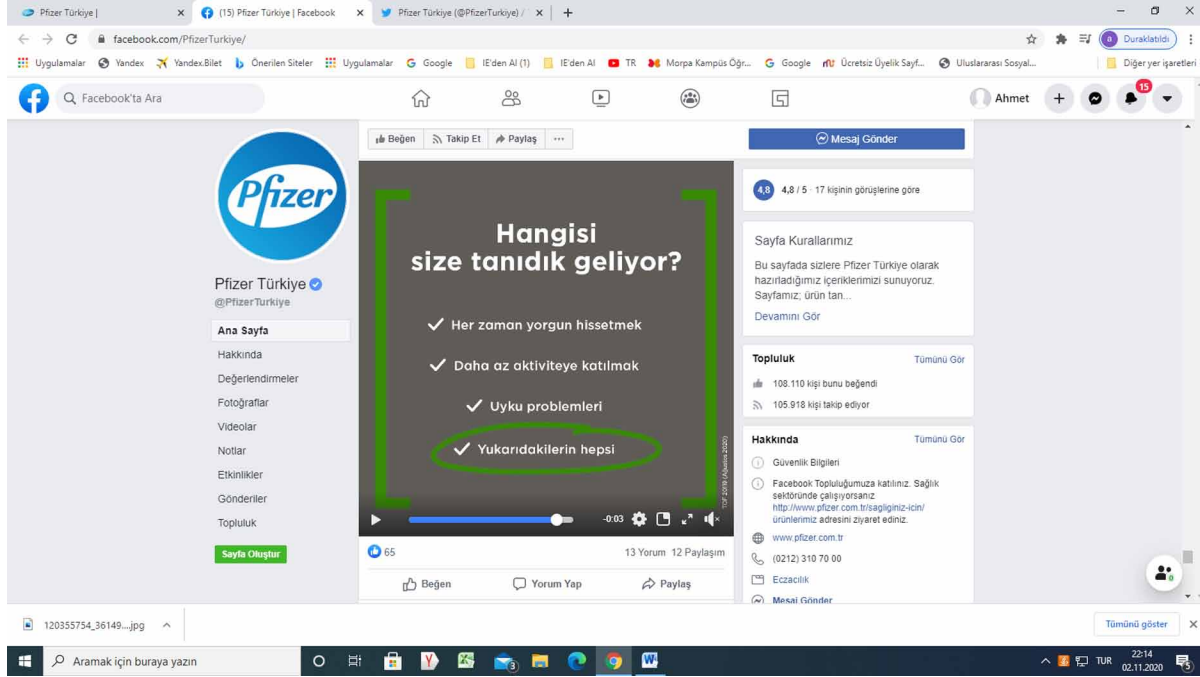
According to the content analyzes; We can see that the most attractive and interesting and liked content was about a success story and news of the girls volleyball team's below 19 year and 2 thousand likes in 2 september it means in 1 day. 72 comments under this content and this means that this is the highest rate of cooments in the page of the company and with 132 shares in 4 september the content about sports and nutrition become the best in sharing by the followers. Another important attractive point in the company page is there have been references used in every content and shares and direct the followers to the expert webpages about the said subjects. For example 61 percent of the Romatoid Artrit patienst have problems in sharing their problems with their doctors and the page encourages the patitents to contact with their doctors without any hesitation and fear. This made awareness.

The comments in the page contains mostly thanks and likes of the followers because of these useful sharings and posts. To the questions about an illness page replies and directs the patients to a doctor. There is a sample of these comments without patient Info. There are regular replies to the questions of the patients.

Comment: Is there a treatment for Lupus?

Pfizer Turkey: Hello we advice you to see a doctor about your question and problem.

*Figure 1. Content of the Facebook Page of the Pfizer Turkey Company
source: <https://www.facebook.com/PfizerTurkiye/>.*



The reply about the company to the indication ‘Which is more familiar to you’ question about Rheumatoid arthritis posted on 14 of September taking place below;

Hello Mrs.Nurten; our page www.acikacikromatizma.com is only a Facebook page and does not make any treatment or don't give a result on the problems and health issues. You must apply a doctor for better reply and solution.

CONCLUSION

When we see that most of the posts and shares of the Pfizer Turkey are informative about illnesses we think that medicine companies are doing their best to make an awareness on the illnesses and problems of the patients. And this also gives adding to the health communication periods. The company shares many posts about problems and illnesses by using videos and pictures and texts and this gives a very useful support to the health communication improvement company.

In the informative posts references taking place with the posts and shares make us think that the company intends to present a true and healthy information and health communication. This is a true application and also this prevents other followers of the page to direct the other followers to wrong sources and pages who are willing to learn sth. without getting any risk.

Health defence is related to the true health information. So all the actors in health sector like companies and other organisations must act with a big responsibility to prevent misunderstandings and misinformations by taking all the risks and difficulties into consideration. Because audiences trained and informed in health care on social media environments are actively participating in these networks and become aware of their own health. So we can see that Pfizer Turkey obeys this rule and directs the patients to the experts and doctors without getting any risk.

As the content about celebrations and success stories of the contests, and races in all over the World are high we can understand that if we use the same style and strategy we can increase the likes of the pages, and the posts.

The campaigns in healthcare communication are successful with effective communication strategies to ensure that individuals maintain the recommended correct health behavior and principles for a long time. As a result, we think that when we use the social media tools in a right way we can increase the effectiveness of the health communication easily and immediately. By taking care of the limitations in information sharing on health sector we believe that we can increase the success of the health communication.

FUTURE RESEARCH AND DIRECTIONS

The use of social media platforms of companies producing different healthcare products outside pharmaceuticals requires analysis in terms of health communication. Medical firms, pharmacies may be subject to analysis in this area. In the analysis to be carried out on this topic, it would be helpful to analyze the content of multiple firms and compare the content in terms of their contribution to improving health. It can also be thought of comparisons by extending the work on Facebook shares to other social networking networks.

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KEY TERMS AND DEFINITIONS

Communication: Dialog between two or more people.

Content Management: Posting and managing the posts in digital media.

Health: Healthy soul, physical health, and comfort.

Health Communication: Health and communication integration.

Improvement of the Health: Educational and useful information and usage of them for public health.

Risk: Uncertainty about the results of the studies.

Social Media: Social network which gives opportunity to the users to share their posts.

Chapter 6

The Role of Social Media Use in Health Communication: Digitized Health Communication During COVID-19 Pandemic

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ABSTRACT

In the digitalized world, the use of social media is increasing and spreading to many areas. Moreover, the process of digitalization of everything transforms the media tools and fits mass communication into digital coding together with interpersonal communication. Health communication ensues between doctors, patients, and other healthcare professionals, and its strength is important. Health institutions, doctors, and patients can now communicate through new media and discuss health-related issues through these channels. Many phone applications have transformed health into e-health by digitizing the patient-doctor relationship. On the other hand, the coronavirus (COVID-19) pandemic, which spread from China to the whole world and affected almost every country in a short time, forced the world to a more isolated lifestyle. This study investigates the role of new media opportunities in health communication during the pandemic. In this context, the literature research is examined.

INTRODUCTION

The internet, as a rapidly developing phenomenon all over the world, has surrounded our lives today. Its evolving structure and the fact that it becomes more and more wireless, increasing its reach every day, has made it an indispensable tool in both personal and business life. This vehicle, which is indispensable today, has emerged as a result of the development of some technologies. Many developments in the historical process, such as the emergence of the computer, the first two computers to sending e-mails to each other, the establishing international wired networks, websites, the emergence of mobile phones, the production of smart versions of mobile phones, the spread of tablets, social networks, the use of its

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applications, the new social networks through mobile phones which feeding a media field, have caused the internet to penetrate to the deepest.

In this process, the most used analog methods are digitized. As with the transition from analog clocks to digital clocks, e-mails instead of mails, digital writing platforms instead of paper, digital versions instead of traditional media tools began to be used. Social media provides to spread the news almost instantly when the event is still in progress, and instead of expectancy for the newspaper to read or to see in the TV's news bulletin. Now, it has become commonplace to follow any event, activity happening all over the world, reach with a single button, and be informed independently of geographical borders.

The fact that computers fit into cell phones has made them a powerful weapon. The combination of formerly separate hardware, almost like a Voltron, has made mobile phones an efficient tool in many ways. Today, there is slightly no transaction that cannot be done with mobile phones. These tools, which can stay in our pocket, offer us multiple features by merging all in one spot, such as a Swiss army knife, a tape measure, a GPRS tool, a socialization tool, a heart rate meter, a pedometer, a scanner, and an internet access point.

The convergence has virtually made digital transformation mandatory for practically all sectors. Even though it was offered in 2011, the first ideas about digital transformation are based on much older. In 2011, at a fair held in Hannover, Germany, the industry 4.0 concept was announced to the world. Technologies in which are improved by the years can help all types of sectors can take digitalization one step further. Thus, digital transformation has begun to be discussed in many areas such as education, art, economy, and politics. The health sector has also taken its share from this effect of digital transformation, and it has started to produce digital versions of many industrial applications.

It has now become possible to say that social networks are frequently used whenever any information is needed in the field of health. For example; Healthcare professionals like the WhatsApp application in other industries; It is known that it is used frequently by doctors, nurses, pharmacists, healthcare administrators, other healthcare professionals and related sectors. It was stated in the studies that this situation accelerates communication, the functionality of the transmission of the read receipt of the message, and the ability to transmit data forms such as picture, sound, document, video recording together with written messages, and it has been reported that it offers many advantages to healthcare professionals (Güdük & Önder, 2018, p. 128).

As of December 2019, when the world health organization declared the new type of coronavirus (COVID-19) pandemic on March 11 (WHO, 2020), digitalization processes, which have become the number one issue on the world agenda, has not only accelerated but also caused it to become compulsory. Many industries have come to a halt in production due to this transmittable through personal contact disease. And lockdowns have been made in many countries for months. However, contrary to many remaining industries, the health sector has had to fight with this virus by working at an increasing pace and continued to serve humanity, albeit under many severe conditions. The digitalization process has forced the health sector to transform more rapidly with the pandemic. Primarily in Turkey, the ministry of health to announce daily data on COVID-19 cases and losses on Twitter; His frequent use of social media for warnings, precautions, and other remarkable messages is one of the best examples.

By courtesy of social networks, providing information exchange is very agile, and many analysis, interpretation, and content production become possible in a short period. Employing the data accumulation obtained through "social networks" to determine and follow future trends shall be simple. The widespread use of social networks is a factor that further increases their impact considered. In short,

thanks to social networks, it is possible to communicate avoiding in-person gatherings, especially during the pandemic process, and to follow and monitor many health processes.

This study aims to discover the role of new media opportunities in the COVID-19 process. It was tried to find after the field study to reveal how and wherein all progress was affected by the pandemic while it was previously digitalizing.

SOCIAL MEDIA AND HEALTH COMMUNICATION

Social Networks and Usage Information

When it comes to social networks, social media platforms such as Facebook and Twitter come to mind first. But are there any other social networks other than these two? Based on these two, social networks can be seen as platforms where individuals can interact with each other through avatars, broadcast their messages, receive likes and comments on these messages, and sometimes these comments or posts can be shared by copying other avatars. But is social media just made up of these two platforms? Facebook, in February 2004 (History.com-Editors, Facebook Launches, 2019); Twitter was launched in July 2006 (History.com-Editors, Twitter Launches, 2019) launched, isn't there any other social platform before it? Another question to be asked is a social network or social media?

The concept of network is expressed as the connection established between two computers, where these two computers/machines can communicate and exchange data (FCIT, 2013). This network developed later, and the computer networks (e.g. *ARPANET*) established in particularly in the military-base constitute the basis of today's internet construction. As the internet has developed and technologically advanced; more data can be exchanged. Until the end of this period, the internet experience was limited to the possibilities to read, watch, or listen to the content prepared by the one-sided content creators offered by the *WorldWideWeb*. Then, with the new millennium, web2.0 technology made the internet mutually usable. Users are now not only readers but also content producers. At this point, social networks, on the other hand, are computers, smartphones, tablets. It refers to a virtual environment through which individuals can share their messages and contents and interact through it. Some researchers define social networks (social media) as environments where people maintain social connections and social relationships with other people with similar likes, events, previous experiences, or lives. (Obar & Wildman, 2015, p. 1). The types of social networks are listed as follows (Onat & Alikılıç, 2008, p. 1118):

- E-Mail Groups,
- Blogs,
- Forums,
- Intranets,
- Extranets,
- Short Message Services,
- Social Networks' Websites.

Whether it is e-mail groups or social media websites, the purpose of all social networks is to gather different individuals and exchange information through a platform. Therefore, social networks and/or social media (here-in-after called "social media") are digital platforms where many groups of individuals

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gathered to achieve these goals in both private and corporate life, and those individuals meet digitally for specific purposes. In common, the usage statistics of social media are classified as contributing (sending) or consuming the produced content (hiding or observing) in studies (Schlosser, 2005; Shao, 2009). Holding a producer or being in a consumer position on social media is not a choice anymore with the technology of web 2.0. However, this circumstance has a formation that can change continuously. In other words, users can be both a producer and a consumer. That may vary depending on what task the user undertakes on social media. For example; a person who is in a consumer position while watching a video on YouTube is now a content producer in a comment or blog page where they share their ideas about the video (Shao, 2009). Nevertheless, the case can be perceived as follows: The owner of the content presented on any profile page is the producer, and the person who visits the page can be seen as a consumer. From this point of view, most social media users (Jones, Ravid, & Rafaeli, 2004) can be seen as consumers. Some researchers state that the younger generation (Generation Y) being online on social media longer (Bolton, et al., 2013).

Table 1. Comparison of Web 1.0 to Web 2.0

Web 1.0	Web 2.0
Programmer - created web pages, graphics, Flash	User - created Web pages, pictures, user reviews, blogs, wikis, YouTube, social networks
Experts create content	Everyone creates content
Individuals visit web pages, read content	People construct shared information
Tightly controlled "sites"	Loosely controlled communities
One - way (one - to - many)	Many - to - many (and peer - to - peer)
Britannica Online	Wikipedia
Publish	Participate
Firewalls, hierarchies	Dynamic, non - hierarchical
Static, stable content, few changes content, few changes	Constantly updated content (Twitter, Wikipedia)

Source: (Bozarth, 2010, p. 12)

Although the young generation mostly prefers social media in terms of usage, it has a structure that includes many freedoms and irregularities for the public sphere. Social media provides a more uncensored atmosphere compared to traditional media. Of course, this is derived from social media is new, and there are still audit gaps in its legal infrastructure, and it is more difficult to inspect than the conventional one. Social media creates "virtual squares" by bringing the old squares to virtual environments. Mayfield, explains the five elements of social media as follows (Esteves, 2010, pp. 11-12):

- Participation: Social media should be open to everyone and allow for the feedback process.
- Openness: Social media channels should be accessible to every user. Access blocked situations can occur in rare and extraordinary circumstances.
- Conversation: While traditional media provides one-sided communication, recent modern new media shall offer a double-sided communication opportunity.
- Community: Social media must ensure that communities - engagement - organize rapidly.

- Connectedness: Social media shall allow multimedia sharing with different content with various links.

Considering the recent social media usage statistics, a very high number of users are actively using social media. The user numbers of social media are not expressed in thousands, or tens of thousands, or even in millions. In Table 2, the number of social media users, which was 2.86 billion in 2017, increased by 50 percent in a short period of two years, and as shown in the same table, it is predicted that this number will double in 2025 compared to 2017.

Table 2. Number of global social network users 2017-2025

Years	Number of users in billions
2017	2,86
2018	3,14
2019	3,4
2020	3,6
2021	3,78
2022	3,96
2023	4,12
2024	4,27
2025	4,41

Source: (Clement, 2020)

Similarly, in another study, 55 percent of the total world population, which is 7.75 billion, lives in urban areas, 5.19 billion people have a phone, 4.54 billion of them are internet users, and 3.8 billion are active social media users (Wearesocial-Hootsuite, 2020). Therefore, as can be understood from both studies, the number of social media users has been precisely high. Any increase in these numbers in the future is inevitable. Besides, having a very high domain shows something that social media usage amount is higher than any other media. Therefore, the situation that makes social media so effective is that the number of individuals using it is precisely high can be said.

On the other hand, another issue is the usage purposes of social media. Although the purpose of social media use of each individual may change, these purposes are gathered in the axis of the possibilities offered by social networks. The method of use, form, and other details may vary depending on the quality of the social network service provided. In research conducted on the internet, the purposes of social media (*Facebook, Twitter, Instagram*) usage can be listed as follows (Desreumauxx, 2018):

- “To stay in touch with what friends are doing (42%)
- To stay up-to-date with news and current events (41%)
- To fill up spare time (39%)
- To find funny or entertaining content (37%)
- General networking with other people (34%)
- 42% of people use social media to stay in touch with what friends are doing.

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- Because friends are already on them (33%)
- To share photos or videos with others (32%)
- To share my opinion (30%)
- To research new products to buy (29%)
- To meet new people (27%)”

Health Communication and Digitalization

Notwithstanding quite a long time passed, and health communication is a topic that started to be discussed in the 70s, its importance remains hot. The subject of health communication, which is as important as health, examines an area that is considered on the two-way communication flows in all processes related to health. In other words, health communication is a branch of the communication field related to health (Ratzan, Payne, & Bishop, 1996) and is a rapidly growing sub-topic in the field of communication (Feeley & Chen, 2014). The United States (US) Department of Health and Human Services defines techniques used to inform, influence, and/or motivate individuals, the public, and corporate target audiences on important health issues as health communication and can also be seen as an art (USDHHS, 2000). On the contrary, health communication is a broad and multidisciplinary concept related to other different fields (Schiavo, 2007).

Although the communication between doctor and patient generally comes to mind when it comes to health communication, health communication is a much deeper issue that can take place at different levels. In general, health communication takes place at all three levels (Özmen, 2018, pp. 15-16):

- Interpersonal communication in the dimension of interpersonal communication, which occurs during a physician’s meeting with a patient (Patient-Physician Communication),
- Group communication in the community health dimension (Intergroup Communication),
- Mass communication.

Regarding the dimension of interpersonal communication, health communication can take place between patient-doctor, patient-nurse, patient-healthcare personnel, or all kinds of healthcare personnel such as patient-patient, doctor-doctor, physician-nurse, and related persons. Health communication can be individual or can consist of individuals on a scale that includes groups. On the other level, health communication is required for the corporate communication of health institutions. Health-communication can be accomplished at the third level for purposes such as informing the society on public health issues and advancing hospitals and health services to the public for promotional purposes. However, health issues can often have features that can be urgent and important to be agile. Therefore, the speed at which the message is transmitted is crucial. The faster the message is transferred, the faster action can be taken on different subjects such as health-related behavioral change, information, attention, and coordination. For these and similar reasons, new features of digital facilities become critical in terms of improving health communication.

By the new century, digitalization has brought many possibilities. Information can now be stored and processed digitally, and with the help of businesses such as data mining and big data delivers the monumental tasks quite swiftly. Thus, it becomes easier to implement applications that will increase communication efficiency. The lower cost of these applications (Nanah & Bayoumi, 2018, p. 8) can be among the advantages of digitalization.

Additionally, the digitalization process and its benefits: 3D printers, autonomous robots, cyber-physical systems, augmented reality, big data, such as the internet of things, can directly affect the health sector and health communication messages. From this point of view, to raise awareness shortly, communicating health information to the patient, organizing training for patient information and health-related applications, diagnosis, decision making, follow-up-monitoring in disease treatment, communicative processes transfer and health education for health professionals, epidemic management, It will be possible to carry out processes that affect many health communications such as data collection, processing, and storage using new digital possibilities (Hu, 2015, p. 269). For instance, by using mobile applications, it is possible to determine the diagnoses of the diseases of the individuals before they go to the hospital and to provide faster guidance. With these and similar applications, health communication is also affected by the digitalization process in the health sector and transforms into digital health communication: E-health Communication. According to Eng, e-health is defined as the use of information and communication technologies, especially through the internet, in order to improve and make health and health services effective (Eng, 2001, p. 1). E-health communication also has an expanded-definition scale. However, e-health communication provides health information including; health information on the Internet, computer-aided learning, online group support, online participant communities, information obtained by information technologies, telephone counseling with IVR (Interactive Voice Response) from home, bio-metric evaluations and transmission, patient-provider e-mail communication (Neuhauser & Kreps, *Rethinking Communication in the E-Health Era*, 2003, p. 116), and as a digital form of health communication that can be managed with strategic decisions.

Health Communication in Social Media

The developments experienced brought about a rapid transformation. While the world resumes acclimating to this new system, it additionally replaces itself with the benefits of conversion. As mentioned before, in the digitalization process, it has become easier than ever to reach and influence large masses in momentary time. Communication tools used within the scope of health communication have turned into the capable appliance in terms of speed, time, and efficiency as they increase their capabilities in the axis of digitalization. The desired message can be delivered from a single source to thousands of recipients at the same time, even if they are arranged as different messages, and the exchange of information has increased enormously compared to the previous times. On the other hand, new media tools, instead of traditional media tools, give the masses more right to choose and refuse (Guler, 2006, p.1'den akt: Kartal & Eriguc, 2018, p. 570).

It is possible to say that sharing is concluded digitally in today's nature, where our digital presence has increased. Among these shares, communication with healthcare professionals and patients or, in other words, healthcare professionals and target audiences address digital. At this point, social media is recognized as the easiest way to make these shares digitally. Now that social media, along with smartphones and tablets, is closer and more portable than with our personal computers. In this way, a doctor can communicate with another doctor, patient, nurse, and other healthcare personnel throughout social media. For instance, the fact that practitioners create WhatsApp groups among themselves reduces the information exchange to an almost instantaneous level. As another factor, the use of social media is essential in any situation that requires public attention regarding health (see Ministry of Health posts). Further than that, health education may likewise be accomplished using social media.

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In another case, health communication on social media is that doctors can use social media to create profile pages where they can introduce themselves, their practices, clinics-hospitals, make an appointment, and display their skills, abilities, and successes. In as much as these profiles, patients can access detailed information about the doctor of their choice, get ideas about which doctor, which hospital should be decided, and enable them to make more accurate decisions. Reading the thoughts or complaints on forums about doctors or hospitals catalyze to make decisions for patients. Websites such as *Patients Likeme*, *CaringBridge.org.*, *Diabetesmine.com*, *ACOR.org* are platforms where patients can communicate and receive, and share information about a doctor, treatment, and other related processes, as well as university-sponsored sites such as *Medpedia.com*, *AskDrWiki.com* (Vardarlier & Ozturk, 2020, p. 11).

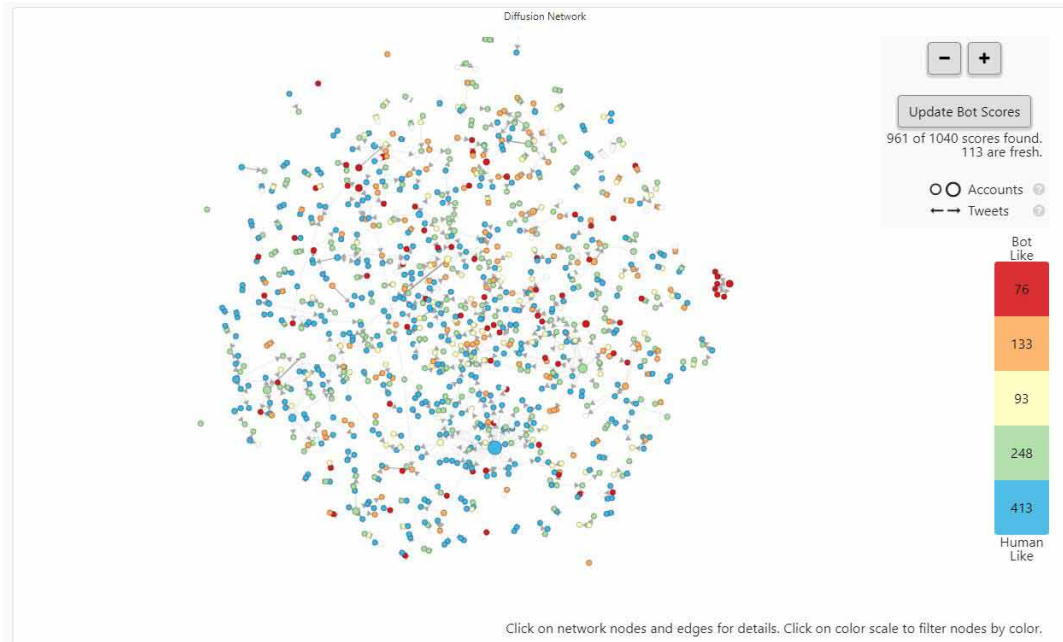
Some authors state that social media makes communication in the field of health considerably accessible and adequate. According to these authors, the positive effect of social media on health communication is provided by the following benefits (CDC, 2011, p. 1):

- Ensures the transfer of information about health and protection more effectively and quickly, facilitates information sharing by strengthening communication with the target audience.
- It enables information to reach a much wider audience.
- It provides the opportunity to increase the impact by personalizing the motivating health messages suitable for the target audiences.
- Facilitates mutual communication, liaison, and community involvement.
- It contributes to people making safer and healthier decisions.
- Include social media in health communication activities.
- Social media enables people to receive health information whenever and wherever they want.

Furthermore, social media, it has brought a new dimension to health communication with applications such as websites of health institutions, personal and corporate pages of healthcare personnel, websites offering health information, forums, access to health products, health-related online support groups, and health-related video sharing (Çınarlı, 2012). This new dimension brings many advantages as well as disadvantages. Laving information shared on social media is spread immediately and can be manipulated and re-shared with accounts that are not real, that may be a type of software, or who intend to use malicious use. For this reason, some social media posts are not correct and do not reflect the truth. The purpose of these types of posts can often be to provoke, confront, or demoralize oppositional individuals (Hanson, 2019). These accounts, which can be called a troll, bot-like, or fake, serve to spread rapidly by transferring some posts that are sometimes produced and can be adverse and provocative. Some researchers develop unique tools that can detect such accounts holders. This tool allows users to identify the person who re-post a share and reveal unreal account holders. The medium called “Hoaxy” developed at Indiana University can detect whether the accounts shares are bot-like or human-like. As in Figure 1, the red color illustrates the bot-like ones, the blue color represents the human-like ones in blue, and the other three colors shows the rest on Twitter. According to the results, after a tag search, the tool detected 413 human-like accounts, 76 bot-like accounts. A total of 474 other individuals are in mean colors.

Figure 1. A tag for identifying bot-like or human-like accounts on Twitter (HOAXY, 2020)

Source: HOAXY, 2020



This image shows some malicious usage on Twitter. Based on this example, social media posts may include fake, troll, bot-like accounts, and misleading information that spread as speedily and widely as the others. Thus, it proves that meticulously reading the posts on social media is crucial, and it is necessary to confirm and verify the information. As a further extensive solution, “media literacy” education is required. Considering, only individuals who had media literacy education can choose the right posts and prevent the spread of misinformation.

Nevertheless, a health communication message to be provided through social media will be efficient despite all these obstacles. Advantages such as fast transmission of messages, more effective relationship control through software, and programs necessitate the use of social media in health communication. Many health care providers have already started using social media for its advantages and have tried to improve healthcare services in this way (Huo & Turner, 2019).

E-Health Communication Applications

For health communication to become even more beneficial, it is necessary to make optimum use of existing and new digital opportunities/applications as much as possible. It will be inevitable that health expenses will increase if new solutions are not provided. Increasing the need for healthcare professionals in the future is a natural result of the increasing population. Therefore, it is necessary to benefit from the blessings of technology to meet this augmenting demand and to produce more rational solutions. In the US, the cost of healthcare costs for one year already exceeded \$ 1 trillion in 2000 and recently US health spending reached \$3.5 trillion in 2017 (CHCF, 2019, p. 2; Neuhauser & Kreps, 2003, p. 109). Behavioral changes need to be acquired to prevent deaths caused by alcohol, smoking, drug (McGinnis

& Froege, 1993). In order to provide the necessary information and training requirement, must meet by using new opportunities such as social media to produce new solutions in health communication. Accordingly, it is fundamental to know the technologies that will transform health communication into e-health communication intimately. It is necessary to closely examine the digitalization process, which has greatly benefited from the leading actors of the industry 4.0 breakthrough such as the Internet of Things, big data, and artificial intelligence.

The internet of things is seen as one of the indispensable elements of today's digitalization process, which allows devices to interact with each other using the internet connection with the development of internet technology. Our concept language uses the term "Internet of Things" in Turkish. The concept became noticeable when it was first used in a report published by the International Telecommunication Union (ITU) (Yiğitbaşı, 2011). The Internet of Things has to bring together certain technological developments and connect it to the internet network that will make all objects smart. Objects should primarily be capable of perception. They will do this through the sensors inside. Later, it should diagnose and classify these objects it detects through the processors or chips embedded in them. Finally, in line with the data obtained, it should be able to take action to fulfill the task assigned to it.

With the introduction of 5G mobile technologies, these objects have become controllable via mobile phones. For instance, with the internet of things, the refrigerator in homes can save personal eating and drinking habits in cloud systems using the internet, and if a product frequently in use is missing, the fridge may order online for the owner's behalf. Smart home system technologies can prepare a cup of coffee before the masters awake in the morning, open the curtains of the bedroom, and inform the master about the weather.

The Internet of Things, which will acutely affect many industries, will be used with nano-technology, especially in the field of health. For instance, with nano-technology, nano-sized objects as the blood cells in the vessels, protecting the patients from illnesses and even aging. Thus, these nano-smart objects will strengthen the defense system by acting like antibodies in the body both in diagnosing and treating diseases and in eliminating diseases (Rosenberg, 2017).

It is possible to reproduce these examples even more, and it is thought that the Internet of Things will not only be limited to individuals houses but will spread to workplaces, factories, and even cities. Therefore, the health sector appears as a field with wide application areas with systems that can be affected by these technologies. With the internet of things, technologies that can support patients in many ways will become possible.

The internet of things is considered as a cluster in which any person, anything is connected with each other, anytime, anywhere, with any service and any network. It is a new approach in next-generation technologies that can affect the whole business world and it is expressed as the identification of smart devices and objects one by one in today's internet infrastructure and the interconnection of these devices. Internet technologies today allow users to access data anytime and anywhere. The rapid increase in the interaction between the user and computer systems with the developments in information and communication technologies has revealed the need for smart ecosystems (Can, Sezer, Bursa, & Ünalır, 2016).

The Internet of Things includes "the digital overlay of information on the physical world. It is predicted that 100 billion devices will be connected to the network in the next 5 to 10 years" (Yiğitbaşı, 2011). This means that in these five decades, we will see things connected to the internet in almost every field.

When the Internet of Things is considered technically, the functioning looks as follows: The device detects data and converts it into analog or digital signals. Wireless and wired communication infrastructure such as RFID, Zigbee, 802.5.4, NFC, Infrared, Bluetooth, ModBus, M-bus, GPRS, and GSM,

Bacnet, LPWAN, power line carriers, Ethernet which is required for human-machine, machine-machine communication and communication protocols are in the communication layer. Later, these data are recorded as data in the memory through predetermined communication protocol channels. Recording to the memory is carried out by small data processing systems on the card. If the data is large, they are saved by exporting over the internet for storage in cloud systems. When these data in cloud systems become data stacks over time, they form a data pool called big data. Then, the data from this data pool is transformed into interpretable outputs by means of various algorithmic systems and software and can be presented to the use of the systems.

Big data offers an enormous data pool that will complement the information hunger of the future. This pool is so big that; According to a report in Hurriyet, the total amount of information humanity has accumulated from 1986 to 2007 has been calculated as “295 exabytes (exabytes)” that is “equivalent to 1.2 trillion hard disks” (Hurriyet, 2011). On the contrary, the total amount of information produced in 2016 was equal to 90% of the total amount of data on the Internet (Schultz, 2017). In other words, our data production speed increases at a rate beyond folding, causing big data to reach much larger numbers. In the future, supercomputers can access these data via cloud systems and instantly present the infinite source of information to humanity.

In light of this information, in terms of the health sector, the Internet of Things and big data will appear in an integrated way in the new order. These systems, supported by cloud systems, autonomous machines, cyber-physical systems, and cybersecurity systems, will create healthcare applications that are much more different than today, forming the health 4.0 structure in accordance with the industry 4.0 structure.

Health information of patients, such as patient status information, previous treatment information, drug use statistics, all have been recorded and tracked in systems. Such information is available in current applications. In the later stages, these data collected from the patients will be able to be analyzed, interpreted, and robotic doctor applications where algorithms can produce results by virtue of the interaction of the devices. As an alternative, there is a transition towards a more autonomous system where physician robots examine the patient, produce the treatment, solutions, and prepare medicines.

Health information systems are a critical application area where the Internet of Things can be used and thus offer more effective solutions. Health information systems; It is a broad-area that includes electronic health records, telemedicine devices, mobile health (m-health) applications. As a result of collecting and analyzing patient's data from different devices, some services can be held more beneficial, such as monitoring chronic diseases, providing elderly care, maintaining and monitoring healthy lifestyle (fitness) and mobility programs, and remote patient monitoring activities (Can, Sezer, Bursa, & Ünalır, 2016).

In terms of the pharmaceutical industry, the medical devices and sensors used for the effective tracking of drugs for treatment constitute the data of the Internet of Things system. For instance, these data collected from heart rate monitoring, blood pressure monitor, thermometer, heart rate sensors provide traceable data about the health status of the patient. Storage of data and converting them the health data is essential for the health sector. Questioning these data afterward, analyzing them within applied rules, and defining alarms for imperative conditions will provide significant gains in individual health services, especially in terms of time.

The security issue will be the new, vital agenda of the new health sector structure that will change. Some of the obtained health data may be conveyed to other systems by various applications after concerns of security and privacy shall be ensured. As a result of the ability to connect to health devices and applications ubiquitously, the Internet of Things becomes vulnerable to attacks in the field of health.

Consequently, the protection of personal health data emerges as a paramount-problem. Hence, it will be inevitable that the new systems developed are protected with cybersecurity systems, and the legislative bodies will review the laws within the scope of cybercrime.

Confidentiality, integrity, usability, trust, authentication, and authorization are the basic security concepts that should be considered in internet-based health space solutions. It is necessary to prevent unauthorized persons from accessing personal health data, to prevent unauthorized changes to health data, to use the Internet of Things services by authorized persons, services, or devices, to authenticate the device that uses the Internet of Things to communicate with, and to ensure that only authorized persons have access to services and data (Can, Sezer, Bursa, & Ünalır, 2016).

New technologies, which are among the possibilities brought by digitalization, will affect the way the healthcare sector does business and initiate the process that will transform health communication into e-health communication. The innovations that computers bring to the health sector, phone applications serve to improve health communication. Thus, it ensures that the data obtained in the field of health can be stored, processed, controlled, and monitored in real-time and effectively. In this process, it is meaningful to look at what these applications are. Some of the benefits of using e-health applications are listed in the researches (Adegboye, Omodunbi, & Esan, 2017, p. 129):

- Improving the quality of care: E-health advances the quality of healthcare by allowing comparisons between different providers that involve consumers as additional strengths for quality assurance and direct patient flows to top quality providers.
- Efficiency: One of the aims of e-health is to increase the efficiency of healthcare services, and this leads to a decrease in costs.
- Consumer and Patient Empowerment: Basic medical information and personal electronic records available to consumers online.
- Cost reduction: Another possible way to reduce the cost of healthcare is to avoid duplicate or unnecessary diagnostic or treatment interventions through enriched communication opportunities between the healthcare provider and patient participation.
- Information provision: Online educating doctors through health education and preventive information.
- Collective, encourage new relationships between patients and healthcare professionals towards a true partnership where decisions.
- To expand the scope or field of health service beyond its traditional boundaries, both conceptually and geographically.
- Equality: This is to make health services more equitable, one of the goals of e-health.
- To provide a standardized information exchange and communication between health institutions.

In addition to all these benefits, it seems that e-health applications will be used much more widely in the very near future. A report from Research and Market estimates that the global wearable medical device market will reach a volume of \$ 27.8 billion in 2022 (ResearchandMarkets, 2018). Thus, many technological new objects such as wearable technologies, robotic doctors, autonomous services, artificial intelligence product nano-sized devices, mind maps are about to enter individual and corporate lives. In this respect, it becomes extensive to look at what these technologies are. According to a study, some of the e-health applications are listed as follows (Göztaş & Karanfiloğlu, 2018):

- Artificial intelligence supported health applications
 - **Ada:** Personal health assistant.
 - **Google DeepMind:** It is an application that doctors can use in the process of treating patients and deciding what kind of treatment should be.
 - **Your.MD:** An artificial intelligence supported mobile application equipped with basic health services.
 - **Babylon Health:** A digital doctor can track the health status of its users along with their past illnesses.
 - **Nvidia DGX-1:** DGX-1 is a new generation computer, and hospitals and millions of patients' records (diseases, test results) will be collected and processed in a single center.
- Internet-based health applications
 - **Smart Pills:** Smart pills are a kind of microdevice that works on the internet in the form of a pill that allows people to monitor important information.
 - **Right Eye:** Eye-tracking system for general healthcare and wellness.
 - **iHealth:** is an application that includes many features such as blood pressure monitors, wireless scales, glucose monitoring, and fitness tracking systems.
 - **Chronothera featured Smart stop:** is a device that helps to get rid of these bad habits.
 - **LumiWare:** offers infrared light therapy for those with chronic pain.
 - **Diabetic Monitoring System:** A new generation medical practice that concerns diabetics
 - **Intelligent ulcer sensor:** Those sensors monitor and warn the body to do regular and specific exercises on time.
 - **Thermo:** It is a smart thermometer that measures body temperature.
 - **Wearable health technologies:** These smart devices can be used by attaching or placing them on various parts of the body.
 - **Mobile compatible hearing aids ReSound:** Intelligent hearing devices and accessories
 - **Intelligent knee brace Quell Relief:** Another wearable device on knee pain relief.
 - **Smart Bra:** There are smart sensors inside the bra that identifies any cancerous area.
 - **Health Originals:** It is a wearable product and works against asthma, as an asthma management system.
 - **Google smart lenses:** With data obtained from the tears of the person with smart contact lenses, it is possible to optimize glucose levels.
 - **Zhor smart shoes:** Apart from warming the feet, it also measures the number of steps taken and the number of calories burned.
 - **Veta:** A wearable device that helps elder or disabled individuals in an emergency to find location, body temperature information.
 - **Valedo back sensor:** This sensor is worn on the back, works with Bluetooth Smart technology, and produces very good solutions for back pain.
 - **Gymwatch:** It can provide real-time feedback by attaching to the arm or leg while lifting weights or using exercise devices, detecting the range of motion, and the force used during exercise.
 - **Hexoskin:** These biometric t-shirts use sensors built into the fabric to measure heart rate, respiration rate, and volume, number of steps taken, calories burned, and healthy sleep.
 - **Quell:** A wearable product for the elderly with chronic pain that relieves pain when sleeping, standing, or when needed.

- **QardioCore:** A wearable ECG monitor.
- **Smart Stop:** A smart device that helps individuals quit smoking. It has sensors that detect changes in the body and the person's desire for cigarette-nicotine.

Social change and industry 4.0 practices raise expectations from the health sector even greater. In the health sector, where uninterrupted service expectations are increasing day-to-day, new technologies are entering individual lives every day to ensure a healthy exchange of information. In addition to the integration of health technologies with information technologies, wearable technologies, and the reflections of the Internet of things, and new products have emerged recently, affect the health sector.

It will be possible to develop devices specifically for the patient together with the digital transformation in healthcare that comes with the Industry 4.0 process. The digital transformation process has substantial advantages in the field of medical manufacturing. With industry 4.0, products and hardware equipped with software can exchange information to ensure their management and optimization of the production line. Since the production with autonomous robots and cyber-physical systems equipped with sensors, this decentralized production model is produced without the need for operator intervention. In this production model, robustness and autonomy are at the forefront. Autonomous robots can perform self-maintenance or warn the system when it is time to do it, perform simple repair functions that are not heavy, and take predictable actions in crises. Thus, the automatic production of products that are customized for patient needs is not only practical but also highly efficient and economical (Kesayak, 2017).

Such a kind of production requires the infrastructure of information-processing technologies together with cyber-physical systems and autonomous robots. Moreover, the legal regulation background is a requirement. The questions of whether the existing infrastructures of cities are sufficient for providing uninterrupted and high-power internet, whether some investment has been made in the way of transforming into smart cities, and measures have been taken, needs an answer.

In addition to existing technologies, issues, as the procurement or production of artificial intelligence and learning machines (autonomous robots, cyber-physical systems, cloud computing systems, super-computers) shall be prioritized. The new technologies and applications may bring new legal problems. For instance, when the internet first emerged, actions that recently is cybercrime were accomplished in many areas, such as social media. However, there was no legal regulation regarding treating these as crimes could only be executed after actual legal regulations. Therefore, the future and what it will bring shall be addressed with a foresight perspective, measures shall be taken against possible crimes, and patient and healthcare worker rights should be protected.

E-Health Communication in COVID-19 Pandemic

With the development of technology, the world is rapidly moving towards new conditions in continuous change and advancement. On the one hand, with the increase in the number of technologies, the introduction of many new technologies into our lives every day facilitates our work, on the other hand, events with negative consequences such as natural disasters and epidemics can affect the masses negatively.

The new type of coronavirus (COVID-19) pandemic (hereinafter COVID-19 or COVID-19 pandemic), which emerged in the last months of 2019 and spread rapidly around the world, has also adversely affected all humanity. Individuals who had to live by being restricted in many ways under these unfavorable conditions had to change habits and adopt new behaviors called "new normal". For instance, the act of handshaking requires physical contact and causes virus infection. Today, handshake yield to new

methods of greetings. The new type of coronavirus can infect people by contact with an infected surface or another person. Thus, it has increased the interest in cleaning and cleaning materials. The individuals performed 171 percent more purchasing behavior online, instead of physically shopping at grocery stores, 171 percent more products for personal care, and 162 percent more for home care products (Kişin, 2020).

The COVID-19 pandemic process, which emerges as a period when habits have to change, forces individuals to be more careful in every field. In this process, where we have to realize old habits in different ways, the new possibilities offered by information technologies enable us to digitize all processes faster than ever before. All information processes over the internet can continue without slowing down by using mobile phones, computers, and tablets without being physically in contact. According to some opinions, the digitalization process has accelerated with the pandemic (Suleymanli, 2020).

From this point of view, this study aims to examine how the possibilities brought by information technologies transform communicative processes in the context of COVID-19. To reveal how and in what direction health communication is affected by digitalization during the COVID-19 pandemic, is studied.

First, the new types of coronavirus cases started to be seen in Wuhan Province of the People's Republic of China (In shorth: China) in late 2019. The cases were officially defined on January 13, 2020. As a result of research conducted on a group of patients, it was found that the patients showed respiratory symptoms such as fever, shortness of breath, diarrhea, cough (The-Health-Ministry-of-Turkey, 2020) Coronavirus is one of the viruses that can be found in animals such as camels, cats, and bats. It is a large family of viruses with examples that can be transmitted from animal to human and then transmitted from person to person. Some known types include MERS-CoV, SARS-CoV, and 2019-nCoV (Turkish-Pharmacists'-Association, 2020).

COVID-19, which spread worldwide in a short time, started to show its first cases in Turkey on 10 March 2020, according to official results (AA, Sağlık Bakanı Koca Türkiye'de ilk koronavirüs vakasının görüldüğünü açıkladı, 2020) and again spread to the whole country shortly. As a result, many sectors across the country had to take a break from work and physical transportation. Interaction across the country came to a halt, with a curfew imposed for limited periods. Many sectors have tried to circumvent the process remotely by digital methods due to uncertainty. Meanwhile, a vaccine for treatment and/or prevention has not been developed, yet. With the diversification and development of new technologies, digital transformation gained momentum with the pandemic process (Develi, 2020). More telecommuting or home working models have now been adopted. At this point, the possibilities offered by digitalization come to the fore. Similarly, limitations in information technologies in previous epidemic diseases made it more difficult to cope with the epidemic. The Spanish Flu epidemic between 1918 and 1920 made one-third of the world population sick at that time and caused an estimated 20-50 million deaths. (Duarte, 2020). Undoubtedly, factors such as socio-economic conditions, political events, and medical facilities of that period were also compelling in this result. Besides, the underdevelopment of technologies and limited sources of that period were also effective in fighting against to epidemic. Detecting the epidemic, knowing it, and applying the measures could be done with limited means. Thanks to today's possibilities, the news of the first cases detected in China spread all over the world from the first moment, and countries were able to take various measures in this way. Detection of the first case in China has also come to the fore with the contribution of social media. Dr. Li Wenliang (working in Wuhan, China) shared the situation with a group of friends over WeChat (Chinese WhatsApp), a phone messaging application, in several of his patients who shared the same complaints, and the situation was reflected in the media (AA, 2020).

In particular, the instant viral spread of the posts on social media has enabled everyone to learn enough information about the virus. At the same time, fake information about COVID-19 has also been produced and spread, especially on social media (Aydın, 2020, p. 77). Much false information may be shared without question due to the panic and uncertainty caused by the epidemic (Aydın, 2020, p. 77). However, it is also possible to confirm and/or verify this information together with the other techniques on social media. Thus, it is possible to spread misinformation similarly by replacing correct information.

Social media and other new technologies can produce useful and creative solutions during the pandemic process. In particular, it has many benefits in terms of reducing the risk of infection and preventing the spreading speed. The fact that communication opportunities have increased more than ever during the pandemic process has brought crucial contributions to the efforts of states to reduce the spread. For instance, many informative materials such as reports, brochures, records, posters about COVID-19 have been prepared on the official website of the Ministry of Health of Turkey and made available to the public and private sector. In just a few steps, it is easily possible to obtain this information over the internet and via a printer and apply it in-house.

Finally, using social media and other applications to make predictions and to use these technologies in decision-making have also become very important during the pandemic process. With forecasting programs, artificial intelligence, big data analyzes, it is possible to get answers to questions in advance about the spread of COVID-19, such as how many people can be infected, die, how much medical equipment is required. In this way, the required precautions and supplies can be learned in advance.

FUTURE RESEARCH DIRECTIONS

This study was conducted while the COVID-19 pandemic is continuing. Therefore, advancing the information in the content of the research with more extensive studies will provide more comprehensive results. Exclusively, researches to be conducted after finding the appropriate treatment or medicine-vaccine for the disease will support the subject.

CONCLUSION

The advantages of digitalization have transformed health communication into e-health communication. This transformation has brought many new opportunities to health communication as it affects all individual lives. Each new achievement contributes to better healthcare. New topics such as the rapid spread of information, the diffusion of information, the increasing database system, and data mining in these databases are lined up before the eyes. New developments in the field of health deeply affect patient-physician communication. Nowadays, it is possible to get information about diagnosis and treatment methods without physically going to the hospital by using applications. Getting information pharmacy on duty/night-pharmacy with no waste of time is just a tap away. Many things related to health have gained momentum with procedures such as hospital appointments, online pre- and post-appointment, and e-pulse applications. In this context, it has been observed that social networks are used frequently. Hospitals, doctors, and other healthcare professionals create their social media accounts and accomplished many communicative processes in the field of health. Therefore, the position of social media in health communication holds an increasingly expanded place.

Despite all these, some potential problems will make health communication less salutary. As it is increasingly digitized, cyber-security-problems become more common. Examination, analysis, and other software operations using accounts on social media threaten privacy and trust issues.

While the rapid spread of information offers the opportunity to learn everything in advance, it also makes it possible to spread misinformation. Spreading of fake info, images, and other content by distorting information such as fake accounts, bot-like users, trolls make the information on the internet (particularly on social media) need to be confirmed. Especially during the COVID-19 pandemic, violation of such issues can have vital consequences. The dissemination of misinformation about the pandemic can negatively affect health communication.

Information received without confirmation will inevitably produce false and dangerous results. For this reason, the question of how to confirm correct information becomes crucial. In other words, issues such as reading the media correctly, using it accurately, and confirming make media literacy mandatory. For these reasons, it is essential to give media literacy lessons in schools and to provide media literacy for adults.

While health communication is transforming into e-health communication with digitalization, it should not be forgotten that we are still in a period in which measures should be taken. In this context, while the COVID-19 pandemic is remaining, it is essential to be quite cautious until a valid treatment method is found.

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KEY TERMS AND DEFINITIONS

Big Data: It refers to data repository accumulated through sensors and individual entries.

Data Mining: It is the analysis and processing of data from the data repository and trying to produce meaningful information.

Digital Transform: It is the reorganization of production settings, using such as big data, the internet of things, artificial intelligence, cyber-physical systems, augmented reality, and 3D printers.

Digitalization: It refers to the abandonment of analog methods and the use of computer environments created in digital forms.

E-Health: It is the term that expresses the conduct of health activities through electronic devices and applications.

E-Health Communication: It refers to designing a two-way communication model with the use of digitalization possibilities in health communication.

Industry 4.0: A new production concept, introduced in Germany in 2011, that envisions the redesign of the industry through digital transformation.

Internet of Things: It refers to smart solutions produced by equipping all devices with sensors and chips and making them connected to the internet.

Chapter 7

Precede: Proceed Model for Health Communication – An Analysis of COVID Coverage in Indian Newspapers

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ABSTRACT

Coronavirus was declared a pandemic on 11th March 2020. Since then the events around the world have unfolded quickly, and by August 2020, India was emerging as a COVID-19 hotspot. With increasing threat to the people around the world, it became pertinent to evaluate health communication pertaining to the pandemic. Consequently, this chapter analyses the applicability of PRECEDE-PROCEED Model (PPM) on the newspaper coverage of COVID-19 in India in two leading newspapers, with the unit of analysis being the headlines on front pages. Results of the analysis show that the coverage of COVID-19 witnessed a gradual increase in the both the newspapers, and the coverage was aligned with the model in terms of disseminating new and evolving information to create awareness and facilitate adoption of new behaviour. However, the coverage faltered at times as far as assessment of administrative policy was concerned.

INTRODUCTION

When the news of the COVID-19 outbreak in China slowly started trickling out, it seemed a distant reality that the coronavirus would be a pandemic, affecting millions across the world. However, a few months down the line, the situation had drastically changed. Covid-19, named so by the World Health Organization on February 11th, 2020 was declared a pandemic on March 11th, 2020 and as of on 28th

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June 2020, Covid-19 had claimed 495,388 lives across the world. (World Health Organization, 2020; WHO Covid-19 Dashboard, 2020; Covid-19 India Timeline, 2020).

World witnessed an unprecedented scenario, a continuously evolving situation which presented its own set of challenges. Here, the relevance of mass media was reinforced again. When ‘shelter in place’ restrictions across the world put people in isolation, the media was not only a source of information, but most importantly a source of emotional wellbeing. Nevertheless, one of the most crucial challenges that a pandemic presents is attitude and behaviour modification. The challenge of behaviour modification is further compounded by the panic that can grip the masses when they are devoid of authentic, credible, and persuasive communication and media has the potential to bridge the gap between people and credible information.

Mass media is responsible for persuasive health communication, affecting attitude and behaviour change. In fact, mass media has always been an appealing method to disseminate information regarding health, thereby preventing social and health problems (Wallack, 1981). Media educates about health and achieves health goals, while emphasizing old messages to sustain changes in health. It can also acquaint people with health behaviour change products and services. (Flora, Maibach, & Maccoby, 1989). Mass media’s relevance during a pandemic is amplified, taking into consideration that masses need to be informed about the ongoing developments, infection rate, precautions to be taken to prevent the illness/disease etc and media can help put a specific health issue in the nation’s agenda. (Institute of Medicine, US, 2002).

Out of all the mass media, T.V. is the least specialized medium when it comes to satisfying any personal or political needs. However, newspaper is the most specialized medium for integration into sociopolitical order (Katz, Hass & Gurevitch, 1973) Newspapers might not be the mainstream media anymore due to ever diminishing resources, but these remain a keystone media providing not only important information but also enabling coverage in other mediums, having ‘*ecological consequences*’ (Nielsen, 2015). Similarly, Heyd (2012) also points out that newspapers have not only provided relevant and immediate information, but have also been known to influence the perception of the readers and ‘*shape historical memory*’.

In India, mass media like T.V., and the internet, though a popular, accessible and effective medium for health communication; are wrought with the issues of fake news and disinformation. According to a Microsoft study (2019) 64% Indians encountered fake news online, which was the highest among the 22 countries that were surveyed (Popat & Popat, 2020). Television though more credible than the internet struggles with Television Rating Point (TRP) conundrum. Hence, it is quite easy for the audience to discredit audio-visual sources like T.V. and the internet. Further, radio, though with its continued evolution in India (Thomas, 2019) can be quite difficult to relate with. However, newspapers with its written word credibility, remain one of the most important channels of communication and especially so during a pandemic (Newspapers’ role in the time of coronavirus, 2020). Relevance of newspapers in India can be highlighted with the fact that there were 17,573 registered newspapers in India as of 31st March, 2018 (Prakash, 2020). Further, in addition to Hindi and English, India has newspapers in 14 vernacular languages. These numbers and meticulously fact checked information by editors at various levels underscore the importance of newspapers. Consequently, it was only relevant to evaluate the COVID-19 coverage in newspapers.

BACKGROUND

It was only on January 30th, 2020 that the first coronavirus case was detected in Kerala, (Southern state in India) a student from Wuhan and a few days later, it was declared a calamity in the state. From here on India saw a gradual but consistent rise in the case count. By March 15, 2020, cases were doubling every five days. By March 25th with 606 cases, 24 states of India were officially affected by the virus and one of the strictest lockdowns in the world was put into force in the country (Covid-19 India Timeline, 2020). With 20 million infections across the world by August 2020, India was quickly emerging as the global epicenter of COVID-19 (Altstedter, 2020). During these unprecedented times newspapers became the first source of information which was to impact readers directly. The Prime Minister of India also assured the citizens of the credibility of newspapers as an important source of information (Sharma, 2020). In fact, in the times when most of the 24x7 news channels in Indian T.V sphere are vying for the viewers' attention aggressively, according to a survey conducted by Ormax Media, 62% of Indian viewers still consider print media as the most credible source of news (Print emerges as the most reliable news source, 2020)

MAIN FOCUS OF THE CHAPTER

Precede-Proceed Framework

Taking into consideration the importance of Health Communication through the print media specifically the newspapers, it was decided to analyse the news content using the applicability of Proceed- Precede Model (PPM) for Health News on the COVID-19 coverage.

PPM is a comprehensive and exclusive theory-based model. The strategy of this model involves thorough analysis of multiple dimensions (as explained in the pictorial representation of the model), including sociology, epidemiology, behavior, environment, education, organization, and management policy, for the development of a health education intervention, implementation of the intervention, and evaluation of the process, impact, and outcomes of the intervention (Ranjbaran et al., 2015)

As the name suggests the model comprises two distinct sections, Precede and Proceed.

For the purpose of newspaper coverage the model can be understood thus: (Also explained in image 1)

Phase 1: Social Assessment

The PRECEDE portion of the Model begins with diagnostic activities that identify desirable outcomes or goals of the coverage. The question that the media needs to put to itself would be "What can be achieved?"

Phase 2: Epidemiological, Behavioral, and Environmental Assessment

To find out the knowledge levels in the society, to identify the right target group and to determine what needs to change. This phase should determine epidemiological, behavioral, and environmental factors that impact the coverage of Health news. Have the journalists kept in mind the above factors while covering the pandemic?

Phase 3: Educational and Ecological Assessment

The coverage would be most likely to result in behavior change and sustain this change process through the predisposing, enabling, and reinforcing factors. The existing knowledge, the reinforcement, the change in behavior and finally sustained behavior change. Since, health messages during the pandemic follow the persuasive communication guidelines, this phase is very important. Do the news stories teach new skills, inform about new services, resources, and programs?

Phase 4 and Phase 5: Intervention Alignment, Administrative and Policy Assessment

Do the stories match the desired changes expected from the community? Throughout the time period of the study, have the stories shown a certain shift as the days go by and the readers' knowledge level changes.

What new resources, organizational barriers and facilitators, and policies that were needed for intervention implementation and sustainability were identified? Has the organizational and environmental systems that could affect the desired outcomes been taken into account? Has the administrative and policy level assessment of resources, budgetary needs, and organizational situations been made?

Phase 6: Implementation

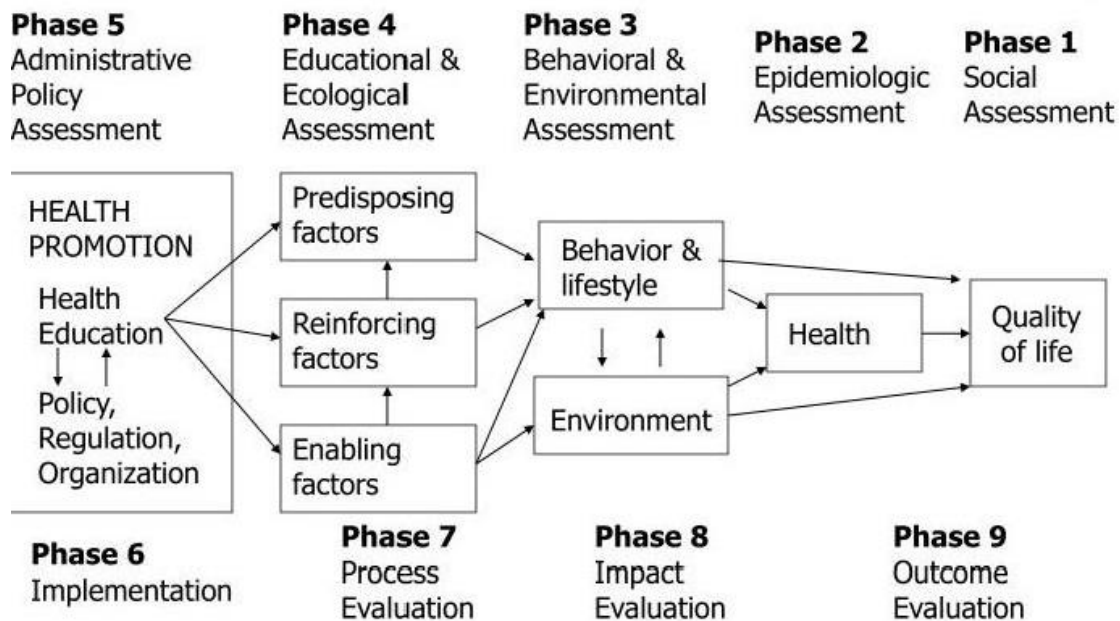
The aspects of the PPM that have been included in the coverage as part of essentials in reporting will form a part of 'implementation' phase.

Phases 7 and 8: Process and Outcome Evaluation

This could be assessed by the headline in the story. Since journalism banks on day-to-day coverage of the stories, it is important to check at what level the stories begin. Do they begin day after day from the initial problem or do they take some knowledge for granted?

Figure 1. The model, Proceed-Precede (Green & Kreuter, 1991, as cited in Parvanta, C.F. et. al, 2010)

PRECEDE-PROCEED Framework



REVIEW OF LITERATURE

Coverage of public health information, pandemic or epidemic level information by the media needs to be streamlined into a set methodology rather than fall under the precinct of general reporting principles. The readers may read the health stories with a wishful eye or with suspicion. If the reportage would follow a theoretical framework, perhaps the stories would be more reliable. Health interventions strategies acknowledge the role of health communication. No intervention is possible without a sustained planned communication angle. Such efforts emphasise the role of persuasive communication.

It has already been established that mass media are the main source of lifelong adult education. This would make them apt for community education that will eventually lead to skills development, information and communication technologies, and capital formation at the grassroots level (Oyebamiji, 2012). Health communication is an important area and most newspapers allot some pages or sections in their publication for the coverage of Health news. That these stories should be focused on bringing about a change in behavior, educating the public about the related issues is taken for granted.

Eight phase planning model PRECEDE (Predisposing, Reinforcing, and Enabling Constructs in Educational Diagnosis) outlines a diagnostic planning process to assist in the development of targeted and focused public health programs. PROCEED (Policy, Regulatory, and Organizational Constructs in Educational and Environmental Development) highlights the implementation and evaluation of the intervention designed in the PRECEDE component. (Green & Kreuter, 1991)

Many researchers across the world have studied the implementation of the PPM model for health interventions. Binkley et al studied the implementation of the PPM model through interviews. The data were collected from 10 IDD and dental care persons. Each of these participants engaged in an informal discussion that posed questions central to the assessment of phases 1-4. Their planned efficacy study is designed as a cluster randomized control trial that includes a process and outcome evaluation. They also measured adequacy of implementation by recruiting an expert panel who has published implementation articles. (Binkley & Johnson, 2013)

Some researchers have changed the structure of PPM, by reallocating the positions to the phases and also modified the nomenclatures of the phases to suit their disciplines such as Howat et al., who adapted and applied PPM as a framework for planning the Child Pedestrian Injury Prevention Project (CPIPP) by reversing the model with the first phase commencing on the left rather than on the right of the diagram. Changes have been made to the name of each phase such as 1)Social factors assessment(social diagnosis);(2)epidemiological factors assessment (epidemiological diagnosis); (3) behavioural and environmental factors assessment (behavioural and environmental diagnosis); (4) contributing factors assessment (educational and administrative diagnosis);(5)intervention strategy selection; and(6)evaluation (Howat et al., 1997).

Some have used PPM to gauge the awareness levels amongst the stakeholders. By applying the PPM to the health promotion model of development, implementation and evaluation of a community awareness campaign designed to improve mental health literacy and early help seeking amongst young people. In this study The Precede-Proceed Model guided the population assessment, campaign strategy development and evaluation. The campaign included the use of multimedia, a website, and an information telephone service. Multiple levels of evaluation were conducted. This included a cross-sectional telephone survey of mental health literacy undertaken before and after 14 months of the campaign using a quasi-experimental design. (Wright et al., 2006) Wang et al. applied the PPM to test its effectiveness for reducing depression and increasing quality of life has been demonstrated in patients with coronary artery bypass grafting, type 2 diabetes, and the elderly. (Wang et al., 2017)

The model has been used in a qualitative content analysis of descriptions of apps, which were provided by the apps' developers and were accessed through the iTunes App Store. iPhone apps were chosen because of their overwhelming popularity and versatility and use in previous content analyses. (West et al., 2012) Similarly the model was used to guide the coding of the apps. Two of the study authors designed the coding methodology and instrumentation following a preliminary review of apps. The study authors trained two research assistants to code the apps. The final study sample consisted of only apps that were coded as intending to promote health or prevent disease/injury, which resulted in 255 apps, or 98.5% of the total number of stress management apps available in the health and fitness category. (Payne et al, 2016)

Studies have used a variety of methodologies, triangulation being one of them. Triangulation can be used to improve confidence in research findings. (Thurmond, 2001) The five phases of the assessment through PPM to identify community health problems, risk factors and existing resources was completed using three types of triangulation including data source triangulation, researcher triangulation, and methods triangulation. (Moran-Ellis et al, 2006) Parent et al. studied the level of training of secondary-level nurses in the Democratic Republic of the Congo (DRC) with the systemic approach, based on the PRECEDE PROCEED model of analysis. Their study led to a better understanding of the educational determinants and of the factors favourable to a better match between training in health sciences and the expected competences of the health professionals. (Parent et al., 2004)

Precede

Researchers have suggested a vast scope for the application of PPM. Future health programs should focus on smoking, physical inactivity and unhealthy eating behaviours. Behaviour change strategies should take predisposing factors, enabling factors and reinforcing factors into consideration. Policies, organization and human resource need strengthening. (Li et al, 2009)

Parent et al. have recommended that their work must be read on two complementary levels: one reading, focused on the methodological process, should allow our findings to be transferred to other problems (adaptation of a health promotion model to the educational sphere). The other reading, revolving around the specific theme and results, should provide a frame of reference and specific avenues for action to improve human resources in the health field (using the results of its application in health science teaching in the DRC).

Encouraged with the previous researches this study aims to explore the possibility of adopting PPM for news writing. For the purpose, the presence of one or more phases of the PPM in the news stories is to be discerned. Thereafter, a set of news values for Health news may be recommended. This study may itself be considered as a pilot for larger studies on the application of the PPM model in public health coverage.

METHODOLOGY

The present study was envisioned with the aim of evaluating Indian newspaper coverage of COVID-19 with reference to Proceed- Precede Model (PPM). For this purpose it was decided to analyse the COVID related coverage on the front page in The Times of India and Dainik Bhaskar, which according to the Audit Bureau of Circulations, India (ABC, 2018), were the highest circulated English and Hindi language newspapers respectively in India. The unit of analysis was the headline of stories on the front page related to the pandemic because as Dor (2003) states headlines not only direct the readers to construct an interpretation of the story, but also provides them with an optimal ratio between the understanding the context and effort required for processing.

TIME FRAME OF THE SAMPLE

The time-period chosen was 15th February 2020 to 25th March 2020 to take into consideration the gradual increase in spread of Covid-19 in India, culminating into one of the strictest lockdowns the world had seen during this pandemic. The objective was also to investigate whether the newspaper coverage corresponds to the increase in cases.

DATA ANALYSIS

For the sake of convenience and ease of understanding quantitative data for both the newspapers has been divided into three sections namely: February 15th to 29th, March 1st to 15 and March 16th to 25th, as is seen in table No. 1 for The Times of India.

The Times of India

Table 1. The elements of PPM in Times of India's coverage of the Pandemic.

S.No		Feb 15-29	March 1-15	March 16-25	Total
	No. of stories	10	34	85	129
Phase I	Social assessment				
	Desirable outcome: Awareness	10	34	85	
	Desirable outcome: Anxiety control/motivation/behaviour modification	5	3	3	
Phase II	Epidemiological, Behavioural, environmental assessment				
1)	Find out knowledge levels in society	0	0	0	
2)	Identify the target group				
a)	All readers	6	30	81	
b)	Business community etc	3	4	4	
c)	Any Other (Women, employees, cricket lovers, government vendors etc.)	1	0	0	
3)	Determines what needs to change	0	0	0	
Phase III	Educational and ecological				
1)	Informs new programs/resources etc.	9	17	18	
2)	Result in behaviour change	0	2	4	
3)	Both	0	6	14	
Phase IV	Intervention Alignment	0	21	4	
Phase V	Administrative policy assessment	1	2	2	
	Both	9	0	28	
Phase 7-8	Process and outcome evaluation				
	New information	7	34	85	
	Takes for granted knowledge of the readers	6	11	7	
	Follow-up element	4	0		

Social Assessment (Phase I)

February 15th to 29th: With the number of stories dedicated to COVID at 10, most of the stories created awareness about larger economic impact of the virus, the efforts India was making as a country to ward off these effects, efforts to evacuate Indians in China and India China relations amidst India imposing curbs on exports. February 25th to 28th saw no COVID coverage, as there were other ongoing developments in the nation e.g. on-going riots in North East Delhi.

1st March to 15th March: This period witnessed an increase in number of stories dedicated to COVID-19, the total being 34.

16th March to 25th March: This phase too witnesses a drastic increase in the number of stories by approximately 50, taking the total to 85.

Precede

Social Assessment is an important element in all the stories in the period. The main aim of the news stories was to create awareness about the pandemic bridging the gap between people/readers and administration.

Epidemiological, Behavioral, and Environmental Assessment (Phase II):

February 15th to 29th: Out of the 10 stories 6 were targeted towards all the readers, and for the rest, the target readers were business community, government etc. However, no stories either evaluated the knowledge levels of the society or determined what needed to change further.

March 1st to 15th: Taking into consideration that pandemic affected all sections of society, most of the stories were targeted towards all the readers except for in situations where there was drastic change in the stock markets. Since, not everyone deals in stocks, it is evident that these stories were framed for the business community .e.g the coverage on 1st of March was, “India starts hunt for alternatives for China to source over 1K items”. One of the main headlines on 10th March stated in dramatic terms, “1942, A horror Story: Sensex suffers worst 1 day loss ever”.

March 16th to 25th: In this phase as well most of the stories were targeted towards all the readers and only 4 were framed for the business community.

Educational and Ecological Assessment (Phase III):

February 15th to 29th: Taking into consideration that the coverage was substantially slanted towards creating awareness about the efforts of the government, this showed that the aim of the coverage was also to educate the readers about new programmes as is appropriate under this phase e.g. coverage on 19th February focused on how government planned duty cuts to soften the blow of the virus on economy and coverage on 22nd February focused on government seeking relief for coronavirus hit companies.

March 1st to 15th: The aim of 50% of the stories was to inform the readers about new programmes/initiatives/policies. However, only 8 stories aimed at informing new policies and as well as aimed at behaviour change.

March 16th to 25: 18 stories aimed at informing the readers about new programmes and 14 aimed at both informing new programmes and behaviour change. However, only 4 stories completely focused on changing behaviour. However, it is pertinent to point out that the total number of stories focusing on behaviour change is less than 50%.

Intervention Alignment and Administrative Policy Assessment (Phase IV-V)

February 15th to 29th: This phase was marked by the coverage which indicated that since COVID had not directly impacted India substantially, it was only a distant reality and the administration was doing everything in its capacity to soften the indirect impact of the virus, so far on India. Intervention alignment was highlighted in one of the headlines on 17th February, which stated, “12 medicines likely to face exports curb” and administrative policy assessment was highlighted in the coverage on the 16th February, which took stock of medicines shortage which could eventually happen due to COVID Crisis.

1st March to 15th March: This time frame witnessed an increase in the number of times readers were presented with intervention alignment .i.e. 21 stories intervention alignment and 2 administrative alignment. Readers were not only introduced to the intervention by India itself, but by other countries as well

e.g. on 10th March, a subhead of the story, which largely focused on the case count, states that Qatar had banned the entry of Indians. Similar intervention alignment was also informed to the readers e.g. on 14th March readers were informed that Indian government has suspended rail travel from and to Bangladesh.

It is to be noted that at this point of time in sample, administrative assessment has not been given much preference e.g. one of the administrative assessment being highlighted on 4th of March focused on how there was no contingency plan in Indian Premier League (IPL, Cricket) for a virus threat. On 7th of March the only story on COVID-19 highlights that “hospitals reel under the rush of suspects”. However, the content of this subhead takes the reader to page 8 on the newspaper, indicating that at this point administrative assessment was not the main aim.

March 16th to 25: Similarly, in this time frame as well, out of 84 stories dedicated to COVID-19 only 28 stories focused on intervention alignment as administrative assessment both. This number was an improvement from the previous phase, but this does not even account for 25% of the total stories in this time frame.

Process and Outcome Evaluation (Phase VII and VIII)

15th February to 29th: Out of the 10 stories, 7 give new information, 6 take for granted the knowledge of readers e.g. the coverage of 16th February focusing on the assessment of medicines which could be out of stock due to COVID crisis takes for granted the knowledge of the readers about the usage of medicines. Further, 4 stories have a follow up element to it.

1st March to 15th March: All stories give new information, 11 take for granted the knowledge of the readers and none of the stories have a follow-up element.

16th March to 25th: 85 stories gives new information. 7 take for granted the knowledge of the readers. None give a follow-up element.

Implementation (Phase 6)

This phase highlights the aspects of the PPM that have been included in the coverage as part of essentials in reporting will form a part of ‘implementation’ phase. Consequently, to understand the inclusion of PPM this phase has been analyzed towards the end. The above analysis indicates that all phases have been included in the coverage, which highlights the coverage’s adherence to systematic and goal-oriented approach.

DAINIK BHASKAR

Dainik Bhaskar was the Hindi Language newspaper selected for the analysis. Table No. 2 below gives a comprehensive look of what the pandemic coverage looked like in numbers.

Precede

Table 2. The elements of PPM in Dainik Bhaskar's coverage of the Pandemic.

S.No		Feb 15-29	March 1-15	March 16-25	Total
	No. of stories	6	13	29	48
Phase I	Social assessment				
	Desirable outcome: Awareness	5	12	27	
	Desirable outcome: Anxiety control/motivation/behaviour modification	1	1	5	
Phase II	Epidemiological, Behavioural, environmental assessment				
4)	Find out knowledge levels in society	0	0	0	
5)	Identify the target group				
d)	All readers	6	10	28	
e)	Business community etc	3	2	1	
f)	Any Other (Women, employees, cricket lovers etc.)	0	5	0	
6)	Determines what needs to change	0	0	2	
Phase III	Educational and ecological				
1)	Informs new programs/resources etc.	2	1	5	
2)	Result in behaviour change	1	1	3	
3)	Both	0	8	12	
Phase IV	Intervention Alignment	0	1	6	
Phase V	Administrative policy assessment	0	0	1	
	Both	2	8	10	
Phase 7-8	Process and outcome evaluation				
	New information	6	13	29	
	Takes for granted knowledge of the readers	0	1	0	
	Follow-up element				

Social Assessment (Phase I)

February 15th to 29th: In total 6 stories are dedicated to the pandemic, as shown in Table no. 2 above. There was no coverage related to the pandemic on 15th, 16th, 18th, 20th February and from 25th February to 29th February. This could be attributed to the other ongoing developments in the country e.g. protests pertaining to Citizenship Amendment Bill and riots in North-East Delhi etc. Further, at this time COVID-19 has not affected India in its entirety. For 5 stories out of 6, desirable outcome was creating awareness and for the remaining one the desirable outcome was to control anxiety. The 24th February's coverage headline states that there is no influence of coronavirus on trade.

1st March to 15th March: The number of stories increases from 6 to 13 in this time-period, which translates into 1 story per day on an average. However, there was no pandemic coverage from 1st to 3rd March and no newspaper on 11th March. Here too out of the thirteen stories 12 stories aimed at creating awareness regarding pandemic and its related situations. Only 1 story aimed at motivating the readers in the scenario when coronavirus cases were increasing rapidly in India .e.g. the coverage on 8th of March,

which is also Women's Day, bring to light the research stating that women have a better immunity than men in the fight against COVID.

16th March to 25th March: This time-period has only 10 days, but the stories increase to 29, which translates into 3 stories per day on an average. This number also highlights the increasing importance of timely communication of the pandemic to the readers. Out of 29 stories, 27 were aimed at creating awareness and 5 were aimed at controlling anxiety/to motivate and/or behaviour modification e.g. coverage of 20th March carried 5 stories. One of the stories from the coverage, though was carried on a column on the right hand side of the newspaper, appealed to the reader to get themselves tested for the virus if they had recently returned from anywhere outside India. The coverage of 22nd March carried 9 stories pertaining to the pandemic. In one of the stories, the newspaper makes an appeal to the readers to stay in homes for public welfare. Here, the aim was not only to inform the readers about the measure being taken by the government to curb the outbreak, but also aimed at behaviour modification of the readers,

Epidemiological, Behavioral, and Environmental Assessment (Phase II)

February 15th to 29th: All the stories (6) are targeted towards all the readers of the newspaper. However, 3 of these stories are also targeted towards the business community in the country e.g. the coverage on the 19th February states that the Finance Minister of the country in discussion with various businessmen said that there will be an announcement of the plan to save the economy from the effects of coronavirus. The headline went on to state that 20 Indians will be airlifted from Wuhan. However, none of the stories either aims to find out the knowledge levels of the society or determines what needs to change.

March 1st to 15th: Out of all the stories (13) 10 stories are targeted towards all the readers, 2 stories are targeted towards business community and 5 are also targeted towards other categories of readers like women, employees and cricket lovers etc. e.g. the coverage on 5th March includes a suggestion of work from home by one of the most renowned businessmen of the country. This suggestion was only a part of the main coverage, which focused not only on the rising numbers of the COVID positive but also other aspects like informing the readers about the most vulnerable groups to infection. Further, none of the stories either aims to find out the knowledge levels of the society or determines what needs to change.

March 16th to 25th: Out of all the stories (29) 28 stories are targeted towards all the readers and 1 towards the business community. Further, none of the stories aim to find out the knowledge levels of the society, but two stories do determine what needs to change e.g. the coverage on 18th March, which carries only one story not only states the number of deaths in the country and the most vulnerable to fatalities related to the COVID, but also states that the shortage of medical specialists in the country needs to change if India is to be ready to fight the pandemic.

Educational and Ecological Assessment (Phase III):

February 15th to 29th: In this time periods, since most of the stories aimed at creating awareness, 2 stories inform new programmes and initiatives by the government and 1 story aims to see a result in behaviour change .e.g. the coverage on 21st February states that a suspected COVID patient in a small town of Punjab fled the hospital on seeing others in a mask. It highlights the need to eliminate the stigma associated with it, hence, aiming for behaviour change. Coverage on 22nd February states that the Central Government has asked the state governments to be on alert. It was stated in the wake of a rising number

Precede

of cases in the country. This coverage aimed at informing the readers about initiatives that were being taken, in this case by the government, to curb the spread of the virus.

March 1st to 15th: In this period most of the stories (8 out of 13) aimed at not only informing new programmes and initiatives but also aimed at behaviour change.

March 16th to 25: In this period most of the stories (12 out of 29) aimed at not only informing new programmes and initiatives but also aimed at behaviour change.

Intervention Alignment and Administrative Policy Assessment (Phase IV-V)

February 15th to 29th: Taking into consideration that it was the beginning of the pandemic in India only two stories, focus on intervention alignment and administrative assessment .e.g. the coverage of the pandemic on 19th of February states that Finance Minister of the country has assured the business community that there would be an announcement of a plan to cushion the economy from the effects of the COVID outbreak. This story highlights that there will not only be an intervention by the government, but this also highlights that there has been an assessment of the situation on the part of the government. Similarly, the coverage on 22nd February states that the central government has asked the state government to stand vigil amidst the outbreak of the pandemic, this coverage highlights both intervention alignment of the coverage but is also a cue to conduct administrative assessment on parts of the states.

1st March to 15th March: In this time-frame one story comprises of intervention alignment and 8 stories comprise of intervention alignment and administrative assessment both e.g. the extensive coverage on 4th March informs the reader about the intervention of closing two schools in Noida (National Capital Region) and also uprises the readers about the administrative meetings in Delhi, Telangana and Rajasthan, thereby conducting administrative assessment of various measures being taken.

March 16th to 25: Out of 29 stories 6 and 1 stories comprise of intervention alignment and administrative assessment respectively and 10 stories comprise of both.

Process and Outcome Evaluation (Phase VII and VIII)

15th February to 29th: All the stories give new information to the readers of the newspaper and none take for granted the knowledge of the readers. Most of the stories though new were generic enough to be understood by all the readers e.g. the main headline of the 23rd states that Olympics could be cancelled and there could be a shortage of iphone owing to the ongoing coronavirus crisis. On reading the sub-headlines of the coverage reason of the shortage and impact of COVID on the economy becomes substantially clear.

1st March to 15th March: Here, all the stories give new information to the readers. However, 1 story also takes for granted the knowledge of the readers. The Women's Day coverage of 8th March states that according to a research, women might be better at fighting the COVID-19 than men owing to habits related to hormones and health. However, it does take for granted that all readers might know about hormones and their role.

16th March to 25th: In this time-frame all the stories (29) give the readers new information pertaining to the pandemic and none take for granted their knowledge.

Implementation (Phase 6)

The above analysis indicates that all phases have been included in the coverage, which highlights the coverage's adherence to systematic and goal-oriented approach.

DISCUSSION

Inclusion of all the elements of PPM in the coverage indicates that the model can be a starting point for the newspaper coverage. Howat et. al, recognized that the process of PPM can enable the formulation of objectives, thereby enabling the development of interventions and evaluation methods. Hence, PPM as a starting point of the coverage can be used to pinpoint the goals of the coverage, which can not only enable the coverage to transform into interventions for the public but can also be monitored and evaluated at a later date, improving the coverage of emergency situations in the newspapers. Similarly, Binkley and Johnson also concluded that PPM could be used to develop and evaluate interventions for adults.

Adherence of the pandemic coverage in both the newspapers to the PPM highlights that newspaper coverage on a public health emergency is methodical, organized, and efficient. The coverage ensures that new programmes, interventions, policies reach the readers and there is no information gap between the administration and the receivers. This reinforces the role of newspapers as a vehicle of accurate, authentic, and timely information.

It has usually been noted that newspapers do adhere to certain ideologies. However, in this case the coverage of pandemic in both the newspapers sets an agenda on behalf of the government or administration with consistency. It overpowers the role of newspapers as a 'watchdog'. The cooperation between the newspapers and the government which has the potential to be observed negatively may have in fact averted a state of panic. Appearance of government officials like the prime minister at regular intervals and its subsequent coverage in both the newspapers may have provided a sense of stability and steadiness in an unprecedented public health emergency. Information has been gathered and collated by the journalists/newspapers in the light of social assessment, epidemiological, behavioral, and environmental assessment, educational and ecological assessment. However, the analysis also indicates that the coverage in both the newspapers lacks substantially when it comes to aiming behaviour change and assessing administration and interventions.

CONCLUSION

The efficacy of the PPM model for public health coverage has been substantiated above. Researchers understand that public health coverage in a densely populated yet diverse country like India needs to be systematic and goal oriented in its approach. Diverse viewpoints can lead to diverse interpretations which can lead to a scenario of potential panic, which needs to be avoided in emergency situations like COVID-19. There needs to be consistent cooperation between the administration and the communication channels for the purpose. Taking into consideration that for most of the stories in both the newspapers the target readers were all the readers, it shows the efforts on the part of the newspapers to design the same information for all the sections, which was needed in the scenario.

Precede

However, at the same time newspapers should also be able to play their role of a watchdog, carrying out administrative and intervention assessments. This role is important so that the readers can know about the efficiency of their governments and about the resources that are available at their disposal. Watchdog role of the newspapers also ensures the independence of the content. Despite various circumstances prevailing and influencing the coverage, researchers understand that if PPM is allowed to be a starting point for public health coverage, it can transcend political, social and cultural barriers, transforming the newspaper coverage into evaluable public health interventions.

RECOMMENDATIONS AND LIMITATIONS

In the light of the above findings, researchers would like to recommend that PPM should be the basis of public health coverage in the newspapers. Researchers would also like to recommend that in addition to creating awareness, other important goals that public health newspaper coverage should not overlook is behaviour change, assessing administrative readiness to tackle a public health emergency and coverage of interventions being introduced by various stakeholders, which can in turn apprise the readers about how their behaviour can and should be modified.

Despite the overwhelming evidence of the efficacy of the PPM model for public health coverage, the present study is not devoid of its limitations. Here, it will be pertinent to point out that two newspapers in no way represent all the newspapers. There is a possibility that many other newspapers might have all the elements of the model in perfect harmony and balance. Given this limitation, researchers would like to assert that recommendations given above will still be relevant for newspaper coverage of a public health emergency or a pandemic in any given language. It is equally relevant to bring to light here that English and Hindi are two important official languages in India. Taking into consideration that Chandigarh edition has been utilized for analysis it is important to point out that English has an universal appeal and is even more important in a globalized context. On the other, only 43.63% of the total population has Hindi as their mother tongue (Sen, 2019). Hence, choosing a Hindi newspaper for a comparative analysis was according to the location and thereby choice of the researchers. The present study in no way claims to represent all the other languages of India. Hence, has the limitation of being restricted in its scope.

Despite its limitations, newspapers are a valuable source of information and have the potential to circumvent fake news and theatrics surrounding TRP. Without a barrier like these between the sender and the receivers, newspapers can clearly set a positive agenda, which is the need for emergency health communication. Cutting across the noise surrounding an emergency like COVID-19, newspapers have set a precedent for accurate information, earnestly making it goal oriented, which only underpins the relevance of PPM for health coverage.

FUTURE RESEARCH DIRECTIONS

Newspaper coverage, pertaining to any issue and especially health communication needs to be regularly evaluated and PPM can be a logical starting point. Mass media are not only utilized for a specific purpose like disseminating information, but also have a responsibility towards the society that these function in. Whether or not a society can be egalitarian largely depends on the information people are given. Further, in view of the current scenario of inequalities at every level, it is important that newspaper coverage

pertaining to a specific issue should be studied in depth with a longitudinal perspective to gauge the degradation or an evolution of the news content. Also, coverage of health issues should be periodically evaluated on the basis of PPM, so that content could be improved. The aforementioned research should be used as a training module for journalists covering health issues.

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KEY TERMS AND DEFINITIONS

ABC: Audit Bureau of Circulations, India is an organization, which audits circulations of publications in India.

COVID-19: It is an infectious disease caused by coronavirus, SARS-CoV-2, a respiratory pathogen.

Health News: News pertaining to health issues, affecting people in a specific area or worldwide.

Pandemic: An epidemic, which crosses international borders, occurring worldwide and affecting a large number of people.

PPM: Proceed-Precede Model (PPM) is a theory-based model. The strategy of this model involves thorough analysis of multiple dimensions (as explained in the pictorial representation of the model), including sociology, epidemiology, behavior, environment, education, organization, and management policy, for the development of a health education intervention, implementation of the intervention, and evaluation of the process, impact, and outcomes of the intervention.

RNI: Office of Registrar of Newspapers for India compiles and maintains a register of newspapers in India.

WHO: World Health Organization came into being in 1948. It directs and coordinates health within the United Nations System.

Chapter 8

Health Risk Communication and Media

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ABSTRACT

Risk communication is a concept defined by many organizations like World Health Organization (WHO) and Centers for Disease Control and Prevention (CDC). Effective risk communication is a complex process. It is an interactive process of exchange of information and opinion among individuals, groups, and institutions. Risk communication is part of the risk management process, with the primary aims to promote awareness and understanding of risks. In the risk management process, risk communication is at the center. There are a number of approaches to the process of risk communication and its components, including how messages are sent and received. The management of public health outbreaks has always included a specific communication component in the form of warnings, risk messages, evacuation notifications, messages regarding self-efficacy, information regarding symptoms, and medical treatment, among many others. Media can play a significant role for raising awareness of the health issues. But the difficulty is to find the right channel of communication for the target audience.

INTRODUCTION

Risk is used to signify negative consequences. Risk communication deals with risk elements. It is the act of conveying information between parties about levels of health or environmental risks, the significance or meaning of health or environmental risks, or decisions, actions, or policies aimed at managing or controlling health or environmental risks. Risk communication is at the core of the risk management process. Risk management process consists of five stages: risk identification, risk assessment, policy development, policy implementation and policy evaluation. For all these stages communication is the main part of the risk management process. Effective risk communication is a complex process and for risk communication strategies some factors matter: build trust; announce early; be transparent; respect public concerns; and plan in advance. Establishing trust with the public is the most critical aspect of effective risk communication. Trust is hard to build and easy to erode. There are many interested parties

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in the risk communication process. Interested parties include government agencies, corporations and industry groups, unions, the media, scientists, professional organizations, public interest groups, and individual citizens.

There are also some approaches to risk communication. Each approach views risk communication from a slightly different perspective. The main approaches to risk communication are: Communication Process approach, National Research Council's approach, Mental Models approach, Mental Noise approach, Hazard Plus Outrage approach, Social Amplification of Risk approach, Social Trust approach, Evolutionary Theory Approach, Health Belief Model approach, Crisis Management approach. All the theories explain the underlying structures of risk communication.

Difficulties in communicating risks during infectious disease outbreaks include: the complexity of the disease pathophysiology and epidemiology; the capacity for individual actions to influence the health of others. Media has a huge role in communicating risks during communicable diseases. But the difficulty is to find the right channel of communication for each audience. One channel may not be appropriate for all. When target audiences have been defined, it is necessary to choose the channels that are most likely to reach the audiences. The mass media can deliver the information quickly to a wide audience but can't alone be expected to motivate people to change their behaviours. New channels for risk communication are developed in the last few years. The most rapidly growing channel is internet. Contrasted with traditional media where users are passive recipients, social media provides an interactive platform. Blogs, microblogs, video sharing platforms, photo sharing platforms, social network websites, discussion forums can be listed among social media. The important part of communicating risk information is message design. In message design some elements should be considered. These elements are: clarity, consistency, credibility, public need, tone and appeal.

In this chapter, basic concepts and processes related to risk communication are explained. However, the risk communication process is also discussed from a theoretical perspective.

BACKGROUND

Definition of "Risk Communication"

The most simple definition that has been advocated by the British Medical Association in 1990, "risk is the probability that something unpleasant will happen". Therefore, it is not certain that the event will occur but, if it does occur, the event will have negative rather than positive consequences (Berry, 2004, p. 3). In its most basic form, risk is the absence of certainty (Sellnow et al., 2009, p. 3). The Oxford English Dictionary definition of risk is 'a chance or possibility of danger, loss, injury or other adverse consequences'. In this context risk is used to signify negative consequences. The Institute of Risk Management defines risk as the combination of the probability of an event and its consequence. The Institute of Internal Auditors defines risk as the uncertainty of an event occurring that could have an impact on the achievement of objectives (Hopkin, 2012, p. 13). According to Hopkin (2012), risk is an event with the ability to impact the mission, strategy, projects, routine operations, objectives, core processes, key dependencies and/or the delivery of stakeholder expectations. It is important to understand the uncontrolled level of all risks that have been identified. This is the level of the risk before any actions have been taken to change the likelihood or magnitude of the risk. Although there are advantages in identifying

the inherent level of risk, there are practical difficulties in identifying this with certain types of risks Hopkin, 2012, p. 17). Risks often associated with (Jeynes, 2002, p. 8):

- poor communication channels
- need to change management approach as the firm grows and the early flexible style needs to become more structured or formalized
- inappropriate premises or facilities to support growth of the firm
- product life cycle and product development
- lack of training or facilities to develop up-to-date skills
- inability or unwillingness to change to meet challenges of modern competitive environment.

Table 1. Definition of Risks (adapted from Hopkin, 2012, p. 14)

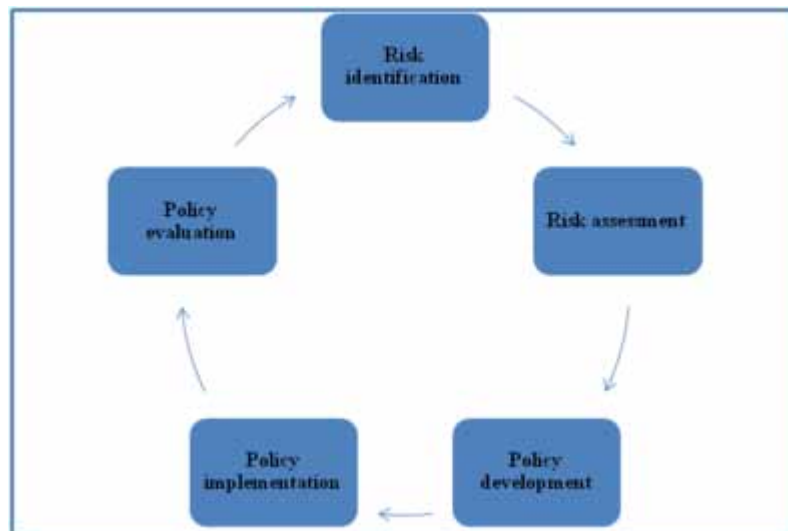
Organization	Definition of “risk”
ISO Guide 73 ISO 31000	Effect of uncertainty on objectives. An effect may be positive, negative or a deviation from the expected.
Institute of Risk Management	Risk is the combination of the probability of an event and its consequence.
Institute of Internal Auditors	The uncertainty of an event occurring that could have an impact on the achievement of the objectives.

Risk communication is an interactive process of exchanging information and ideas between individuals, groups and organizations. It contains several messages and other messages about the nature of the risk that are not entirely risk related and that express concerns, views, or responses to risk messages or legal or company regulations relating to risk management (Sellnow et al., 2009, p. 5). Risk communication is defined as a targeted exchange of information about health or environmental risks between interested parties. More specifically, risk communication is the act of conveying or transmitting information between parties about levels of health or environmental risks, the significance or meaning of health or environmental risks, or decisions, actions, or policies aimed at managing or controlling health or environmental risks. Interested parties include government agencies, corporations and industry groups, unions, the media, scientists, professionals organizations, public interest groups, and individual citizens (Renn, 2012, p. 290).

According to Heath (1994), “risk communication deals with risk elements, whether they are appropriately tolerable, and risk consequences”. Covello (1992) defines risk communication as “the exchange of information among interested parties about the nature, magnitude, significance, or control of a risk”. The National Research Council (1989) describes risk communication as “an interactive process of exchange of information and opinion among individuals, groups, and institutions”. Risk communication, then, is closely associated with threat sensing and assessment. In practice, risk communication most often involves the production of public messages regarding health risks and environmental hazards. Risk communication is also grounded in an assumption that the public has a generalized right to know about hazards and risks. The availability of information allows the public to make informed choices regarding risk. In this way risk communication facilitates decision making and risk sharing (Reynolds & Seeger, 2005, p. 45).

Risk communication is part of the “communication and consultation” activity of the risk management process, with the primary aims to promote awareness and understanding of risks (Goerlandt, Li & Reniers, 2020, p. 3255). It’s a two – way process. The necessity of a two-way process has been emphasized by FAO / WHO: “Ongoing mutual communication between all interested parties is an integral part of the risk management process. Risk communication is more than just the dissemination of information, and an important function is the process by which the information and opinion required for effective risk management is included in the decision”. It is no coincidence that risk management, traditionally shown as a linear process, is now generally seen as a cyclical process with risk communication at its core (Lang, Fewtrell & Bartram, 2001, pp. 318-319).

Figure 1. Cycle of Risk Management Process (adapted from Lang, Fewtrell & Bartram, 2001, p. 319)



Risk Management Process

Risk should be considered to be an event that will have a significant negative effect on an organization or result in significant deviation from expected outcomes. So that, risk management is about achieving the best possible outcome for the organization by preventing negative events, minimizing the damage. On that basis, risk management is about achieving the best possible outcome with plans and expectations (Hopkin, 2013, p. 3). Risk management is about taking measures based on risk assessments and considerations of a legal, political, social, economic nature. It’s mainly a political process although science is involved in the gathering of technical, social or economic information (Van Leeuwen & Vermeire, 2007, p.3). ‘Risk management’ is the term used to describe a sequence of analysis and management activities focused on creating a project-specific response to the inherent risks of developing a new capital facility. Risk management process consists of five stages. Risk management process is repetitive and cyclical. As the project evolves some risks will be resolved or diminished while others may surface and thus be added (Molenaar, Anderson & Schexnayder, 2010, p.16).

Risk Identification

Risk identification is the identification of the adverse effects that a substance has an inherent capacity to cause (Van Leeuwen & Vermeire, 2007, p. 3). Risk identification is the process of determining which risks might affect the project and documenting their characteristics using such tools as brainstorming and checklists (Molenaar, Anderson & Schexnayder, 2010, p.16). The objectives of risk identification are: 1)to identify and categorize risks that could affect the project and 2)to document these risks. The outcome of the risk identification is a list of risks. The list of risks should be comprehensive and non-overlapping (Molenaar, Anderson & Schexnayder, 2010, p.45).

Risk Assessment

The second stage of risk management; risk assessment begins by the definition of elements at risk. The primary purpose of risk assessment is to identify hazards and assess and reduce their risk to an acceptable level. Much of the risk assessment criteria are related to defining the scoring or ranking of risk including the severity of consequences and likelihood of occurrence as part of the overall risk assessment process. The process includes some components (Lyon & Hollcroft, 2016, pp. 69-70):

- *Risk factors.* Specific risk factors used to measure risk such as severity, likelihood, or probability, frequency, duration, failure detectability, control effectiveness, vulnerability or other risk measures.
- *Risk levels.* Specified risk levels or categories for each risk factor.
- *Risk values.* Defined qualitative, quantitative or semiquantitative values for risk levels.
- *Risk actions.* Decision guidelines or action required for each risk level.
- *Risk screening and communication tools.* A risk assessment matrix, graph or risk priority numbers used to measure, screen, compare and prioritize as well as communicate risk within an organization.

Policy Development

“Policy” is considered to be a combination several processes, which, although interrelated, still can be conceived as distinct elements determining government action (Sato, 2009, p. 5). The risk management policy must be clearly defined. The policy should describe the organization’s objectives for and commitment to risk management. The policy may specify the following aspects (Kouns & Minoli, 2011, pp. 115-116):

- Accountabilities and responsibilities for managing risk
- Commitment to the periodic review and verification of the risk management policy and framework and its continual improvement
- Links between this policy and the organization’s objectives
- Organization’s risk acceptance level
- Organization’s rationale for managing risk
- Processes and methods to be used for managing risk
- Resources available to assist those accountable or responsible for managing risk

Policy Implementation

The fourth stage is policy implementation, wherein the adopted policies are executed by administrative units (Sato, 2009, p. 5). policy implementation stage is the procurement and application stage where selected strategies are implemented, tested and have ongoing maintenance applied (Smith & Brooks, 2012, p. 31).

Policy Evaluation

“Policy evaluation” stage is the assessment of the effectiveness of measures taken. The Centers for Disease Control and Prevention definition of “Policy” is “a law, regulation, procedure, administrative action, incentive or voluntary practice of governments and other institutions. Policy evaluation uses a range of research methods to systematically investigate the effectiveness of policy interventions, implementation and processes, and to determine their merit, worth, or value in terms of improving the social and economic conditions of different stakeholders. Policy evaluation applies evaluation principles and methods to examine the content, implementation or impact of a policy. Evaluation is the activity through which we develop an understanding of the right, worth, and utility of a policy (CDC, 2020).

Approaches to Risk Communication

Strategies for overcoming social and psychological barriers to effective public health risk communication emerge from a number of theoretical perspectives (DiClemente & Jackson, 2017, p. 378). There are a number of approaches to the process of risk communication and its components, including how messages are sent and received, how conflicts are managed and how decisions are made. Each approach views risk communication from a slightly different perspective, just as different audiences view a risk from different perspectives. The more risk communication perspectives the communicators understand, the more likely they will be able to choose approaches that will meet the needs of their particular situation and audience, and the more likely that their risk communication efforts will succeed (Lundgren & McMakin, 2018, p. 11).

Communication Process Approach

Risk communication is a form of communication that, like other forms, is represented by the traditional model of communication. That is, there is a source of communication that generates a message that goes through a channel to a receiver. For example, a regulatory agency (the source) may decide that a chemical poses an unacceptable risk to the public (the message) and issue a press release (the channel) published as a story by the news media (another channel) that is read by members of the local community (the receivers). Various studies in risk communication have looked at individual components of this model to see how changes in any component affect the others (Lundgren & McMakin, 2018, p. 12).

National Research Council's Approach

According to National Research Council (1989) risk communication is the “interactive process of exchange of information and opinions among individuals, groups, institutions concerning a risk or potential risk

to human health or the environment”. The implication for those who communicate risk is that any form of successful risk communication must incorporate the exchange of information and opinions and the participation of the stakeholder groups from the beginning. How this exchange is accomplished will vary for each type of risk communication. The audience is necessarily involved in exchanging information with those who are communicating and managing the risk in consensus communication. The exchange can be incorporated into care communication by soliciting audience feedback before and after risk information is distributed (Lundgren & McMakin, 2018, p. 13).

Mental Models Approach

The mental model approach (2002) offers tools for better understanding how a lay audience’s cognitive beliefs about medical and environmental risks impact their interpretations of health risk messages and outlines specific ways in which technical and scientific concepts can be tailored and focused into understandable risk communication (DiClemente & Jackson, 2017, pp. 378-379). Mental model is a five-step method for creating and testing risk messages (Morgan et al. 2002, pp. 20-21):

Step-1. Create an expert model. Review current scientific knowledge about the processes that determine the nature of the risk. Summarize it from the perspective of what can be done about the risk. The formal representation that was chosen is the influence diagram, which allows representing and interpreting the knowledge of experts from diverse disciplines.

Step-2. Conduct mental models interview. Conduct open-ended interviews, eliciting people’s beliefs about the risk, expressed in their own terms. The interview is shaped by the influence diagram, so that it consist of relevant topics. It allows the expression of both correct and incorrect beliefs.

Step-3. Conduct structured initial interviews. Create a confirmatory questionnaire whose items capture the beliefs expressed in the interviews. Direct it to the larger groups sampled appropriately from the intended audience to estimate the population prevalence of the beliefs.

Step-4. Draft risk communication. Use the results from the interviews and questionnaires, with an analysis of a decisions to determine incorrect beliefs. Then draft a communication and subject it to the expert review.

Step-5. Evaluate communication. Test the communication with individuals selected from the target population using interviews, focus groups, questionnaires.

Using the mental models approach, communicators begin by determining to which audience the risk communication efforts will be directed. They then interview members of that audience to determine how the audience views the risk. Answers of all the participants were used to compile a mental model, a view of how the audience saw the dangers (Lundgren & McMakin, 2018, p. 20).

Mental Noise Approach

This approach holds that when people perceive themselves at risk, their ability to hear and process information decreases dramatically. Under such circumstances, the ability to attend to and retain information is estimated to be 80% less than normal. This limitation is particularly true in sudden, unexpected crises. The implication for those communicating risk is that risk information must be carefully presented, particularly in crisis communication. Proponents of the approach advise that no more than three key messages, repeated frequently, should be used, along with reinforcement of verbal and written communications with visuals, and ruthless removal of jargon, technical terms and acronyms (Lundgren & McMakin, 2018,

p. 17). The approach promotes the use of in-depth interviews and other means of information gathering, as used in audience research for social marketing, for example, to gather information about popular interpretations of risk and assist in tailoring risk communication messages. In addition, it is important to ensure that risk communication materials are easily comprehensible and contain adequate repetition and visualisation in order to reach the intended audiences (Infanti et al, 2013, p.7).

Hazard Plus Outrage Approach

That is the audience's view of risk reflects not just the action but, even more important what emotions they feel about the action. Think of the hazard part of the risk as the expert's assessment of the risk – the factors considered in the risk assessment, which may lack emotional aspects of the risk. Think of the outrage of the part of the risk as the nonexpert's assessment of the risk – the average person's Outlook on the risk, which may lack some or all of the factors considered in the risk assessment. If both assessments are in agreement, that is the expert and nonexpert agree that the risk is substantial or insubstantial, then there is a lesser chance of controversy. If the two assessments do not agree there is a greater chance of controversy. The implication for those who are communicating risk is that a presentation of technical facts will not necessarily give most audiences the information they want. The communicator must understand the audience's feelings and make sure that the information addressing those feelings is included in the risk message (Lundgren & McMakin, 2018, p. 14).

Social Amplification of Risk Approach

The approach has several implications for risk communicators. One is to actively plan for and respond to the social ripples that arise from a risk being identified, particularly in consensus and crisis communication. Such planning should incorporate thorough understanding of audience needs. Another implication is to follow one of the primary principles of risk communication: ensure that information is communicated early, often and fully (Lundgren & McMakin, 2018, p. 14).

Social Trust Approach

This approach holds that a person's trust in an institution is built on an understanding of the institution's goals, motives and actions in relationship to the person's values. The implication for those communicating risk is that information alone, no matter how carefully presented, will not communicate risk effectively if trust and credibility are not established first. Trust and confidence are being shown as increasingly important to how people perceive risks and how they respond to risk management strategies. Unfortunately, how an organization is perceived is often beyond the control of risk communicators (Lundgren & McMakin, 2018, pp. 18-19).

Evolutionary Theory Approach

The theory of evolution has also contributed to effective risk communication. Natural selection resulted in people who value fairness, equity, prudence, generosity and who fear breaking social contracts. In general, humans are hardwired to cooperate in sharing resources. Risk communicators could expect that

risks perceived as unfair, unjust, costly, wasteful or harmful to a single group of people may be viewed as more dangerous and less acceptable by stakeholders (Lundgren & McMakin, 2018, p. 20).

Health Belief Model Approach

The Health Belief model helps to explain why individuals may accept or reject preventative health services or admit healthy behaviours (Brake, 2013, p.273). The model supposes that health-related action depends upon the simultaneous genesis of three factors (Rosenstock, Strecher & Becker, 1988, p. 177):

- (1) The existence of sufficient motivation to make health issues salient or relevant.
- (2) The belief that one is susceptible to a serious health problem or to the sequelae of that illness or condition. This is often termed perceived threat.
- (3) The belief that following a particular health recommendation would be beneficial in reducing the perceived threat, and at a subjectively-acceptable cost. Cost refers to perceived barriers that must be overcome in order to follow the health recommendation; it includes, but is not restricted to, financial outlays.

The Health Belief Model is comprised of several constructs that in combination, predict behavior. They are: perceived threat (an individual's assessment of the likelihood of a negative health condition occurring) perceived severity (an individual's assessment of the seriousness of contracting the health condition and its consequences); likelihood of action (rewards attributed to engaging in the recommended behavior) against perceived barriers (obstacles that dissuade an individual from executing the recommended behavior change); cues to action (motivating factor that provokes change); and, self-efficacy (one's belief in one's ability to actually perform the desired behavior change (Patterson, Bates & Grijalva, 2018, p. 5).

Crisis Communication Approach

The crisis communication approach holds that those who are communicating the risk use every device to move the audience to appropriate action. This approach holds that the organization knows what is best for the audience and should act as a firm parent in enforcing its opinion. The implication for those who are communicating in a crisis is persuasion (Lundgren & McMakin, 2018, p. 24). Risk and crisis communication differs in definition, however they are also interconnected. Risk communication addresses probabilities and potential situations of harm and danger, while crisis communication focuses on a specific event or action that has already occurred or will almost certainly occur in the near future. Crisis communication is an on-going process that occurs during the actual crisis (Bourrier, 2018, p. 3).

Table 2. Features of risk communication and crisis communication (Sellnow et al., 2009, p. 4)

Risk Communication	Crisis Communication
Risk centered: Projection about some harm occurring at some future date	Event centered: Specific incident that has occurred and produced harm
Messages regarding known probabilities of negative consequences and how they may be reduced	Messages regarding current state or conditions
Based on what is currently known	Based on what is known and what is not known
Long term (pre-crisis stage)	Short term (crisis stage)
Technical experts, scientists	Authority figure, emergency managers, technical experts
Personal scope	Community or regional scope
Mediated: Commercials, ads, brochures, pamphlets	Mediated: Press conferences, press releases, speeches, web sites
Controlled and structured	Spontaneous and reactive

Risk Communication During Outbreak

The emergency plans acknowledge that one of the most important considerations in the event of an infectious disease outbreak is communication, both with the public and among those individuals and organizations involved in the plans' implementation. Government and organizational documents, and academic literature about infectious disease communication, deals with one-way transmission of information to the public by experts, often by the mass media, and focuses on getting across the facts so that the public: (a) won't panic and (b) will do what the experts advise (Holmes, 2008, p. 350).

In general, the management of public health emergencies has always included a significant communication component in the form of warnings, risk messages, evacuation notifications, messages regarding self-efficacy, information regarding symptoms and medical treatment, among many others. Public health emergencies, in contrast, generally concern the outbreak of particular diseases or the identification of specific risks from environmental or life-style factors. In such cases, public health agencies will track the sources of the disease, undertake actions to stop the contamination, issue warnings and recalls, and provide the public with information about symptoms, treatments, and ways to avoid exposure (Reynolds & Seeger, 2005, p. 44).

Difficulties in communicating risks during infectious disease outbreaks include: the complexity of the disease pathophysiology and epidemiology; the capacity for individual actions to influence the health of others. Pandemic (H1N1) influenza highlighted these challenges. Rapidly evolving knowledge about the epidemiology of the disease and its impact required ongoing communication with all involved groups. Key tasks for public health professionals were: to ensure the dissemination of key messages about disease control; to ensure the media were regularly updated; and to acknowledge uncertainty. They also had to understand the concerns of the public and respond accordingly. These efforts help to maintain the confidence and trust of the public and, ultimately, lead to the relevance and effectiveness of public health messages (Lowbridge & Leask, 2011, p. 34). During the outbreak of West Nile virus, public health agencies have disseminated information about the nature and frequency of the disease and the level of risk and have offered guidelines for how to avoid mosquito bites. Typically, these activities rely on the mass media and general public education campaigns to spread the word. Moreover, emerging diseases such as SARS or avian flu H5N1, although less malevolent in their origins, create similarly

frightening scenarios of widespread harm to the public health. The technical assessment of hazard, then, suggests a high level of risk. These risks are also new to the general public and, therefore, include low familiarity, are seen as unnatural and exotic, and create high levels of uncertainty. In most cases, they involve organisms that cannot be seen and diseases and symptoms that have not before been evident in the general population. This general lack of familiarity is likely to enhance the perceived risk by the general public. As with other forms of risk communication, these emergent threats create challenges for the medical and public health community to communicate in accurate, credible, timely, and reassuring ways (Reynolds & Seeger, 2005, pp. 44-45). Whenever an outbreak occurs, communicators must be ready to provide information to help people make the best possible decisions for their health and well-being. This must be done in rapid timeframes and without knowing everything about the crisis (Centers for Disease Control and Prevention, 2020).

Historically, risk communication, whether in a crisis or not, has focused on communication to the public about industrial, medical, environmental, societal, or catastrophic risks and hazards that can potentially impact exposed populations, communities, or individuals. Agencies involved may include public health, but much of this work has been conducted through environmental, food, drug, and agricultural regulatory agencies. Objectives for organizations and agencies charged with overseeing these types of risks are to minimize and/or manage health impacts through mitigation, and health protection activities as well as through policy, legal, social, and behavioral adjustments for organizations and people affected. Risk communication is a part of this process and entails both internal communication, for example, to exposed workers, and external communication, to the general public if they too are at risk for exposure. Risks in question are typically time bound, geographically specific, and relevant to some but not necessarily all populations. Risk communication is a set of practices and relationships more generic than crisis risk communication, which presumes an emergency (Glik, 2007, p. 34).

The five best practices for risk communication developed by the World Health Organization provide a sound framework on which to base communication strategies. The practices are: build trust; announce early; be transparent; respect public concerns; and plan in advance. Establishing trust with the public is the most critical aspect of effective risk communication. Without trust public health messages are more likely to be disregarded. Trust is hard to build and easy to erode. Top-down communication, unresponsiveness, a lack of transparency and wrongly over or under-emphasising health risks can contribute to the erosion of trust (Lowbridge & Leask, 2011, p. 34).

Channels and the Messages

The role of the media and how they frame responsibility for a health crisis represents an important component of messaging to the public. By placing responsibility for a health crisis, such as a pandemic, the media are also able to mediate public behavior to panic by inducing a sense of otherness which has the effect of allaying fears by framing them as distant (Thomas et al., 2020).

The media is the main channel for the risk communication with the public. Media can play a significant role for raising awareness of the health issues. But the challenge is to find the right channel of communication for each audience, because one channel may not be appropriate for all. Also, the choice of channels may change over time. Communication channels are selected that make the best use of resources while still meeting overall goals. Techniques of communicating with individuals include: brochures, information packets, newsletters, videotapes or slide shows, advertisements, fact sheets, and press releases (Santos, 1990, p. 48). Different channels of communication have different strengths.

Newspapers are excellent for reporting detailed investigations and in-depth news. Television delivers information quickly and can present the visual elements of the story. Television, radio, telephones, and the internet may have a wider reach (CDC, 2014).

When target audiences have been defined, it is necessary to choose the channels that are most likely to reach the audiences. Selecting the appropriate channels and methods for communication is important for reaching the target audiences. This is especially important with health risk communication, where participants can quickly feel excluded if they do not believe they are getting adequate information in a timely manner (CDC, 2014). Channel selection might include a mix of mass media (television, radio, magazines, newspapers, internet). The mass media can transmit the information quickly to a wide audience but can't alone be expected to motivate people to change their behaviours. The mass media are the public's primary source of the information but may be less trusted than more intimate sources of information. Media channels may focus too much attention on new information that affects limited segments of the population; may increase the chances for miscommunication of complex or controversial news, may communicate incomplete information (Arkin, 2012, p.131).

New channels for risk communication are developed in the last few years. The most rapidly growing channel is internet. Internet share elements of traditional mass media channels. The unique feature of internet is its large channel capacity. The internet may be used to transfer rapidly large amounts of information (Mazis & Morris, 2005, p. 106). New communication technologies such as blogs, social network websites, photo and video sharing websites and microblogs are a few of the Technologies that have created opportunities to communicate about risk (Rains, Bruner & Oman, 2015, p. 228). The 21st century has witnessed the rapid diffusion of various social media. Social media is defined as a group of internet-based applications that allow the creation and exchange of user generated content. Contrasted with traditional media where users are passive recipients, social media provides an interactive platform for active social participation which has transformed the way of sending and receiving information (Cheng & Cameron, 2018, p. 9).

Table 3. Types of social media for risk communication (adapted from Rains, Bruner & Oman, 2015, p. 229)

Social media	Function
Social network website	System of personal webpages that articulate members' connections
Blog	Dedicayed space for a single individual or organization to share information
Microblog	Dedicayed space for a single individual or organization to share information (limited characters)
Discussion forum	Online group dedicated to contributing, viewing, responding to questions, comments
Video sharing website	Website dedicated to viewing, sharing, commenting on videos
Photo sharing website	Website dedicated to viewing, sharing, commenting on photos

The purpose of communicating risk information is message design. Messages may be designed to convey new facts, alter attitudes and change behaviour. The following factors that help determine public acceptance should be considered before messages are drafted (Arkin, 2012, p.132):

Clarity: Messages must convey information clearly to assure the public's ability to make informed personal choices and to limit the chances for misunderstanding. Clear messages contain as few technical, scientific and bureaucratic terms as possible.

Consistency: All messages on a particular risk topic would be consistent, lessen the confusion and mistrust of science and increase the probability of understanding.

Credibility: The spokesperson or the source of the information should be trustworthy and consistent.

Public need: Messages should be based on what the public perceives as most important and what they want to know.

Main points: The message designer should clarify the most important points for the public.

Tone and appeal: The message should be appropriately reassuring, alarming, challenging, or depending on the desired impact on the target audience.

Several communicators have played an important role in designing messages. However, not all people tasked with the responsibility of communication are trained communicators, and fewer are risk communicators. Nevertheless, communicators are confronted with risk communication and in the absence of any guidance or best practice, this paper seeks to provide a model which assists communicators in asking the right questions and thus framing the issue that they are responsible for communicating. It is hoped that through its practical application, communicators will gain a greater understanding of the role and responsibility that they play in risk communication (Smillie, 2010, p. 117). Risk communication is often riddled with suspicion, therefore, initial strategies are needed in message design that build trust. Trust is an important pre-requisite for effective orientation and action. There are four key issues on which trust must be based, including: perceptions of commitment, competence, caring, and predictability. Trust takes time to build, it is fragile - it can be destroyed in an instant. It requires continuous reinforcement and maintenance. Communications must be made to the public early, often, and fully. Even if no new information is available, the public must know that the risk is still being studied and has not been forgotten (Ng & Hamby, 1997, pp. 473-482). The communicators who convey risk-related information to other interested parties are thus crucial to the accurate communication of risk and can generally be divided into four main groups: scientists, journalists, stakeholders and governments/public health authorities (Smillie, 2010, p.116).

FUTURE RESEARCH AND DIRECTION

In this chapter, health risk communication is discussed within the risk management process. Both risk management process and health risk communication are explained in a theoretical framework and relevant approaches are defined. It is stated how to use the media in health risk communication in general. The use of traditional media and new media has been explained. However, information on media usage is at a basic level in this chapter. For this reason, it is recommended to consider the use of media in health risk communication with a wider perspective for future studies.

CONCLUSION

Risk communication is a process about the potential risks related to a particular condition to inform people. The risks may be directly linked to a person or community. It involves a two-way exchange of information between the parties likely to be affected. It is at the core of risk management. Risk communication adds value to society by transparency, trust building, acknowledging uncertainty. The successful control of any type of health risks depends on effective communication with the public about associated risk and protective factors. These situations are often characterized by high levels of uncertainty and strong negative emotions such as fear, distrust and anger, which causes barriers to effective communication. Every day, risk communication is needed somewhere in public health. Whenever a crisis occurs, communicators must to be ready to provide information to help people make the best possible decisions for their health. Media can be used to reach audiences. Traditionally media and new media can be both used for an effective communication strategy. The selection of channel is important because not all channels are suitable for the target audience. New channels for risk communication are developed in the last few years. The most rapidly growing channel is internet. Internet share elements of traditional mass media channels. The main difference between the traditionally media and the new media is the interactivity. The purpose of communicating risk information is message design. Messages may be designed to convey new facts, alter attitudes and change behaviour. Clarity, transparency and clearness should be provided in message design.

There are a number of approaches to the process of risk communication and its components, including how messages are sent and received, how conflicts are managed and how decisions are made. Each approach views risk communication from a slightly different perspective, just as different audiences view a risk from different perspectives. These approaches explain how risk information is processed, how risk perceptions are formed and how risk decisions are made. These comprehensions can be used to inform the development of more effective risk communication strategies.

Risk communication is important in the following situations:

- explaining the probability of the risk and the predictability of the risk affect
- defining the difference between risk and the hazard
- reducing fear and uncertainty about the diseases
- addressing the long-term effects of risk and risk management
- improving the understanding of terminology and concepts about risks
- creating an environment where risks and uncertainties discussed
- improving the transparency and the credibility of the experts in risk management

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KEY TERMS AND DEFINITIONS

Expert: A person who has a great deal of knowledge.

Health Crisis: An emerging situation which affects people.

Outbreak: Sudden rise in the number of cases of an infectious disease.

Pandemic: An epidemic occurring over a huge area, across the world, affecting a large number of population.

Risk: The possibility of an adverse situation or event occurring.

Risk Communication: Exchange of information about risks between experts and people facing threats.

Risk Management: The process of identifying, assessing, and controlling threats.

Trust: Belief in the reliability and the truth.

Chapter 9

Risk Communication and Media in Pandemics

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ABSTRACT

Pandemics as global crises affect our daily routines and practices nowadays. On 11 March 2020, WHO announced the COVID-19 as a pandemic. As the COVID-19 is a communicable disease, public health practices constitute the major preventive mechanism as primary protection besides treatment. Risk communication is essential for public awareness, preventive measures, and containing the outbreak during the pandemic. In a broader aspect, “crisis and risk communication” corresponds to a greater frame that consists of urgent crisis communication, empowering the decision-making process, and building a communication network between the experts and the common. The media plays an important role in conveying information amongst the risk communication experts, administrators, and the common. Pandemic is a dynamic period. In this period, changes are possible in human perception, sensitivity levels, and behaviors. Uncertainty is present in this course. To overcome this uncertainty, correct risk communication with media collaboration is essential.

INTRODUCTION

The World Health Organization (WHO) has announced that a new type of coronavirus disease (SARS-Cov-2, COVID-19) occurring in China has reached pandemic levels on March 11, 2020. In pandemics, risk communication plays an essential role in informing the public, taking precautions, and controlling the outbreak. One of the main points in epidemic control is ensuring the effective participation of the society in measures and interventions. In addition, the negative effects of infodemia can also be managed with accurate risk communication. This strategy should be planned at the global, regional, and country levels, such as government (including ministries and local governments), national and international non-

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governmental organizations, and academia. An epidemic is a dynamically functioning process. Changes might likely occur in people's perceptions, sensitivity levels, and behaviors during this process. At such times, there is uncertainty in the process. It is possible to overcome this uncertainty by collaborating with the media for accurate risk communication.

In this review, risk communication strategies and the role of media are defined by examining society's behavior models and risk perception in pandemics.

RISK AND RISK PERCEPTION

Risk is the combination of the possibility of a dangerous event or exposure befalling and the degree of severity of the health deterioration that the event or exposure may cause. For public health emergencies, risk communication includes the range of communication capacities required through the preparedness, response and recovery phases of a serious public health event to encourage informed decision making, positive behaviour change and the maintenance of trust (*Risk Communications*, n.d.). One-way generic, non-contextualized information dissemination of public health risk can be dangerous and counterproductive. For experts, the risk is great when the hazard is great, and is a function of the exposure to that hazard and the vulnerability of the exposed population. For the public, the risk is great when their sense of emotional engagement is great-fear, anger, outrage (Sandman, 1988).

Risk perception is defined as perceived sensitivity (susceptibility) to a health threat. It usually consists of perceived injury/vulnerability and severity dimensions. Injury or vulnerability can be defined as the possibility of perceived impact from a health threat.

These are:

- Perceived response activity: "What protective behaviour will help?"
- Perceived self-sufficient response: "Am I sure I can perform the protective behaviour?"
- The downside of the response: "What are the disadvantages of the protective behaviour?"

Risk perception and coping assessment determine the type of action used while prompting to demonstrate the behavior. An action can be adaptable and may result in not completing or reversing the recommended protective behaviors. In order for appropriate behavior to occur, perceived intensity and sensitivity response must be high with self-sufficiency, while the disadvantages of response must remain relatively low. If the perceived level of intensity and sensitivity is low, people do not view the subject as threatening and, as a result, are not inclined to show the recommended behavior. If the violence and the perceived sensitivity is high, but the response and/or self-efficacy is low, it may result in incompatible reactions (e.g., denying the existence of a threat) (de Hoog et al., 2007; Ruiter et al., 2001).

Protective behaviors shown in response to a pandemic can be divided into three groups: preventive, avoidance behaviors, and disease behavior management.

1. Preventive behaviors include wearing masks, vaccination, and hygiene behaviors (such as washing hands, coughing, or sneezing into the arm/handkerchief, cleaning surfaces).
2. Avoidance behaviors are practices of not entering crowded environments, not using public transport, and adapting to work within quarantine restrictions.

3. Management of disease behavior includes adaptation to treatment (antiviral medication, etc.), seeking help from professionals, and using telephone/internet helplines.

Some of these behaviors are the responsibility of the individual to perform. Some are determined by law. A high level of individuals' health literacy is required for self-sufficiency in perceiving risk and seriousness and demonstrating appropriate behavior.

RISK COMMUNICATION

Risk communication refers to the exchange of real-time information, advice and opinions between experts and people facing threats to their health, economic or social well-being. The ultimate purpose of risk communication is to enable people at risk to take informed decisions to protect themselves and their loved ones. Risk communication uses many communications techniques ranging from media and social media communications, mass communications and community engagement. It requires a sound understanding of people's perceptions, concerns and beliefs as well as their knowledge and practices. It also requires the early identification and management of rumours, misinformation and other challenges (Gamhewage, 2014).

"Risk communication" is related to providing information to the public concerning behavior or exposure types (can be positive or negative) or proportion (may be strong or weak). "Crisis and risk communication" as a whole corresponds to a framework that includes emergency crisis communication, strengthening the decision-making process, and communicating between experts and the public. In emergency situations, decisions about risky health-related situations and health behaviors may be made over a short period of time. These decisions may have irreversible consequences, and the possible consequences of decisions may be uncertain. Risk communication can help individuals make decisions in the face of questions such as "Should I receive medical treatment?", "Should I purify the drinking water?", "Should I not send my child to school?" (CDC, n.d.).

Risk communication is a combination of two aspects: internal and external communication. Internal communication refers to a situation where risk assessors and managers develop a common understanding of their duties and responsibilities. It allows risk assessors and managers to assess the potential impact and all possible outcomes based on available information. Government is the common communicator between administrators and academics. External communication is the communication of stakeholders in internal communication with the general public. It improves society's awareness of the negative impact of risk and their role and behavior in risk management (IRGC, 2017; Renn, 1998).

The basic principles of risk communication are:

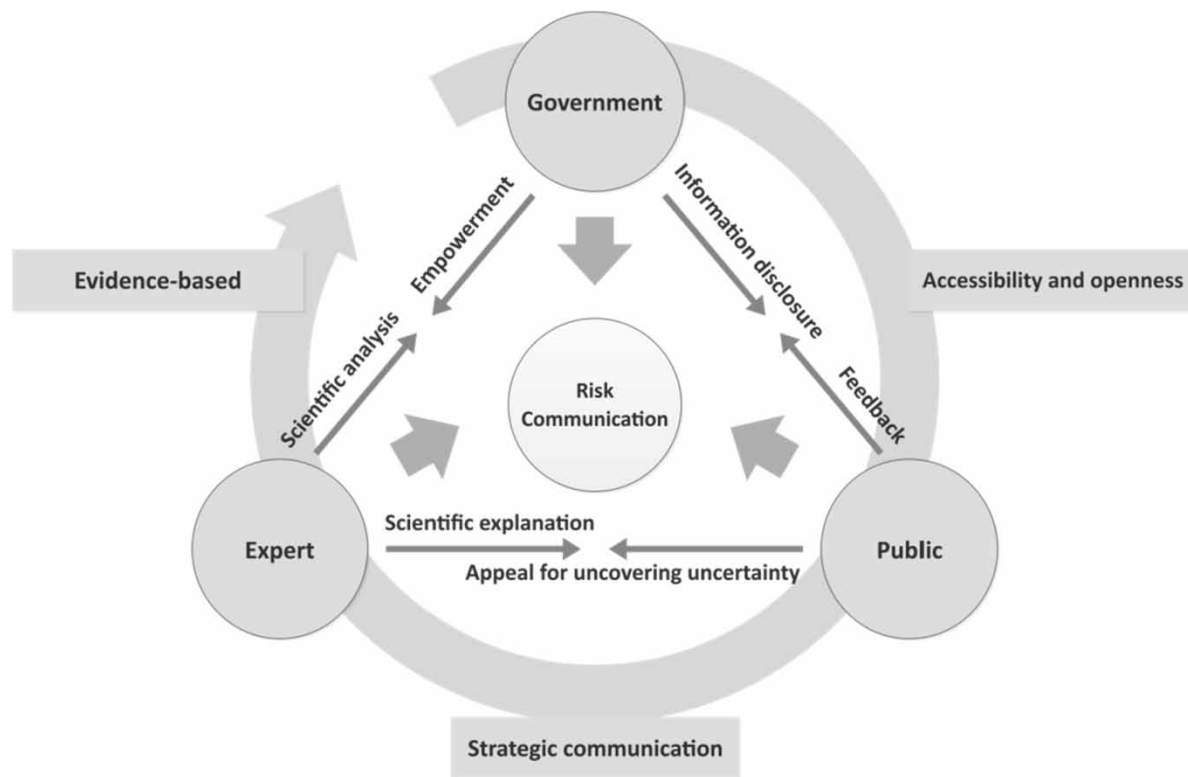
1. **Accessibility and openness of risk-related information:** Accessibility and openness enhance the public's perception that they are fully informed about the risk and are on the same level of sharing. Risk communication should consist of an interactive process to which all stakeholders are given access. Risk communication strategies require creating networks of information sharing and working relationships between individuals, groups, and institutions⁶. (Sellnow et al., 2009) Specifically, in accordance with the characteristics of COVID-19, infection during the incubation stage and infection of asymptomatic patients lead the public's perception to low risk for self-protection. It is, therefore important to establish this interaction.

2. **Early and frequent communication about the characteristics of the risk:** Risk communication should start as soon as the risk is identified and continue to be updated with any new information. For an unknown disease, one should avoid using specific conclusions or statements in communication, while clinical and epidemiological research is ongoing. When updated information is available, the information must be disclosed. The nature of risk can sometimes paralyze an organization, even a whole management network. In effective risk communication, immediate and continuous contact should be made with the public about the risks and regular information as well as risk levels and trends throughout the situation (Lundgren & McMakin, 2013).
3. **Strategic method for conveying uncertainty:** Risk communication often contains uncertain information on technologies, behaviors, medical procedures, etc. To be effective, such information needs to include messages, images that facilitate understanding in public. Because of the uncertainty, unqualified people and experts tend to perceive risks in different ways and use different terms to discuss them. To convey the uncertainty effectively, it is required to assess different levels of perception among different audiences and to use an evidence-based approach. In risk communication, it is most effective to use vague statements and avoid precise estimates. However, it is crucial to present evidence-based communication with numerical data that can convey the degree of uncertainty, rather than words like “likely,” “perhaps,” and “maybe”. It is necessary to develop special communication strategies for different groups of society (age, gender, occupation, etc.). Especially for untrained people, using live images or pictures can illustrate epidemiological features directly, clearly, and visually. The public’s perceptions and concerns should be taken into account if risk decisions and communications are to be successful. Risk communication should be designed not only to present information but also to change the attention and behaviour of the public (Dhami, 2018).

In this model, the three components of the interaction are; Decision Makers (government), Society, and Experts. Government is the primary decision-maker of pandemic management (Figure 1). The responsibility of the government is to convey adequate and accurate information to the community. Open implementation of risk communication can sometimes be difficult. It is considered difficult to decide what, how much, and how to offer the information. For example, full transparency can probably cause unnecessary fear among members of the public. Therefore, it can be tough to manage transparent risk communication in the decision-making process due to many factors. Balancing different factors such as society’s perception of risk and possible subsequent outcomes of conveying information will be a challenging process (Boholm, 2019).

element of risk assessment and decision-making, which can be seen as internal communication. At the risk assessment stage, the consensus of experts in decisions about risk will enable rational decision-making that initiates each intervention, minimizes negative consequences, and maximizes the expected benefits. Governments should empower experts to work on comprehensive and detailed research in the uncertainty of a risk problem. Academic communities should be fully focused on the scientific analysis of risk and share the findings, data, and materials. In modern society, the risk is an interdisciplinary issue. For public health risk, clinical and social sciences, biomedical, etc. should be studied in more than a specific discipline, especially the public health professionals. Consensus on evidence-based analysis is the basis of decision-making.

Figure 1. Government-Expert-Public Risk Communication Model (Zhang et al., 2020).



Communication between experts and the public represents external communication. A major challenge of risk communication is not only conveying information but also finding ways to conduct comprehensive information that reflects uncertainty and empowers the public to make fact-based decisions about health. The public can not always understand complex professional knowledge about risk, so the responsibility of experts is to translate professional knowledge into simple and clear content that is easily understood.

Risk communication responsibility should be a balance between “neither too central nor too decentralized”. Different actors must fulfill their responsibilities according to their roles and operate the communication network. Accordingly, this model underlines the importance of stakeholders in risk communication. Within the communication network, the government should play a leading role in risk communication. The government should ensure cooperation and coordination with other stakeholders to share information in a timely and effective manner.

In Turkey, the situation is being carried out with experts on the scientific advisory board and officials of the Ministry of Health and public communication in the COVID-19 pandemic management process. Applying the best risk communication steps in this process is important for managing the pandemic and its subsequent effects. The best risk communication practices in the literature are presented in 9 steps (Table 1) (Zhang et al., 2020). As shown in Table 1, the process continues with political stability, cultural sensitivity, uncertainty due to the nature of the pandemic and the virus, risk perception of the public, reliable sources of information, and cooperation between the government, experts, and public in Turkey.

Table 1. Message-centric approach and best risk communication practices

Best practices for risk communication	Explanation
1. Taking Risk communication to political determination	This process should be incorporated into political determination with the possibility of an outbreak. Risk-related policies can be developed and conveyed in a variety of ways. The decision-making process must constantly be based on risk communication. An action plan for epidemic management must be provided with political determination.
2. Handling Risk communication as a dynamic process	Effective risk communication is a dynamic, interactive, and adaptable process.
3. Uncertainty, as the nature of risk, should be taken into account	To convey risk information, it is necessary to explain uncertainty in messages. Despite the uncertainty of the cause of this outbreak, current information should be shared regularly.
4. Demonstrating cultural sensitivity in creating messages	Risk communication must comply with certain characteristics of those who follow, such as gender, education, age, and culture.
5. Identifying different risk tolerance levels	Individuals in a society have widely varying capacities to perceive risk-related messages due to the scientific and technical characteristics of risk. There are different levels of risk perception in public.
6. Inclusion of public in the dialogue on risk	Risk communication dialogues should include open, inclusive, and deliberative collaborations between government, industry and public.
7. Delivering messages with honesty	Risk communication should be an honest and open process.
8. Openness and accessibility to the public and meeting risk perception needs	There should be honest, accessible and open communication through various channels where the public can receive messages.
9. Cooperation and coordination between reliable sources of information on risk	Coordination of risk communication strategies requires sharing information and networks of working relationships between groups and institutions.

MEDIA

Risk communication is multi-sectoral, and media is one of the most important stakeholders. Effective media communication in pandemics increases the formation of positive results and public participation. Through effective media communication, public health officials and the government informing the public can consciously help them make better decisions. Such effective media communication requires trust and understanding between public health officials, government, and the media. The media must rely on the government for timely and accurate information. The government must rely on the media to deliver its messages before, during, and after an emergency. For these reasons, both sides depend on the other to succeed. Therefore, the media should be seen as an essential means of transmitting information and a component of epidemic control.

Effective media communication is actually very important in effective pandemic management and should play a central role from the start. It builds public confidence in an organization or government in the process of dealing with the pandemic. Effective media communication is also an integral part of the broader information exchange process, which aims at uncovering trust and understanding of information and interventions. Within the boundaries of existing knowledge, good media communication helps such efforts:

- build, maintain or restore trust
- development of knowledge and understanding
- guide and encourage appropriate attitudes, decisions, behaviors
- promote cooperation and aid

Effective media communication provides timely, accurate, precise, objective, consistent, and complete risk information to the public and is the starting point for building an informed population. An informed population is concerned, interested, reasonable, thoughtful, solution-oriented, and collaborative. They will also be more likely to be appropriately concerned about risk and take appropriate action.

Effective media communication is sometimes used proactively to raise awareness of potential risks or inform people before an emergency. In this way, the public's behavior becomes more straight. It is used to create a more reactive response to an existing situation. It also is involved in informing individuals and disseminating information about protecting and mitigating the effects of an outbreak. In addition, the goal should be to build consensus and engage people in public dialogue.

These steps should be taken into account in relation with the media in the process of risk communication (Hyer & Covello, 2005).

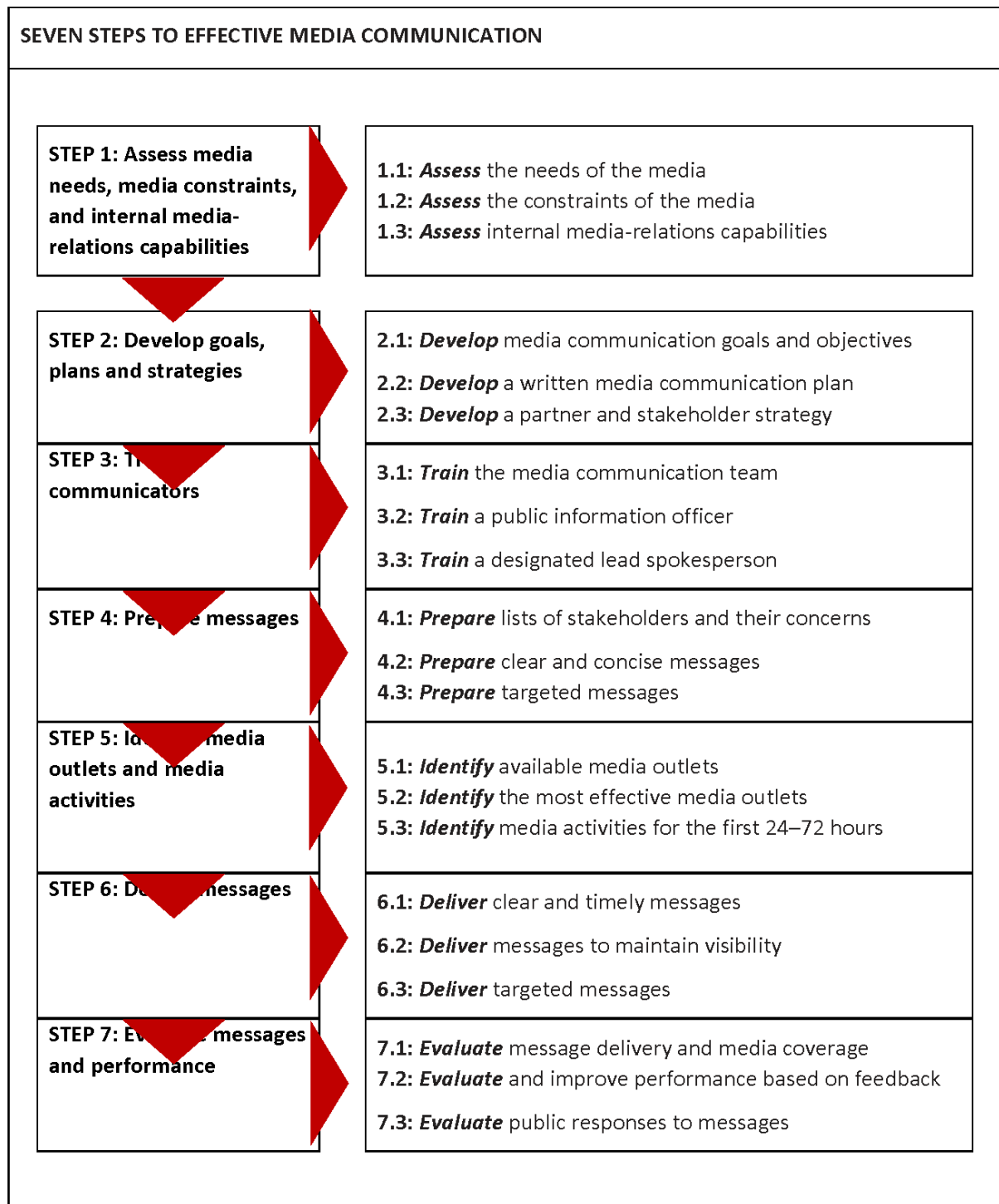
FUTURE RESEARCH AND DIRECTIONS

Risk communication is the key strategy to control the pandemics. Researches should be conducted to continuously measure the risk perception of the society and determine the factors that affect it. Health managers should know the social determinants of health in the community. For this, need recognition studies should be conducted for healthcare professionals and healthcare managers on issues such as knowing the society and communication strategies. With the results of the studies, permanently and dynamically monitored and evaluated intervention programs should be developed. Media is an important stakeholder in this period. It should be effective both in informing the public correctly and in all other stages of the risk communication. For an effective media communication, research should be conducted to determine the knowledge and attitudes of media employees about risk communication and the level of health literacy of the society. As a result, evidence-based intervention programs should be developed to strengthen these skills.

CONCLUSION AND RECOMMENDATIONS

In pandemics, risk communication plays an important role in order to inform the public, take precautions and control an outbreak. Risk communication should be made clear, understandable and continuous regarding the level of health literacy and risk perception of the public. The media has an active role in this process. It should be effective both in informing the public correctly and in other stages of risk communication. For effective media communication, it must be conveyed with serious planning before application.

Figure 2. Consists of 7 steps to plan and implement effective media communication



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KEY TERMS AND DEFINITIONS

Media: The term refers to components of the mass media communications industry, such as print media, publishing, the news media, photography, cinema, broadcasting (radio and television), and advertising.

Risk Communication: Risk communication refers to the exchange of real-time information: advice and opinions between experts and people facing threats to their health, economic or social well-being.

Chapter 10

Risk Communication and Social Media: COVID-19 Pandemic Planning and Response in Turkey

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ABSTRACT

The new form of coronavirus disease (COVID-19) was declared a global pandemic by the World Health Organization on March 11, 2020. Then, the citizens were required to stay in their homes. In this process, social media has become the users' window to the global village. With the prolongation of the isolation process, the use and importance of these platforms in communication, entertainment, socialization, and access to instant information about the pandemic have increased. People and institutions responsible for pandemic management have started to frequently benefit from social media platforms in risk communication activities to create public awareness about the disease and reinforce individuals' beliefs to comply with the precautions. In this study, the person responsible for COVID-19 pandemic planning and response in Turkey, the Minister of Health's, Twitter account was analyzed. The posts shared by the Minister of Health were subjected to content analysis, and the messages conveyed to the citizens were examined from the perspective of the health belief model.

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INTRODUCTION

According to the Constitution of the World Health Organization (WHO), which entered into force on April 7, 1948, *health* refers not only to the absence of illness or disability but also to a state of complete physical, mental and social well-being (WHO, 1948). The physical, psychological, and social well-being of the person is related to the physician's success in diagnosis and treatment, as well as in communicating the risks and treatment recommendations to the patient. In this respect, one of the most critical soft skills of medical practice is *communication*.

Furthermore, the concept of disease in the definition above should be explained because being sick can be perceived differently compared to physicians and non-physicians. According to physicians, any abnormal condition caused by structural and functional changes in tissues and cells would be considered a disease. However, for non-physicians, the disease status may vary by their knowledge and cultural background (Fişek, 1982). While coughing or pain in the body is accepted as a disease or disease risk by a physician, if this does not prevent the person from doing daily activities, they may not define themselves as sick and may not see any risk. In this case, risk communication activities, which include explaining health risks to the public, have been among the most critical health system applications since the emergence of medical practices.

Informing society and creating public awareness are the main objectives of risk communication activities. However, only informing individuals is not enough. It should also be aimed to strengthen individuals' beliefs to comply with the precautions to be taken against risks and perform behavior changes in this direction. The dangers and preventive health practices that arise, especially during pandemic periods, should be explained to individuals, and collective awareness should be provided for the precautions to be taken against disease and illness. In this kind of communication process, Health Belief Model (HBM) aiming to change individuals' health behaviors could be illustrative as it consists of perceptions regarding susceptibility, severity, benefits, barriers, and self-efficacy factors (Becker, 1974; Rosenstock, 1974; Taylor et al., 2006). It could be argued that HBM factors would interact, and individuals would exhibit protective behaviors towards the disease through the messages to be conveyed to the society within the scope of risk communication.

Social media provides a suitable environment for risk communication studies in pandemics in the 21st century. People responsible for pandemic management use social media platforms intensively in communication activities to create public awareness about the disease and reinforce the beliefs to comply with the precautions. In the present study, Health Minister Dr. Fahrettin Koca's Twitter posts were analyzed to see risk communication strategies regarding the COVID-19 in Turkey. First, the conceptual framework regarding risk communication, social media use in risk communication, and HBM were created in this direction. Then, Fahrettin Koca's official Twitter account and his posts were analyzed using the content analysis. Stieglitz and Dang-Xuan (2013) proposed a methodological framework used in the following steps of the current study: designing of the research model, data collection, and data analysis. In coding the posts and determining the categories, HBM was taken as a reference point. The content-analyzed tweets were limited to those shared between January 22, 2020, when Fahrettin Koca made his first post about COVID-19, and June 1, 2020, when the precautions applied under the pandemic was partially removed and the normalization period was started.

EMERGENCY RISK COMMUNICATION IN PUBLIC HEALTH

One of the most important issues addressed in plans prepared for emergencies threatening public health is the communication between the public authority, experts, and the public. Communication, which is an essential part of the pandemic response and management, has critical importance in eliminating the uncertainties that arise during the pandemic and adapting to changing health conditions (WHO, 2005). Reducing the adverse effects of epidemics and pandemics on public health is related to communication effectiveness. Individuals' perspectives and behaviors regarding health risks could be changed through planned communication activities. As a result, all stakeholders' capacity to be effective partners can be increased, and society can be promoted in terms of prevention, containment, resistance, and recovery against disease through a well-planned effective communication (Holmes, 2008).

Risk communication refers to the real-time exchange of information, suggestions, and ideas between citizens, experts, and government in the preparation, response, and recovery stages of a severe incident that threatens public health. The main goal of this process is to mitigate the effects of the threat on groups at risk. Thus, effective decision-making about protective and preventive measures, positive behavior change, and mutual trust between the parties can be encouraged (WHO, 2020). Trust is the most important precondition for this communication process. Without a sense of trust, citizens would be unlikely to follow the government or health professionals' advice and implement precautions. According to Çınarlı (2014), a decrease in citizens' trust in the communication source may increase anxiety, panic, and insufficient health precautions. For this reason, social concerns, beliefs, and perceptions should be well understood by those managing the process, and the facts should be shared with the public in all transparency for more effective risk communication.

Zhang et al. (2020) have demonstrated how to provide effective risk communication by addressing the COVID-19 outbreak in Wuhan, China. According to the research results, local governments and the Chinese government did not use scientific risk communication strategies in the decisions taken to intervene in the pandemic, and the regular information flow to the public was stopped after a while. The uncertainty and insecure environment that emerged due to the flaw in communication brought about increased information pollution and panic. The researchers suggested a risk communication model (see Zhang et al., 2020) to ensure that the public is informed regularly and transparently by keeping the communication channels open among stakeholders.

The model has three main components: government, expert, and public. The flow of information is provided by the interactive and two-way communication process between these actors. The main decision-making actor in the process is the government. Risk assessment and decision-making process is carried out with government-expert interaction, supported by scientific data. Since risk is an interdisciplinary subject, experts from different disciplines such as human and social sciences, biomedicine, communication, economics, and health professionals are also suggested to be involved in the process. The government's responsibility is to convey sufficient and correct information to society without creating an environment of panic and rearranging the message strategies and communication process by following the citizens' feedback. In expert-public communication, it is aimed to transfer complex professional information about risk and information requests from the public into simple and precise content that can be easily understood (Zhang et al., 2020).

Some risk communication functions are as follows: informing, educating, and motivating the society about health risks, building trust in health professionals and public authority, and correcting the mistakes known to be true in society about the disease (Vaughan & Tinker, 2009). In other words, the scope of

risk communication is mostly composed of *preventive* activities. In this respect, the purpose of risk communication in public health emergencies is about addressing health risks with a proactive approach and taking preventative measures before the disease occurs or spreads. The importance of preventive measures should be well explained to the public from all channels, and social awareness should be created.

Previous studies showed that individual behaviors could be influenced by planned communication activities when encountering risks that threaten public health (e.g., Saliou, 1994; Çınarlı, 2005). Saliou (1994) stated that public awareness could be raised about the flu pandemic by transparently sharing medical information. Moreover, it is possible to prevent unfounded rumors and false news with correct communication strategies and ensure that individuals trust the vaccine by changing their negative perceptions about the flu vaccine (Saliou, 1994). Çınarlı (2005) examined the global severe acute respiratory syndrome (SARS) pandemic in the scope of communication studies conducted around the world. Results illustrated that when the public was informed with accurate, fast, and understandable information, individuals would be more likely to comply with the precautions (e.g., isolation, screening, monitoring, quarantine, travel restrictions) in the successful response and recovery phase during the pandemic.

On the other hand, it is not easy for the public to comprehend and adapt to the measures. For example, although it has been a long time since risk communication activities against the pandemic were started to implement, sufficient awareness for COVID-19 has not occurred in our society, even in the implementation of basic measures such as the use of masks and social distance (Duvar, 2020; Hurriyet Daily News, 2020).

According to Vaughan and Tinker (2009), the differences regarding individuals' awareness about pandemic precautions stem from varying factors such as inequalities in access to health services and living conditions, health literacy, language, immigration status, and risk perception. These factors would lead to the emergence of vulnerable communities against the pandemic. There is a risk that even the best communication strategies would be ineffective in the vulnerable communities due to the following reasons: the people's ignorance of public health messages, thoughts of not getting sick, lack of knowledge and skills about pandemic precautions, and the inability of integration into the strategies to cope with the pandemic. For this reason, different communication and message strategies against public health risks should be implemented for various socioeconomic and cultural communities in a society (James et al., 2007).

Some behavioral models were developed to explain the individual's decision-making process in health-related issues. These models can be used in message strategies to make risk communication more effective. Health Belief Model, Planned Behavior Theory, and Transtheoretical Model could be some of them. These models treat the individual as a rational decision-maker influenced by factors and motivated as a linear progression from attitude to action (Ajzen & Fishbein, 1980; Prochaska & DiClemente, 1983; Rosenstock, 1974). In the following sections, after examining the use of social media in risk communication, we discuss how the Health Belief Model, one of the health behavior models, can be applied to risk communication.

USE OF SOCIAL MEDIA IN RISK COMMUNICATION

According to Ulrich Beck, the risk society is also a society of science, media, and information. Therefore, mass media are indispensable elements of risk communication. On the one hand, mass media enables

the individual to realize the risks; on the other hand, it significantly affects how risks are perceived (Beck, 1992).

Debates about the effects of mass media have continued from the 20th century to the present; however, there is no consensus on its impact on society. Early studies focused on the change in attitudes and behaviors and determined how mass media's influence initiated strong effects. In those studies, it was accepted that the receiver was in the passive position and the influence power entirely belonged to the sender. In the studies conducted during the period of strong effects of mass media, it has been accepted that social life is an interaction system maintained through communication. The recipients' attitudes and behaviors can be changed due to the transmission of the correct messages through the media; thus, social harmony can be achieved. For instance, political researchers primarily aimed at revealing the persuasion power of newspapers and radio regarding public opinion creation through propaganda in that period. States mostly supported studies to control society through propaganda during World War II and the Cold War; industrial companies supported the research to understand the effect of commercial product advertisements and influence consumers. Since the middle of the 20th century, it was argued that the impact might be limited to the recipient's ability to interpret the message. In these studies, focusing on the receiver, the audience is evaluated in a position that could resist the effect and choose what, when, and how much to watch (McQuail & Windahl, 1997). In contrast to studies focusing on the strong effects, communication is considered a cyclical process rather than a unidirectional flow in studies conducted during the limited effects period, and it is accepted that the receiver is in an active position. Therefore, it has been argued that the primary source of daily information and socialization is not the mass media alone; the power and power structure, political, economic and cultural structures, and social institutions with individual interactions in society are also impactful (Erdoğan & Alemdar, 2010).

Despite these discussions, considering the growth and universality of television, newspapers, and magazines today, the internet and social media seem to be more effective (Turancı, 2010). One of the most critical points in risk communication is that the feedback should be taken into account. The messages should be rearranged in line with feedback, as indicated in the model suggested by Zhang et al. (2020). With this aspect, social media enables interactive and bidirectional communication, thus allowing quick and easy feedback from the public (Taylor & Kent, 2007).

Proactive risk communication provides essential information and advice for adopting preventive health measures in public health emergencies that increase disease surveillance and reduce public confusion (Merchant et al., 2011). In this respect, social media plays a vital role in transmitting messages for preparation and response to public health emergencies in recent years (Fung et al., 2015). Social media has become an important tool in accessing instant information about the disease and communication, entertainment, and socialization functions for citizens locked in their homes due to isolation precautions, especially in epidemics and pandemics. Therefore, the use of social platforms has gradually increased. As a result of this increase, people and institutions responsible for pandemic management have frequently started to utilize social media platforms in risk communication activities to create public awareness about the disease and reinforce individuals' beliefs to comply with the preventive measures. Therefore, it would be worth pursuing which strategies individuals and institutions use via social media in times of risk and crisis that require instant information flow and fast feedback.

Regan et al. (2016) investigated the role of social media in risk communication activities carried out by stakeholders in food safety crises in Ireland. In that research, in-depth interviews were held with the actors responsible for risk management and communication in Ireland's food sector. Stakeholders identified risk communication as a central and highly important activity in protecting consumer health and

the Irish food industry's reputation. Risk communication has become a prominent activity in conveying information in crisis times, educating and informing the public about risks, preventing misinformation, confusion, and panic. However, the results showed that the actors responsible for risk management were not aware of the importance of two-way communication with the public and social media's interactive nature during these activities.

Cool et al. (2015) examined the social media strategy within the scope of WHO's emergency risk communication plan in Typhoon Haiyan, which was seen in the Philippines in 2013 and affected the health of more than 16 million people. The results stated that the WHO's Philippines office did not use any social media platform before Typhoon. WHO created Facebook, Twitter, and Instagram accounts immediately after Haiyan Typhoon and started to inform its followers about the health measures they should take to reduce the risks of the epidemic. Since social media use is quite common in the Philippines, it was possible to develop health messages and content that both educate and inform the public by reaching large masses in a short time via these platforms. The findings highlighted that social media is a viable low-cost tool for emergency risk communication, improving traditional emergency risk communication by quickly spreading public health messages. Also, it was suggested that social media use should be part of all emergency risk communication strategies. In addition, Arguin et al. (2004) compared the plague epidemic in India in 1994 and the SARS pandemic in 2002 to reveal digital channels' importance. Although thousands of documents were distributed to the public through print media and fax during the plague epidemic, it was possible to distribute millions of records to a much broader audience in the same period in the SARS pandemic through digital media and websites.

RISK COMMUNICATION FROM THE HEALTH BELIEF MODEL PERSPECTIVE

Risks may often be underestimated, and the true extent of risk may be neglected. For this reason, the success of communication activities depends on the fact that the source has sufficient information about the target audience and that the target audience can be informed correctly about the destructive consequences of the risk. However, just informing would not be sufficient. Individuals should be motivated about the preventive health measures that should be implemented against the risks that occur, especially in epidemics and pandemics, and their beliefs about the necessity of preventive measures should be reinforced. In this context, it seems that the essential goal of risk communication is behavioral change. One of the theories used in attempts to change health behaviors is HBM. The source of HBM is stimulus-response and cognitive-behavioral theories (see Taylor et al., 2006). For instance, in the 1950s, HBM has become prominent in studies conducted to reveal the factors through which an individual could be motivated to increase participation in tuberculosis screening programs (Güler & Çobanoğlu, 1997).

According to HBM, the following factors influence health-related behaviors: perceived susceptibility, perceived severity, perceived benefit, perceived barriers, and self-efficacy. *Perceived susceptibility* refers to the possibility that an individual may get the disease. *Perceived severity* refers that if precautions are not taken, the condition could breed serious consequences. *Perceived benefit* is the expectation that getting the disease would decrease through the measures. *Perceived barriers* refer to obstacles that make it challenging to implement the measures or to hinder possible negative aspects of behaviors. *Self-efficacy* includes the individuals' belief and determination in implementing health measures (Lachlan et al., 2020; Patterson et al., 2018; Yang et al., 2018).

There have been several studies to explain health behaviors considering HBM in Turkey. In these studies, HBM was utilized to describe various preventive health behaviors such as breast self-examination, taking mammograms, finding diabetes-related practices useful, preventing osteoporosis, and the effects of parents' health beliefs on their children's health. According to the results, perceptions regarding susceptibility, benefit, barriers, and level of knowledge were the predictors of health behavior (Çenesiz & Atak, 2007). Moreover, results revealed that if the perceived susceptibility, severity, and benefit weaken perceived barriers, health behavior would be more likely to be performed. In other words, if the determination level of the individual can reduce the effect of perceived barriers, the expected health behavior is likely to occur (Bulduk et al., 2015).

Cankardaş and Tosun (2016) investigated the role of HBM components on university students' condom use. Findings revealed that condom usage would be higher among those who believe that the benefit they could get from using a condom is higher. Additionally, self-efficacy of using condoms positively predicted the behavior. Besides, women's benefit perceptions and self-efficacy for AIDS protection were higher than men; however, self-efficacy to discuss sexual issues with the family was higher in men.

Pinar et al. (2011) used HBM to explain self-testicular examination behavior, which is the only way to detect testicular cancer early. They found that it was possible to improve self-testicular examination behavior by increasing the individuals' perceptions of susceptibility, severity, benefit, and self-efficacy. Also, they found that predictors of self-testicular examination may vary according to culture. Besides, individuals' self-efficacy, beliefs, and motivation to change the behavior would influence the ability to cope with perceived barriers.

METHOD

Methodological Framework and Procedure

The person responsible for the planning and response of the COVID-19 pandemic in Turkey is Health Minister Dr. Fahrettin Koca. This study's main purpose, which examines Fahrettin Koca's Twitter account (@drfahrettinkoca) with content analysis method, is to reveal the Minister of Health's social media usage strategies as a government representative in risk communication. By this research, the number of followers of the account, the posts, and the use of Twitter's basic interaction features such as hashtag, mention, and retweet were quantitatively analyzed. The interaction rate of the account was calculated. A model developed by Stieglitz and Dang-Xuan was used to create the conceptual model, data collection, and analysis (see Stieglitz & Dang-Xuan, 2013). In coding the shared contents and determining the categories, HBM factors were taken as reference.

Stieglitz and Dang-Xuan (2013) proposed a methodological framework for analysis to be made on web platforms by dividing social media into three as microblogs, social network sites, and weblogs. In that framework, the two main components of the social media analytics framework are data tracking/collection and data analysis. In the data tracking/collection phase of this research, structured and unstructured data were obtained using the Twitter API tracking method to perform the general monitoring of tweets. Since Fahrettin Koca's posts from his account were collected in the research, the self-involved approach was chosen as the tracking approach. A two-part analysis approach, topic/issue/trend - related and structural analysis, was used in the data analysis phase. Content analysis, trend analysis, and social

network analysis were used as analysis methods. NVivo network sociograms and node maps were used to visualize the data in analyzing analysis outputs.

The tweets subjected to content analysis were limited to what Fahrettin Koca shared between January 22, 2020, when he made his first post about COVID-19, and the preventive measures he shared between January 1, 2020, the beginning of the normalization period. The number of followers and tweets related to the account were collected daily via the application extension called NCapture. In the content analysis, the tweets were coded separately by the researchers, and then, categories were obtained, and retweets were not taken into account. The factors of HBM were primarily included in determining the categories. Tweets that do not fit HBM factors in terms of their content were included in other categories based on their subject.

The following formula suggested by Miles and Huberman (1994) was applied to the categories reached by both researchers to understand whether the reliability was provided for content analysis: *Reliability Coefficient* = *Number of Categories with Consensus* / (*Number of Categories with Consensus* + *Number of Categories with No Consensus*) X 100. The coefficient was found as 0.87, indicating good reliability.

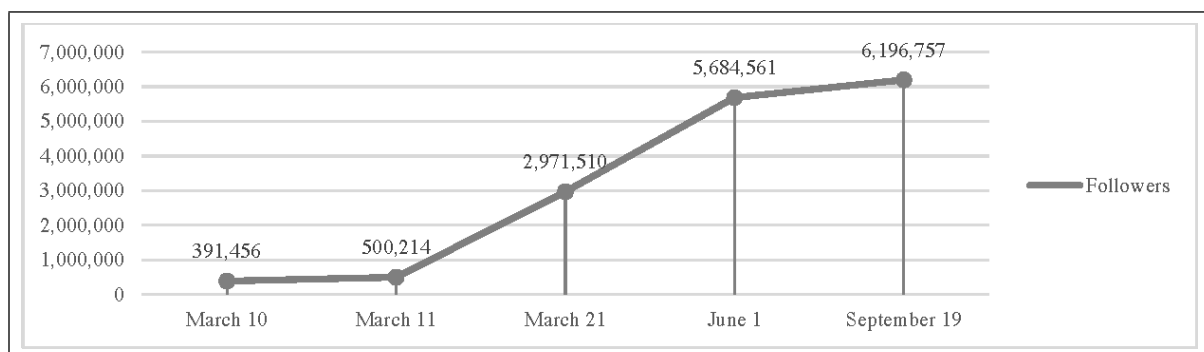
The ability of the researcher to keep himself in a neutral position during the data collection, recording, and interpretation stages and to report the collected data in detail and explain how he reached the results are the acceptance criteria for the validity of qualitative research (Yıldırım, 2010). The detailed reporting of the collected data by supporting NVivo network sociograms, node maps, and graphs during both the quantitative data analysis and the content analysis phase are also indicators of this research's validity.

Findings

Number of Followers and Followed Accounts

Fahrettin Koca announced the first COVID-19 case in Turkey on March 11, 2020. The change in the number of followers before and after this date is shown in Table 1.

Table 1. Number of Followers



When the COVID-19 cases were not officially registered on March 10, 2020, the account had 391,456 followers. The number of followers increased to 500 thousand on March 11, when the first case was announced. After Fahrettin Koca started to share the numbers of COVID-19 cases and those who lost

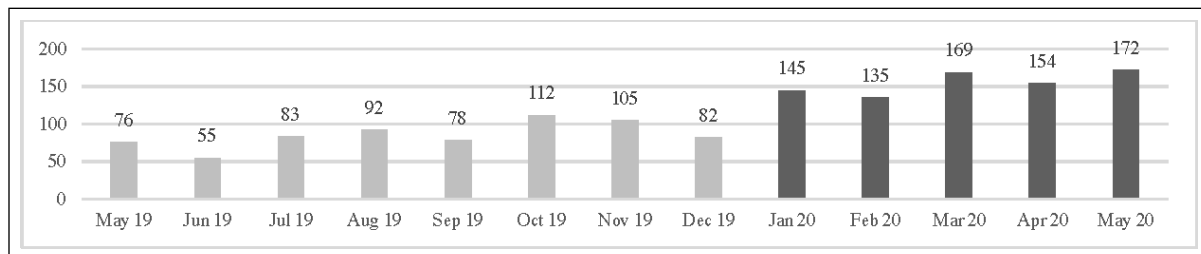
their lives on his Twitter account every night, millions of citizens started to follow his account to see the breaking news about the pandemic. The number of followers, which reached approximately 3 million on March 21, reached 5.6 million on June 1. Approximately six months after the first case was announced, as of September 19, 2020, the number of followers increased by about sixteen times and reached 6.2 million. Fahrettin Koca, with this amount of followers, began to be the one who has the most followers among ministerial officials in the Republic of Turkey Presidential Cabinet.

To be noted, however, Fahrettin Koca follows twenty-eight accounts, including The President, the President of the Assembly, Cabinet Members, AK Party Deputies, the WHO Director, and the WHO Europe Director.

Number of Tweets and Retweets

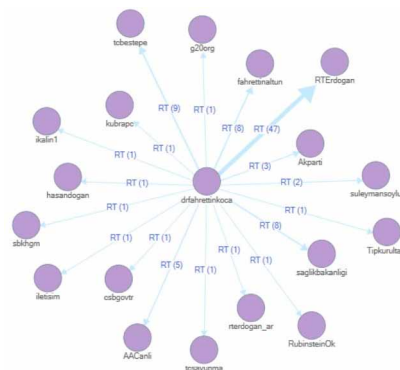
Fahrettin Koca started using Twitter after becoming the Minister of Health and shared his first tweet on July 10, 2018. As of this date, he shared a total of 2,190 tweets until 1 June 2020. The monthly distribution of these shares belonging to the last year is shown in *Table 2*.

Table 2. Distribution of tweets shared in the last year by months



Fahrettin Koca posted his first tweet about COVID-19 on January 22, 2020. The first COVID-19 case in Turkey was officially announced on Twitter on March 11, 2020. Fahrettin Koca, who shared an average of 83 tweets per month until February 2020, increased the number of shares per month to 155,

Figure 1. Retweet sociogram



with the COVID-19 pandemic being at the top of the agenda since February. He has used Twitter for 22 months, and he has shared 775 (35%) of the 2,190 tweets after the COVID-19. This increase in numbers shows the importance Fahrettin Koca attaches to using social media as a communication channel in pandemic management.

A retweet of a tweet shared by another account can be considered a way to interact with other users. Of the 2,190 posts that Fahrettin Koca sent during the period from the date he started using Twitter until June 1, 2020, 97 (4%) were retweets, and 2,093 (96%) were original tweets (written by him). The sociogram of the accounts whose shares are retweeted is shown in Figure 1.

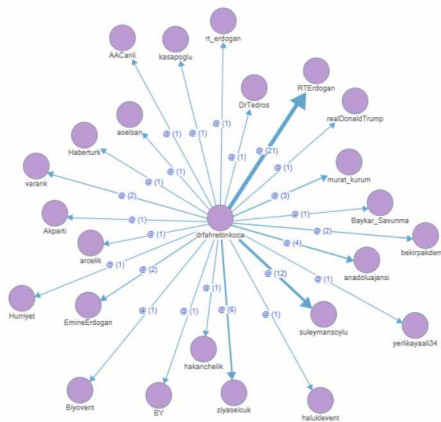
Almost all of the retweets come from the President's official accounts, government ministers, AK Party representatives, and the Ministry of Health. President's account @RTErdogan has been retweeted 47 times, the official account of the Presidency @tcbestepe nine times, the Presidency Communication Director's account @fahrettinaltun eight times, and the account of the Ministry of Health @saglikbakanligi retweeted eight times.

Use of Mention and Hashtag

The “@” symbol is used when tagging (mention) a specific user on Twitter and sharing directly to that account. While users share a topic on the agenda, they can create “hashtags” by adding the symbol “#” to the beginning of the words and getting involved in that topic. As the number of posts related to the same hashtag increases due to these users’ interactions, that topic can become the agenda by entering the “trending topic” list of Twitter.

While examining the use of mentions and hashtags in Fahrettin Koca's posts, 97 retweets were removed, and the remaining 2,093 original tweets were taken into account. Mention was used in 42 of these tweets and hashtags in 329 of them. As in retweets, mentioned users consist of the President, various ministers, AK Party officials, media organizations, and television programmers. The two most mentioned accounts are President @RTErdogan (21) and Minister of Interior @suleymansoylu (12) (Figure 2).

Figure 2. Mention sociogram

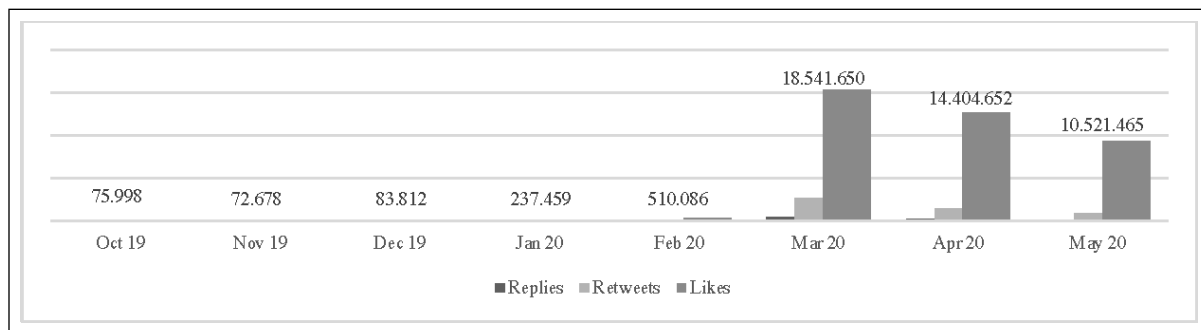


In the use of hashtags, Fahrettin Koca, who usually shared celebration and greeting hashtags related to holidays and special days until the COVID-19 agenda, started to use hashtags more frequently with the pandemic process. Fahrettin Koca, while sharing about COVID-19, mostly used the following hashtags “#HayatEveSığar (#LifeFitsHome),” “#BirlikteYeneceğiz (#WeWinTogether),” “#riskigörün (#seetherisk)” and “#minnettarız (#wearegrateful).”

Interaction Numbers

The parameters used in measuring the effects of the posts on Twitter were the number of replies, retweets, and likes. The number of interactions for a tweet to be replied to, re-shared, and liked by other users can indicate the target audience (Tosyalı & Sütçü, 2019). The monthly interaction numbers of Fahrettin Koca's original tweets shared between October 1, 2019, and June 1, 2020, are shown in Table 3.

Table 3. Interaction Numbers



The numbers shown in Table 3 are the sum of the replies, retweets, and likes regarding the tweets posted in those months. Accordingly, while Fahrettin Koca's posts reached an average of 75 thousand interactions per month, it increased to 237,459 in January and 510,086 in February, when COVID-19 started to become the global agenda. When the first cases of COVID-19 in Turkey appeared in March 2020, 162 original tweets received over 18.5 million interactions, which is beyond 3 million followers.

Fahrettin Koca announced the first COVID-19 cases in Turkey on March 11, 2020, via Twitter, and the number of tests, cases, and those who lost their lives started to be announced to the public daily via Twitter account since 13 March 2020. Informing the public on social media during the pandemic management brought interest in Fahrettin Koca's Twitter account. Thus, both the number of interactions, and the number of followers of the account started to increase in March.

Content Analysis Results

The categories obtained after the content analysis of 674 tweets shared between 22 January 2020 and 1 June 2020 are shown in Table 4.

Table 4. Categories as a result of content analysis

	Category	Number of Tweets	Percentage
COVID-19 Posts related to HBM	Perceived benefits	88	13.06
	Perceived severity	42	6.23
	Self-efficacy	39	5.79
	Perceived susceptibility	23	3.41
	Perceived barriers	7	1.04
	Total	199	29.53
COVID-19 Posts not related to HBM	General information	109	16.17
	Posts to gain trust	105	15.58
	Cooperation/Solidarity messages	65	9.64
	Total	279	41.39
Posts not related to COVID-19	Other posts	196	29.08
OVERALL		674	100.00

Tweets were grouped under three main headings (i.e., COVID-19 posts related to HBM, COVID-19 posts not related to HBM, and posts not related to COVID-19) and nine categories. Five of the nine categories were HBM factors (i.e., *perceived benefits*, *perceived severity*, *self-efficacy*, *perceived susceptibility*, and *perceived barriers*) that form the research's focus. Three categories were related to COVID-19 but not related to HBM; it consists of *general information*, *posts to gain trust*, and *cooperation/solidarity messages*. The last category is the *other posts* not related to COVID-19. One hundred ninety-six posts (29.08% of total shares) including the measures against natural disasters in Turkey, holidays and special day celebrations, opening and visiting announcements, condolence messages for the deceased, and condemning terrorist acts were located in the other categories.

478 (70.92%) of the 674 tweets shared between the dates mentioned above were related to the COVID-19 agenda. Among these shares, 279 tweets that are not covered by HBM constituted 41.39% of the total posts. The first of the three categories under this title is *general information*. One hundred nine tweets where general information about COVID-19 was shared constituted 16.17% of the total posts. Announcements regarding health investments made to support pandemic and disaster situations, especially regarding newly opened pandemic and city hospitals, domestic respiratory equipment, and domestic drug development studies for COVID-19, were under this category. Information about the meetings held with the scientific board and provincial health directors, the number of intensive care and intubated patients, the number of tests performed, the statistics of cases and deaths, and information regarding the national and international interviews on the COVID-19 were also under this category.

The second category of COVID-19 tweets, excluding HBM factors, includes *posts to gain trust*. In this category, 105 tweets constituted 15.58% of the total shares. The government, one of the three main components of the risk communication model, is the primary decision-maker of the process. Building trust in the government is one of the critical functions of risk communication. In this regard, one of the government's most important responsibilities is to create a sense of trust by conveying real-time, sufficient, and accurate information to the public. Because trust is one of the most important preconditions of the

risk communication process, the public may be unlikely to follow the recommendations and precautions without establishing a sense of trust. Therefore, in public health emergencies, the public's concerns and perceptions about the disease should be understood correctly by government representatives, and real-time information should transparently be communicated to citizens. In Fahrettin Koca's posts, while the benefits of pandemic measures were prioritized, it was underlined that transparent pandemic management had been carried out via messages that would make the citizens trust the government. In tweets shared before March 11, when the first cases of COVID-19 began to appear, the measures were taken at airports, and border crossings were announced to prevent the spreading of the virus in Turkey. To build trust after the spread of the virus, messages indicated that although the number of tests increased, the number of cases and death rates decreased, and the pandemic was kept under control through the correct policies.

The third category of COVID-19 posts that were not covered by HBM was *cooperation/solidarity messages*. Sixty-five tweets in this category constituted 9.64% of the total posts. In those posts, social cooperation calls were targeted to three audiences: the media, politics, and citizens. Fahrettin Koca especially called on media organizations regarding allegations against the government, claiming that the government was manipulating the numbers shared every day regarding the number of tests, cases, deaths, intensive care, and intubated patients. Drawing attention to the fact that the process has been carried out transparently, he shared messages of cooperation and solidarity regarding the mainstream media's news. In the messages directed to politicians, he suggested not using the pandemic management disruptions to acquire political gain and not use the pandemic as an ingredient of political struggle. There were appreciation messages to the leaders of opposition parties congratulating Fahrettin Koca for his pandemic management success in some posts.

One of the most crucial risk communication goals is to ensure that citizens believe in the benefits of health measures that must be implemented to prevent the devastating consequences of risks and act following these measures. Namely, it can be said that the most critical goal of risk communication is behavior change. Previous studies showed that individuals could be affected by the HBM's factors in changing health-related behaviors (e.g., Jeihooni et al., 2019; Xiang et al., 2020). For this reason, sharing content suitable for HBM factors in risk communication activities could be considered as a strategy that would encourage citizens to implement health measures to be taken against risks. In the next part of the content analysis, the posts were categorized in HBM factors to reveal to what extent the Minister of Health has implemented this strategy.

One hundred ninety-nine tweets that were evaluated within HBM factors constituted 29.53% of all posts. The English translations of sample tweets analyzed within the HBM categories were shown in the Appendix. The most shared category with 88 tweets was the *perceived benefits* (13.06% of total shares). Perceived benefits refer to the individuals' expectation that the probability of getting the disease would decrease through the measures to be taken against the health risk. These expectations of the citizens could be increased with proper messages. Fahrettin Koca, in his posts, emphasized that if the COVID-19 precautions were followed, the risk of disease spread would decrease. In addition to quarantine and isolation measures, tweets were posted, including the benefits of hygiene, social distance, and mask use in preventing disease. These posts were supported by images, videos, and hashtag messages that could attract citizens' attention. The benefits of isolation, hygiene, and social distancing in preventing disease began to be shared long before the disease had not yet begun in Turkey. In this respect, Fahrettin Koca seems to follow a proactive approach to COVID-19 risk communication.

Perceived severity is the second most shared category within the scope of HBM factors. Forty-two tweets in this category constituted 6.23% of the total posts. The perceived severity indicates that the

disease can breed severe consequences if precautions are not taken against the risk. In this respect, sharing the negative consequences, supported by sample cases and compelling visuals that explain what happens in case of failure to take measures, can provide the expected effect of risk communication. The number of posts Fahrettin Koca shares regarding the perceived severity was directly proportional to the pandemic rate. When there were no cases or the number of cases was decreasing in Turkey, the necessity of complying with the precautions was emphasized. Also, when the number of cases and deaths increased, it was posted that the disease has a high risk of death, especially for older people. The deaths of well-known people were especially shared, and citizens were shown that the disease could bring about devastating consequences.

The next category is *self-efficacy*. Self-efficacy includes self-belief and self-determination in the implementation of health measures. Fahrettin Koca's posts aimed at strengthening this belief and determination were discussed in the self-efficacy category. Thirty-nine tweets in this category constituted 5.79% of total posts. In the posts, photos of citizens who comply with preventive measures were included, and a call to action was made to other citizens to take the same measures. Fun photos and videos that would attract the young generation's attention were also shared, especially to support children and young people's determination and motivation to stay at home. Individuals' self-efficacy was attempted to increase by using cultural indicators such as Ramadan, feast, tea, and coffee. The information regarding the development of a mobile phone application, which detects whether the isolation rules were applied and that the isolation violation would be legally sanctioned, was evaluated under the self-efficacy category. It seems that such legal regulations could increase the citizens' determination to implement the measures.

Another category considered within the scope of HBM factors is *perceived susceptibility*. Twenty-three tweets evaluated under this category constituted 3.41% of total shares. Susceptibility refers to the possibility that the individual can get the disease. If the risks encountered when health measures are not followed could be conveyed correctly in the communication process, citizens can be more responsive about getting sick. When there were no cases or the number of cases decreased in Turkey, Fahrettin Koca's susceptibility messages emphasized the need to follow the precautions. With the spread of the disease, the posts emphasized that the disease may have severe and devastating consequences instead of susceptibility messages. As of May 6, 2020, information was given about the new normalization period that started on June 1, 2020. After the decrease in the number of cases and the increase in the number of patients recovering, it was emphasized that the pandemic has been under control, and the second stage of the prevention against the disease was started. In these posts, the tone of language about the perceived severity of the disease's destructive consequences was softened, and susceptibility messages become salient.

The last category is *perceived barriers*. Seven posts (1.04%) shared about the factors that prevent or complicate implementations of the precautions were evaluated under this category. The lower the individual's perception of the obstacles or difficulties in implementing the measures, the more likely the expected behavior would occur. In other words, it can be said that the probability of the behavior would increase as the perceived benefit, susceptibility, and severity help decrease the effect of the barriers in implementing the precautions. Therefore, Fahrettin Koca shared a few messages in this category to not strengthen the citizens' barrier perceptions regarding implementing the measures. In these tweets, issues obstructing the precautions (e.g., isolation, social distance, and wearing a mask) and a small number of negative examples resulting from not complying with the precautions were included.

FUTURE RESEARCH DIRECTIONS

There are three main components in the risk communication model: government, expert, and public (Zhang et al., 2020). In this study, the government representative's risk communication strategies, who is the main decision-making actor of the process, on social media were analyzed via content analysis within the Health Belief Model framework. However, researchers may be curious about the effects of the strategies implemented on the public. Thus, current findings could reveal the critical role of social media in risk communication and yield worth pursuing research questions for future studies that would address the factors affecting the public's attitudes towards implementing COVID-19 measures within the Health Belief Model framework.

CONCLUSION

COVID-19, which threatens humanity with its high contamination rates, was declared a global pandemic by the World Health Organization on March 11, 2020. As of this date, citizens were required to stay at their homes as part of governments' measures. With the prolongation of the isolation process, social media platforms' usage has gradually increased. In this situation, government representatives responsible for pandemic management started to use social media and mainstream media in their risk communication efforts.

In this study, content analysis was conducted on the Twitter account of Health Minister Dr. Fahrettin Koca, the person responsible for the planning of COVID-19 pandemic response in Turkey. The tweets, whose content analysis was applied, were restricted to those shared between January 22, 2020, when Fahrettin Koca made his first post about COVID-19, and those that were shared between January 1, 2020, when the measures were taken under the pandemic were partially removed during the beginning of the normalization period. COVID-19, which has influenced the world, has become Turkey's primary agenda since the first case seen on March 11, 2020. The number of intensive care and intubated patients, the number of tests performed, the number of cases, and death statistics regarding the effects of pandemics in Turkey were announced daily on Fahrettin Koca's Twitter account.

Fahrettin Koca, who posted an average of 83 tweets per month until February 2020, increased the average number of posts per month to 155 with the COVID-19 agenda. The importance Fahrettin Koca attaches to social media as a communication channel in the management of the pandemic brought about the interest in his Twitter account. Both the number of followers and interactions reached very high values in a short time. This result shows that social media can be a very suitable tool for providing government-public interaction in the risk communication model.

Risk communication aims to address the risks to public health proactively and to take preventive measures before the disease occurs or spreads. Proactive risk communication provides important information and advice for adopting preventive health measures that reduce public confusion in public health emergencies (Merchant et al., 2011; Vaughan & Tinker, 2009). Fahrettin Koca highlighted the benefits of preventive measures such as isolation, cleaning, and social distance in his first posts before the first COVID-19 cases appeared in Turkey. In this respect, it seems that Fahrettin Koca has followed a proactive risk communication strategy.

Another important strategy to be implemented in risk communication is transparency to gain public trust. A decrease in citizens' trust against the resource may lead to increased anxiety, panic, and

insufficient health measures. Therefore, for effective risk communication, social concerns, beliefs, and perceptions should be well understood by those managing the process, and the facts should be shared with the public transparently (Çınarlı, 2014; Regan et al., 2016; Saliou, 1994, Zhang et al., 2020). Many criticisms were brought to question the government's competence in managing the pandemic and sharing information about diseases during the pandemic process. Fahrettin Koca emphasized the transparency of the process against these criticisms. Fahrettin Koca, who also reflected this strategy in his Twitter posts, gave messages about building trust in 15.58% of his posts. In addition to prioritizing the benefits of pandemic measures, he shared messages regarding transparent pandemic management that could increase the public trust towards the government. Besides, he applied a participatory strategy in his posts and called for social cooperation and solidarity with media, politics, and the public.

Public behavior change towards the implementation of health measures is another important goal of risk communication. With this in mind, HBM – which is one of the theories used to change health behaviors, describes the factors that affect an individual's achievement of expected health behavior – is the focal ingredient of the current study. Sharing content suitable for HBM factors in risk communication can be considered a strategy that would mobilize citizens to implement health measures against risks. The tweets were examined and categorized in the context of HBM factors to reveal to what extent Fahrettin Koca implemented this strategy. According to the results, 29.53% of the posts consisted of the shares that fall under the scope of HBM factors. In these posts, attention is drawn to the benefits of COVID-19 measures, the need to be responsive to implementing measures to avoid the disease, and its severe consequences. There was a call to action messages aimed at strengthening citizens' efficacious beliefs in other posts.

Overall, we found that the contents of the messages shared by Fahrettin Koca overlap with the strategies in the risk communication literature and the factors defined in the HBM. Future studies to reveal the effects of these strategies on the public would complement the results obtained from this study.

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KEY TERMS AND DEFINITIONS

Content Analysis: Classifying and summarizing verbal or written data in terms of a specific problem or purpose, measuring certain variables or concepts, and categorizing them by scanning for a specific meaning.

COVID-19: New form of coronavirus disease that emerged in 2019 and affected the whole world.

Health Policy: Decisions and legal regulations made by governments at the national and international scale determining who and how to provide health services, what financial resources are, and how services are delivered to citizens.

Pandemic: General expression given to epidemics that spread and show their effects in a wide area in more than one country or continent in the world.

Social Media: A media system that enables reciprocal and simultaneous information sharing. The whole of dialogues and shares that users make with each other on the internet.

Twitter: Social network launched in 2006, where users can share posts called “tweets” limited to 280 characters.

Twitter API (Application Programming Interface): Interface provided by Twitter to use Twitter application capabilities in another application.

APPENDIX

The English translations of the tweets analyzed within the HBM categories were presented as follows:

“The number of seriously ill patients who need supportive treatment has continued to decline today. We have predictable new cases based on the number of tests. Our new lifestyle: CONTROLLED SOCIAL LIFE, all together with precautions. Requirement: Mask + 1.5 meters Social Distance.” **(Perceived Benefits)**

“The number of tests has increased; the number of new cases has decreased. The decrease in the number of intensive care and intubated patients continues. The next days depend on the consideration of hand hygiene and compliance with BOTH THE MASK AND THE SOCIAL DISTANCE RULES TOGETHER. Let’s Avoid Risk with Controlled Social Life.” **(Perceived Benefits)**

“THE TOTAL NUMBER OF HEALING PATIENTS APPROACHED TO 120 THOUSANDS. The variation in the number of new cases is at the predicted level. The need for intensive care support is gradually decreasing. Further reduction of the risk is possible with strong caution. STRONG MEASURE is a measure to be taken together in social life.” **(Perceived Benefits)**

“A small factor causing unpredictable results is called the Butterfly Effect. Just like the coronavirus emerging in Wuhan upset life all over the world. Now, a little neglect may affect the whole of Turkey from one end to one end. The risk continues. Let’s follow the precautions.” **(Perceived Severity)**

“80% of those who lost their lives are over 60 years old. 75% of them had a chronic illness. For example, 68% of them were blood pressure patients. 75% of those currently in intensive care are over the age of 60, 63% are blood pressure patients. We want people aged 60 and over not to leave the house. There are obvious reasons for this.” **(Perceived Severity)**

“We are still losing lives. The number of cases is increasing. But it should not be forgotten that we run as many tests as possible. With every patient treated, we prevent the pandemic. TODAY THERE ARE 9 NEW DEATHS, 289 NEW DIAGNOSIS. Let’s stay in our house. Let’s not take risks. Life fits into the house.” **(Perceived Severity)**

“We changed this table with 83 million. By persistent measures! Let’s continue our struggle seriously, without any loosening. The number of healing patients will reach 100 thousand people soon. Our number of deaths and cases will gradually decrease. Isn’t it worth a little more dedication?” **(Self-efficacy)**

“If we want, we can achieve it! Our history is witness to this. As long as we do not compromise from acting thoughtfully and consciously. The good tomorrows we will achieve will be thanks to the measures taken today. Let’s not forget our responsibilities: Contact, Distance, Isolation.” **(Self-efficacy)**

“Mothers, fathers, children, young people, adults... I DO NOT INVITE YOU TO DO THE IMPOSSIBLE. I invite you to take simple measures. Remember: We are as strong as the measure we take.” **(Self-efficacy)**

“ARE WE READY FOR THE POSSIBILITIES? YES, WE ARE READY. There have been no cases to date; we have planned how to act if it is, and made preparations for preventing contamination and necessary treatments.” **(Perceived Susceptibility)**

“EUROPE TAKES A SERIOUS RISK. If the infection comes in, it will likely come from there. Those who have traveled elsewhere in the world are now under suspects.” **(Perceived Susceptibility)**

“My request from young friends is this: Don’t be fooled by the lack of symptoms. Remember that you may infect people who cannot defeat the virus. Take a break from active days, be determined during this break. Remember, whichever side you take in the fight, luck will be on that side.” **(Perceived Susceptibility)**

“Although we make a lot of calls for social isolation, I don’t think we are successful enough. More restrictive measures are needed for intercity mobility. Unfortunately, street activity did not reach the expected level in our big cities, especially in Istanbul.” **(Perceived Barriers)**

Today, there were long lines in front of shopping malls and crowds at shopping mall gates. The social distance rule was mostly not followed. There were even those who did not wear masks. Neither masks nor social distance alone is protective. The measures must be complete. The risk continues. Let’s stay at home.” **(Perceived Barriers)**

“We see that the DISTANCE RULE is DISABLED, and a mask is not worn in places. These should never happen—health of 83 million at stake. We can warn each other. In an epidemic, we cannot act as we want. We should wear masks, stay at least one and a half meters away.” **(Perceived Barriers)**

Chapter 11

Role of Media in Health Literacy

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ABSTRACT

The World Health Organization defines health literacy as the cognitive and social skills which determine the motivation and ability of individuals to gain access to understand and use information in ways which promote and maintain good health. Health literacy improves the life expectancy and quality and removes health inequalities. Health literacy includes the stages of reading, listening, analyzing, participating, and making decisions and adapting to life. An infodemic is an overabundance of information. It includes deliberate attempts to disseminate wrong information to undermine the public health response and advance alternative agendas of groups or individuals. Mis- or disinformation can be harmful to people's health, threaten precious health gains, and lead to poor observance of public health measures, thus endangering countries' ability to stop the pandemic. Media is one of the important sectors in health and health literacy. The concepts of infodemic became a current issue with the COVID-19 pandemic and revealed how important the role the media plays in intervening the health problems is.

INTRODUCTION

The term health literacy was first coined in 1974 by S.K. Simonds in the book “Health Education as Social Policy”. In the 1990s, the concept of health literacy began to be redefined and discussed with the idea that its impact would be great on human health; in the 2000s, research and practices on this issue were also put on the agenda of international organizations. The World Health Organisation (WHO) defines health literacy as, “The capacity of gaining the knowledge of maintaining and improving good health through cognitive and social means, individually”(Adams et al., 2009; Health Organization & Office for Europe, 2013; Sezgin, 2014). Table 1 also presented different definitions of health literacy (Sørensen, 2019).

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Table 1. Some Definitions of Health Literacy

Source(year)	Definition
Dodson et al (2015)	'The personal characteristics and social resources needed for individuals and communities to access, understand, appraise and use information and services to make decisions about health. Health literacy includes the capacity to communicate, assert and enact these decisions.'
Sørensen et al (2012)	'Health literacy is linked to literacy and entails people's knowledge, motivation and competencies to access, understand, appraise and apply information to make judgements and take decisions in everyday life concerning healthcare, disease prevention and health promotion to maintain and improve quality of life during the life course.'
European Commission (2007)	'The ability to read, lter and understand health information to form sound judgments.'
American Medical Association (1999)	'The constellation of skills, including the ability to perform basic reading and numeral tasks required to function in the healthcare environment.'
Nutbeam (1998)	'The cognitive and social skills which determine the motivation and ability of individuals to gain access to understand and use information in ways which promote and maintain good health.'
Joint Committee on National Health Education Standards (1995)	'Health literacy is the capacity of individuals to obtain, interpret, and understand basic health information and services and the competence to use such information and services in ways which enhance health.'

Health literacy is an element that increases the lifespan and quality of a healthy life and eliminates health inequalities. For health professionals, practicing correct communication and effective use of clinical skills, having occupational satisfaction is through taking a more active role in decision making, benefiting from a better quality medical service and being comprehensible for those who receive health care. Health literacy is the responsibility of both healthcare providers and individuals. It is a culture-building tool for the preservation and maintenance of health. Health literacy covers an individual's knowledge of health through stages of reading, listening, analyzing, making decisions, participating in decisions, and adapting it to their lives. Health literacy is not just the ability to read. In health literacy;

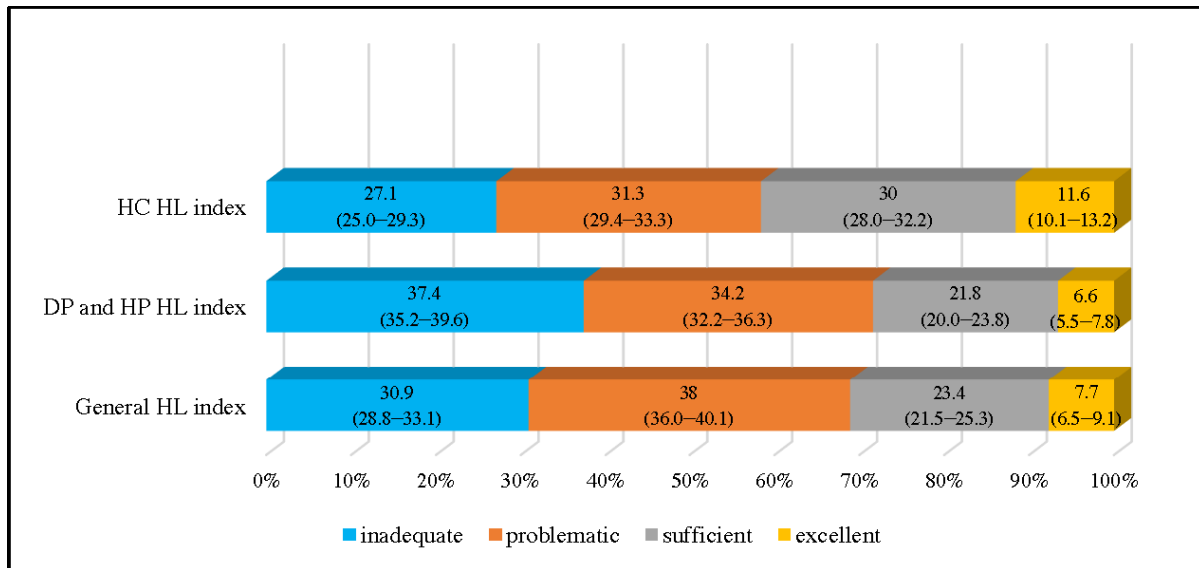
- Awareness of the right to be a patient and health rights
- Understanding of health education materials, etc. and public health announcements
- Individual's ability to reach out to institutions and people providing medical services concerning their illness or ailments
- Understanding approval forms directed by doctors for their diagnosis and treatment
- Visual literacy (interpretation of graphics, etc.), Computer Literacy, Information Literacy (obtaining and applying accurate information), Numerical literacy (ability to calculate) skills
- It has many components, such as the ability to approach integrated health care

Efforts have begun to measure the level of health literacy of societies and to develop intervention programs aimed at it. A study conducted in eight European countries (Germany, Austria, Bulgaria, The Netherlands, Spain, Ireland, Poland, Greece) found that 12% of the participants in the study were insufficient in this regard, and 35% had a problematic level of knowledge and ability (Sørensen et al., 2015).

In America, 50% of adults do not have basic health literacy (Kutner et al., 2003). According to the study conducted in Turkey, 68.9% of the adult population have insufficient and limited health literacy (Özkan et al., n.d.).

HC HL index: healthcare health literacy index, DP and HP HL index: disease prevention and health promotion health literacy index)

Figure 1. Distribution of Health Literacy Levels (95% CI) Determined by TSOY-32 in Turkey (TSOYA, 2017)



Many studies in the literature on health literacy indicate the presence of many factors affecting health literacy. To make it easy to study, we can divide the factors affecting health literacy into three groups; individual characteristics, health care, and characteristics that concern medical personnel. Age is one of the most important factors that affect individual characteristics. With aging, the level of health literacy of individuals drops (Adams et al., 2009; Health Organization & Office for Europe, 2013; Sezgin, 2014).

Another condition that we can count among individual characteristics is whether a person has skills associated with health literacy. Achieving the necessary knowledge about health from the right health source, understanding and applying the knowledge it has achieved on this subject, finding computational and numerical results and telling patients about their health status using verbal language skills, and being able to fully identify the symptoms of the disease are important skills that can be associated with health. For example, reading and understanding a newspaper story about the recent influenza outbreak indicates basic reading and understanding. Trying to calculate the calorie of a serving of food shows basic mathematical skills. Knowing that sugar is glucose by another definition and choosing a product with a low amount of sugar indicates nutritional knowledge that it knows its value in professional language.

All these individual knowledge and skills, as well as past experiences, affect the way society understands and uses health knowledge as well as demographic, cultural, and environmental factors.

INFODEMIC AND HEALTH LITERACY

An infodemic is an overabundance of information, both online and offline. It includes deliberate attempts to disseminate wrong information to undermine the public health response and advance alternative agendas of groups or individuals. Mis- and disinformation can be harmful to people's physical and mental health; increase stigmatization; threaten precious health gains; and lead to poor observance of public health measures, thus reducing their effectiveness and endangering countries' ability to stop the pandemic. Misinformation costs lives. Without the appropriate trust and correct information, diagnostic tests go unused, immunization campaigns (or campaigns to promote effective vaccines) will not meet their targets, and the virus will continue to thrive (Eysenbach, 2002). Low health literacy is a risk to health. At the same time, the risk in infodemic health is even greater. Individuals who do not fully understand health information and cannot evaluate its accuracy have a more negative impact on their health with false and incomplete information. All stakeholders should care about infodemia, especially in epidemic situations such as COVID-19.

To increase and improve Community's Health Literacy, intervention programs with multi-stakeholder approaches are required. These stakeholders are:

- Health service areas
- Healthcare providers "doctor, public health professionals, dentist, nurse, midwife, health officer"
- Other ministries besides the Ministry of Health (Coordinator) such as the Ministry of Education, Ministry of Family, Labour and Social Services
- Food, pharmaceutical manufacturers
- Universities
- Medical students
- Non-governmental organizations
- Mass communication tools
- Decision-makers
- Local governments
- Media

ROLE OF STAKEHOLDERS IN HEALTH LITERACY

While the health sector can lead by example through encouraging and assisting healthcare providers to detect low levels of health literacy in patients and to adapt their communication, an important role is also to be taken up by civil society. Patient associations and organisations working with older people or with disadvantaged groups and communities can all contribute to educate people on health issues, to support them in understanding and critically evaluating health information and to make informed decisions. This process can be supported by way of integrating health literacy as a key issue in public health policies, as well as in educational, social welfare policies at the local, national and international level.

Strengthening the organisational capacity for health literacy involves building health literacy-friendly organisations and settings. In terms of resources, an investment of human and financial resources is essential, and with regard to partnership, there is a need to combine efforts to empower individuals and communities through improved sectoral and intersectoral collaborations on the topic of health literacy.

The role of stakeholders in the development of health literacy in this cross-sector work process can be summarized as follows:

- Improve communication between health care providers and receivers
- Determination of the level of health literacy of the people and follow-up of developments after trainings
- Knowledge of programs and activities, especially the World Health Organization, inclusion of society and helping to achieve positive health results.
- Increase public access to protective methods
- Improving health status
- Improving efficiency in the health system
- Reducing the cost

In a highly media-saturated and digitalised world, health information is increasingly available and accessed via diverse media. The skills to navigate this environment are strongly linked to HL, and as such are not equally distributed within the population. This chapter presents two constructs – media health literacy (MHL) and eHealth literacy (eHL) – and offers an overview of their associations with health behaviour both across different age groups and among special populations. Interventions to improve MHL and eHL are discussed, and conclusions for further research on health literacy and health behaviour in the digital era drawn.

The rapidly growing number of digital health offers has led researchers to reflect on the skills necessary for users to effectively navigate the services and health information provided. Consequently, Norman and Skinner (2006b, p 1) coined the term eHL, meaning ‘the ability to seek, find, understand, or appraise health information from electronic sources and apply the knowledge gained to addressing or solving a health problem.’ Tasks related to eHL are highly complex, and several barriers to completion exist (Chan & Kaufman, 2011). To date, there is one eHL measurement tool that has been used in different settings throughout the globe: the eHealth Literacy Scale (eHEALS) by Norman and Skinner (Norman & Skinner, 2006). It consists of eight items for which respondents self-rate their ease and skills when navigating the internet for valid health information. The original English scale has been translated into many languages, including Japanese, Korean, German, Italian, Spanish, Greek and Hebrew. Although widely used, its validity has been questioned, mainly due to the lack of correlation between eHEALS scores and actual task performance in online health information seeking, and because it does not sufficiently address critical and interactive health literacy skills (Norman & Skinner, 2006).

In recent years, due to the impact of the COVID-19 pandemic, there has also been a rapid increase in health content publications in the media. The popularity of the media has increased due to the advantages and/or benefits of being visible. Due to the numerical multiplicity of programs, speakers invited and/or participating in programs are not always competent in their field (Sezgin, 2019). Because health issues have such a place in the media, the media dimension is of great importance as well as the interpersonal, social, and economic dimension of health literacy. The ability to assess the quality and necessity of health news in the media is also not expected by individuals with inadequate health literacy. It causes confusion as the media tries to increase the number of views and reads by giving stunning news. This confusion can pose major health problems (Osborne, 2013).

This area, where health literacy and media literacy skills are effective together, is becoming even more important than other issues, as it can negatively affect health. Sharing information in the field of

Role of Media in Health Literacy

health also occurs through social media channels. While social media can have positive effects with its speed and reach to large target audiences, it can have major adverse effects on individuals with low health literacy. Again, making health information from evidence-based pages on the internet creates problems in getting accurate information. Even if the correct information is available, it is important to have a high level of health literacy here as well. Therefore, health information on the internet is also required to be controlled by national authorities.

Low health literacy is expected to create difficulties in finding, understanding, and applying accurate information in the media. In this regard, increasing the health literacy level of media journalists will be beneficial. It will prevent false statements and information at basic points when making health news. It will also ensure that journalists who know the level of health literacy in society pay attention to this issue when reporting. It should also be taken into account that the media is a stakeholder that will be effective in increasing community health literacy. Media should already be used for health education within certain boundaries.

Health journalists are advised to pay attention to:

- Choosing the language for the news correctly
- The editing should be planned so as not to affect the doctor-patient relationship negatively
- To not provide contradictory information that confuses the public on issues such as correct use of the drug, obesity, salt control, physical activity
- Staying away from striking headlines and abbreviated information, it can sometimes really get in the way
- Writing news knowing the level of health literacy in society
- Writing news knowing the main health problems of society
- Writing news that will support and strengthen the health system in the community

FUTURE RESEARCH AND DIRECTIONS

The importance of health literacy in health promotion has been understood. Health authorities of countries now determine the health literacy levels of societies at regular intervals, and conduct evidence-based public health intervention programs, including effective factors and stakeholders, to increase health literacy. Level assessment, intervention, implementation and post-evaluation studies must continue in the future. Intersectoral collaboration and intervention programs are essential to improve health literacy. Among these, there is a need for projects and studies for the pre- and postgraduation training of health-care professionals. Since the role of media in intervention practices is known, studies are required to make the media role positively. Improving the health literacy knowledge, attitude and practice of media workers are the most important elements.

CONCLUSION AND RECOMMENDATIONS

Addressing problems-related to low health literacy is a shared responsibility. Different actors and stakeholders need to combine and integrate actions to enhance health literacy in the population, ensure better communication about health and its determinants, develop health literacy-friendly settings and empower

people to make sound health decisions in the context of their everyday life: at home, in the community, at the workplace, in the healthcare system, in the educational system and in the traditional and social media.

Media, which is an important stakeholder in improving the health level of society, has interactions with health literacy on many levels. Health reporters should be enrolled in a special certified training program in order to be able to make news by knowing the level of health literacy of the society and to be effective in the role of increasing the health literacy of the society. In addition, health advice for health news in all media channels should be restructured, and health news should be audited in order to strengthen the aim of increasing and directing the community's health information in the right direction. It is important to increase the media and health literacy skills of individuals in society.

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ADDITIONAL READING

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Chapter 12

Health Literacy Against Misinformation and Infodemic Spreadin Social Media During the Coronavirus (COVID–19) Pandemic: The Lie Epidemic Caused by Misinformation

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ABSTRACT

With developing technologies surrounding human life, communication practices have increasingly become digital, and communication patterns have started to continue as an extension in these digital environments. Communication networks have become crucial platforms in disseminating information with the spread of social media networks via Web 2.0 and the participation of individuals in these networks globally, and these networks play an active role in the dissemination of information. Thanks to the interactive nature of social media, users can actively participate in the process, comment, and create content. Having so many content producers or resources leads to misinformation in an abundance of information, which in turn causes an infodemic. In this context, this study conceptually addressed the misinformation that individuals were exposed to through social media during the Coronavirus pandemic and the infodemic it caused, and the information, skills, and advice people might need in order to become health literate were included in order to overcome it.

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INTRODUCTION

The coronavirus epidemic, which occurred in Wuhan, China at the end of December 2019, continues to show its effects in many countries. As of August 2020, the number of coronavirus cases approached 23 million in the world, while the loss of life from Covid-19 reached 800 thousand (Myers, 2020). The COVID-19 epidemic, which rapidly affects the whole world, continues to radically change established paradigms and habits in almost every field from economy to culture, from politics to ecology, from sports to science and communication. For the first time, individuals living today have faced such a difficult experience in the face of this epidemic that all humanity has struggled with globally. The uncertainty and low predictability of COVID-19 not only threatened people's physical health, but also affected people's mental health, particularly in terms of emotions and cognition, as many theories show (Li, et al., 2020).

It is seen as an advantage for individuals to reach more information about the COVID-19 pandemic, which affects not only the health field all over the world, but also the economy, education and social fields, through new communication technologies. During the epidemic process, individuals try to follow social media as well as traditional media and access information from there. Thanks to the interactive feature of social media, everyone can access and share information. Although this situation has great benefits, it also brings many negative features. Especially since there is no control mechanism in social media, the information is not distributed in a controlled manner and in this case leads to the sharing and circulation of correct information as well as false and erroneous information. Although the historical process of misinformation, false news and misperception is quite old, the history of false news (misinformation) published on social media is quite new, and it is spreading rapidly and during the pandemic period, this false information causes anxiety, fear, stress and anxiety in the society.

This excessive false or erroneous information spread through social media during the coronavirus process increases fear and panic in the society. This situation puts governments and health institutions in a difficult position in managing the epidemic. The definition of "Infodemic" was introduced by the World Health Organization on February 2, 2020, and the issue of infodemic damage to the solution of the pandemic problem and the spread of inaccurate information, especially on the internet, was brought to the agenda. In other words, the situation that causes people to have difficulty in finding reliable and valid sources when they need it and where there is too much wrong information is called infodemic (WHO, 2020). Expressing the information pollution caused by false information about the epidemic, especially from social media, the infodemic threatens the health of individuals by manipulating societies as harmful as the virus.

In this context, the study will describe the misinformation that is spread through social media and individuals are constantly exposed during the coronavirus process. Also, infodemic, which is a new concept caused by misinformation, will be included. Finally, the definition of health literacy, which is an effective device to combat both situations, and various suggestions for individuals to protect their own health in times of pandemic or another crisis will be included.

SOCIAL MEDIA AND MISINFORMATION (WRONG INFORMATION)

Considering that communication is as old as the history of humanity, the history of the lie goes back to the first efforts of man to communicate. Containing the truth in communication is of great importance in terms of mutual trust. In this context, the concept of fake news consists of stories and rumours aimed

at deliberate deception and information and news produced to mislead the masses. Fake news is usually produced with intentions such as influencing readers cognitively, making propaganda, and changing the agenda, as well as the result of misunderstanding, carelessness, or unintentional rushing information. A fake news published in mass media, either intentionally or unintentionally, can become irreversible after reaching the masses (Uluk, 2018).

The spread of new communication technologies has led to an increase in access to technologies and an increase in the amount of information. The lack of existing control mechanisms of the new media environments created by these technologies has caused the wrong and erroneous information to be constantly circulated in the society (Postman, 2013). The spread of various technological devices of the Internet, wireless communication, digital media has also enabled the development of horizontal interactive communication networks that connect the local and the global (Castells, 2016). With the articulation and spread of wireless communication and the internet, it has provided great opportunities for the power of communication and information creation and distribution. The problem of misinformation has worsened in the new media environment; because social media has facilitated the spread of misinformation and strengthened what is available. Due to the lack of gatekeeping in social media, misinformation is becoming stronger and allowing false information to spread massively, causing false information to become an increasing problem (Shin et al., 2018).

The emergence of social media as an important news source has created a new ecosystem for false problem spreading (Pennycook and Rand, 2019). Social media has changed the way we communicate. More and more people are using these types of platforms to read, publish and spread breaking news or updates to their friends. The openness of social networking platforms enables and motivates individuals to communicate freely online, but also brings new challenges. Without careful correction and verification, fake news and false information are widely spread by bona fide users. This kind of misinformation and disinformation cause destructive consequences in the society on social media as it disrupts the reliability (Wu, et al., 2020).

Misinformation, which is false information, is defined as information containing “clear evidence about concrete issues and beliefs not supported by expert opinion” (Nyhan and Reifler, 2010). The concept of misinformation, which means false information or incomplete information, is defined as “the act of giving false or misleading information about something” according to the Oxford dictionary. The spread of misinformation is not new, at least it goes back to the early days of publication. Even the term “fake news”, which has gained a great reputation today, first appeared in 1925, when an article in Harper’s Magazine titled “Fake News and the Public” explained how news allowed false information to spread rapidly. In fact, the term “fake news”, which has gained a great reputation today, first emerged in 1925, when an article in Harper’s Magazine titled “Fake News and the Public” explained how news allowed false information to spread rapidly (McKernon, 1925; as cited in Wang et al., 2019).

Misinformation has always been built on rumours and fictional stories in the historical process. As every society struggles with these rumours and fictions, the situation has become even more difficult today. The web of social media 2.0. creating a user-derived space with its structure allows ordinary people to produce and disseminate content, and in this case leads to the proliferation of false or erroneous information. For example, according to many US democrats in 2006, the idea that the Bush administration did not take any action to stop the 9/11 attacks is one of the best-known examples of misinformation.

Misinformation: It generates misperceptions affecting many areas such as economy, health, climate change, foreign policy and has become a common part of our digital media environments (Fernandez and Alani, 2018). Misinformation can lead to negative consequences at both individual and social levels.

For example, exposure to misinformation can cause people to have false beliefs and, combined with other information, bring people confusion and indifference. Misinformation can prevent people from understanding scientific consensus and further reduce their reliance on scientific matters. At the societal level, misinformation can mislead the public and reduce support for relevant policies. The spread of misinformation about vaccines in some developed countries has reduced the vaccination rate and caused more people to get preventable disease (Zhao, 2020).

By facilitating a two-tier communication flow for the 21st century (Katz and Lazarsfeld, 1955), social media allows everyone to be opinion leaders. Individuals who share political news through social media see themselves as highly effective and actively try to persuade others (Weeks, et al., 2017). The Pew Research Center stated that 23% of adults shared fake news whether they were aware of it or not at the time, and this also applies to false information (Barthel, et al., 2016; as cited in Anspach and Carlson, 2018). The spread of false information on the Internet is not a new phenomenon. However, social media offers a variety of platforms that allow users to share false information more quickly and easily than ever before. False information is presented in various forms such as chain emails, spam, false news, dotted images, out-of-context images, out-of-context videos, misleading news (Safieddine, et al., 2017). Much of this misinformation is increasing today through social media, where information is spreading rapidly and is rarely verified by consumers (Briones, et al., 2011; Del Vicario, et al. 2016; Beaudoin, 2016, as cited in Bode, Vraga: 2018).

Online Social Networks (OSN) have become an important source of information for many people in recent years. As the use of social networks increased, so did the disinformation and misuse of the media to spread misinformation. The spread of information or misinformation in online social networks is private, and studies have revealed that issues such as health, politics, finance and technology trends are major sources of misinformation and disinformation in different contexts, including business, government and everyday life (Kumar and Geethakumar, 2014). Millions of users contribute to social media platforms every day, leaving information about health as well as many other topics, and in this case create a huge data archive for health communication. It is socially important to assess and understand the extent of health misinformation, which consists of critical and sensitive issues. This misinformation can be found in abundance on social media and sharing false information can lead health-related information, attitudes and beliefs into wrong areas (Chou et al., 2018).

The Lie Epidemic Caused by Misinformation: Infodemic

Increasing global access to mobile phones and social media with internet connectivity has led to the production of exponential information and the increase of possible ways to obtain them, resulting in infodemic, which is described as an information epidemic and an epidemic of lies (PAHO, 2020). Tedros Adhanom Ghebreyesus, President of the World Health Organization, made a statement on February 15, 2020, “We are fighting not only an epidemic, but an infodemic at the same time” (Hua and Shaw, 2020:2). The concept of infodemic has been derived to outline the dangers of incidents of misinformation during virus outbreak management (Cinnelli et al., 2020).

Infodemic is a concept typically consumed from a mixture of “information” and “epidemic”, which refers to the rapid and wide spread of both true and false information about a disease or epidemic. As facts, rumours and fears mix and dissolve, it becomes difficult to learn the necessary information about a topic. The term infodemic was coined to outline the dangers of misinformation incidents during the management of virus outbreaks. Because it can accelerate the epidemic process by affecting and break-

ing down social response. Infodemic is not a new concept, it was first used by journalist and political scientist David Rothkopf in his column in the Washington Post in 2003. The world emphasized that the current crisis is diverting its attention to other crises, not to the more terrifying side of the current crisis, and that the frightening thing is the infodemic (epidemic of lies) that emerged with the epidemic. This is because the emerging virus process is not managed well, and what transforms the regional health crisis into a global economic and social collapse is an information epidemic, not a viral epidemic caused by the virus. The epidemic of lies, or infodemic, makes it difficult to control and control the public health crisis (merriam- webster.com).

Excessive data and information abundance are among the most important features of the information society. Power no longer lies in accessing information, but in managing it. In fact, the advent of the internet and social media has undeniably facilitated the circulation and access of information, opening the possibilities for users to access, interact and produce content (Del Vicario et al., 2016). This situation has led to the democratization of the relationship between knowledge and citizens. However, social media and online sites have also become the primary platforms to spread false and misleading information, as they allow fast and large-scale sharing (Lazer, et al., 2018; Pulido, et al., 2020). One of the most important factors in the transformation of the epidemic into an infodemic is social media. Social media is a powerful form of communication because it allows adults and teens to adapt around interpersonal relationships and common interests. Social networks also make it easier for users to stay in touch by sharing content and updates. Social media quickly mobilizes individuals to reach and spread news about the epidemic during the pandemic period (Roberts and Callahan, 2017). In this context, it causes fear and panic by causing false information to become viral like a virus without the need to control its correctness and falsehood, and infodemic epidemic in the society and makes the epidemic more difficult to manage. To overcome this situation, protecting public health in coronavirus and all other epidemics and disasters, managing the process and being a health literate against infodemic arising from misinformation is important individually and socially.

Health Literacy Against Infodemic Arising from Misinformation

Social media and online devices act as a tool to connect people and organizations on issues of common interest. Social media platforms provide a tremendous opportunity for mutual communication and relationships from all over the world. More and more people are getting news and health information online from these sources (Roberts and Callahan, 2017). For the last two decades, the internet has been among the resources that individuals have used to seek health information. Today, health professionals state that individuals often choose the internet as the first source for health research. These healthcare consumers not only seek online health information, but also seek peer support, and these social networks become an important resource for socializing (Atique et al., 2016).

The emergence of new interactive communication channels has also transformed ordinary people from passive information receivers to individuals who actively generate and spread information. However, the news and information on social media are as likely to be false as their reality. Information of unknown accuracy is spread by individuals unintentionally, which causes panic during crisis and epidemic periods. About the new type of coronavirus epidemic that the whole world is struggling with today, false information and fake news have spread rapidly and continue to spread through social media platforms and other channels. In this case, in addition to the coronavirus epidemic, it causes the spread of infodemic, which is a lie epidemic, and individuals experience anxiety and anxiety due to the wrong information about the

epidemic, making the process difficult to manage (Chong et al., 2020). The widespread dissemination of this misinformation endangers the efforts of governments and health authorities to manage the COVID-19 process, leading to social panic and inappropriate behaviour by individuals. It is necessary for individuals to be health literate to understand the wrong or correct information spread from social media and other channels during epidemic and disaster periods and to prevent further spread and infodemic.

Although health literacy has many definitions and conceptualizations, its nature and scope has changed and expanded in the last decade. The first definitions focused on the ability to read, write and practice numeracy skills in health-related materials such as prescriptions, appointment cards, and medication labels. Later conceptualizations have been updated to encompass a range of skills, including social and communication skills that enable people to acquire, understand and use health knowledge, health, well-being and in ways that increase participation in medical decision-making (Heijmans, et al., 2015).

Health literacy (HL) is defined as the ability to find, understand, evaluate and apply health-related information that can help health systems and individuals achieve better quality care, lifestyle, disease management, treatment decisions and health (Nguyen, et al., 2020). As its definition suggests, health literacy includes not only the ability to read health information, but also the ability to read, listen, analytical, and decision-making in a complex range, and apply these skills in health-related areas (Sullivan, 2000, cited in Park, et al., 2013). In this context, Nutbeam (2000) identified three types of health literacy, functional, interactive and critical. Functional health literacy includes basic reading and writing skills to understand health information in simple terms. Interactive health literacy is when an individual manages his health through interaction with professionals and has more advanced cognitive and social skills to apply new knowledge. Critical health literacy, which he defines as the highest level of health literacy, is the use of cognitive skills to critically analyse information in the field of health, to increase awareness of health and to take action to reduce problems.

There are many definitions of health literacy, but the US Department of Health and Human Services prepared a report in 2010 to discuss the role of social media in health literacy. According to this report, health literacy is defined as the degree to which individuals have the capacity to obtain, process and understand basic health information and services required to make appropriate health decisions. The skills required for online health literacy include computer and Internet literacy skills, as well as all traditional health literacy skills and the ability to find and evaluate health information online. However, having access to the Internet and mastering basic computer and Web skills does not mean that a person can properly assess and understand online health information (Boulous, 2012).

Research on health literacy has shown that more than a third of the population worldwide have difficulty finding, understanding, evaluating and using the information needed to manage their health (Sørensen, et al., 2015; Duong, et al., 2017). Authorities should take this into account when informing the public about COVID-19 and tailor the information to the literacy needs of those they want to reach. This means that the response to the pandemic must be examined through the lens of equality, paying attention to those most vulnerable in pandemics, such as the elderly, immigrants or the disabled (Broucke, 2020; Smith and Judd, 2020).

COVID-19 infodemic have revealed that health literacy weakness is a globally underestimated public health problem. For example, nearly half of adults in Europe stated that they have problems with health literacy and have difficulty in accessing information about their own and others' health. Especially during the quarantine process, individuals spend much more time on social media and are exposed to misinformation, and it has led to the unintentional spread and the emergence of infodemic. Health literacy will contribute to the disregard for the false and misleading information spread by individuals

in new media and traditional media and to prevent an infodemic epidemic, especially during epidemic periods. However, when COVID-19 appeared, infodemic, which was an epidemic of lies, also emerged and spread faster than the coronavirus epidemic. However, to protect the mental health of individuals as well as their physical health during the epidemic and other periods, health literacy is of great importance in two stages. First, health literacy globally is as important for the prevention of noncommunicable diseases as well as for the prevention of communicable diseases. Second, with the system preparation of governments, individual preparedness will play a key role in protecting social and individual health (Paakkari and Okan, 2020).

FUTURE RESEARCH AND DIRECTIONS

Any social media site can be chosen as a field of study in future research and the news there can be examined. In addition, misinformation emanating from traditional media and misinformation news emanating from social media can be compared. If there is an infodemic epidemic caused by misinformation in any community, in a region, a study can be prepared by conducting a survey.

CONCLUSION AND RECOMMENDATIONS

Although the excessive abundance of information in today's information age is a dominant feature of this age, the COVID-19 epidemic has also led to the emergence of a new information epidemic called infodemic. Infodemic by the World Health Organization; It has been defined as a second disease accompanying the pandemic. The most important reason for the emergence and spread of infodemic is the continuous circulation of misinformation in the abundance of information. While this information in circulation is spread both maliciously and sometimes unintentionally, it is spread globally through social media posts. In both cases, the information in question turns into harmful content for human health. Especially Web 2.0. the facilities provided by its infrastructure to users allowed individuals to gather on a network and constantly communicate and interact with each other, causing the spread of false information intentionally or unintentionally.

A worldwide study found that one-third of people are illiterate and incapable of understanding, interpreting, and analysing health-related information from social media and other media. It is a known fact that individuals use social media more and are exposed to more misinformation or disinformation, especially during the quarantine process. While infodemic (the epidemic of lies), which arises from misinformation, spreads rapidly through social media, this information pollution disrupts the psychology of individuals, eliminating social trust and peace, and emerges as an epidemic that disrupts mental health as well as physical health of individuals.

Social media channels, known as the primary source of spreading misinformation, have turned into areas where individuals acquire and share their health information. Considering the global population, the spreading infodemic with a low number of individuals with health literacy is the most important evidence of the epidemic. Considering that overcoming infodemic is as vital as overcoming the virus, health literacy is very important individually and socially. Individuals should acquire the knowledge skills necessary to become health literate, understand, interpret, and comprehend health-related information both in real and virtual environments. Relying on reliable and scientific sources is the most important

step in combating the infodemic epidemic. Measures to be taken for infodemic to protect mental health are as important as the measures taken to prevent transmission of the virus. Some of these measures are:

- To follow the agenda from reliable sources with minimum frequency
- To respect the statements of scientists against infodemic
- In these days when social distance is important, reducing emotional distance and maintaining communication with loved ones in virtual environments
- Being critical when looking at social media
- Not posting false information on your online networks and asking the person sharing false information to remove it

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KEY TERMS AND DEFINITION

COVID-19: Coronavirus (COVID-19) disease was first detected in Wuhan, China in December 2019, and then it became an issue as a pandemic across the world.

Health Literacy (HL): It is defined as the ability to find, understand, evaluate and apply health-related information that can help health systems and individuals achieve better quality care, lifestyle, disease management, treatment decisions and health.

Infodemic: A concept typically consumed from a mixture of “information” and “epidemic”, which refers to the rapid and wide spread of both true and false information about a disease or epidemic.

Misinformation: Misinformation is defined as information containing “clear evidence about concrete issues and beliefs not supported by expert opinion”.

Chapter 13

Could There Be an Alternative Method of Media Literacy in Promoting Health in Children and Adolescents?

Media Literacy and Health Promotion

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ABSTRACT

It is stated that the media is the most influential social tool on creation/shaping of health behaviors of children and adolescents. Most of the individuals that pose into the media tools are misinformed about numerous facts that are either wrong or manipulated about health, and this information adversely affects the health behaviors. In this study, a compilation was conducted with the aim of both raising the awareness of media literacy approach in health promotion concept and emphasizing that the usage of educational methods implemented in the media literacy might also be used by nurses.

INTRODUCTION

According to social learning theory, children and adolescents learn by observing and imitating the events they experience (Bandura, 2001). It is emphasized that it is important for them to adopt these behaviors to think that the events they observe are real. In this context, the media, where they spend a significant part of their days, is shown as one of the most frequently used learning tools for adolescents.

However, cognitive development theorists point out that individuals' cognitive capacities affect how they perceive and understand the media content exposed (Strasburger, 2009a) and they characterize children / adolescents as the most vulnerable group in this context (Strasburger, 2009a, 2009b).

It is stated that the media, which is defined as one of the most important mass media, is the most effective socialization tool in the formation and shaping of health behaviors, especially for adolescents

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(L. Bergsma, 2013; Kunkel et al., 1999; Sutton & Wilson, 2001). In this context, studies on the subject show that the media have negative effects on the health of children / adolescents such as violence and aggressive behavior, sexuality, poor academic performance, body image deterioration, substance use and obesity (LJ Bergsma & Carney, 2008; Chandra et al., 2008; McLean, Paxton, & Wertheim, 2016). In parallel with this situation, it is stated that false messages in the media will bring along an increase in chronic diseases in the future (Goss et al., 2009), insecurity in health care and problems in compliance with treatment (van Bekkum & Hilton, 2013).

Approaches such as the regulation of media content to reduce the negative effects of media on health are shown as traditional practices. Instead of these approaches, it is stated that the concept of media literacy, which is defined as the ability to reach, critically analyze and evaluate the information learned through social communication tools (Aufderheide, 1993), is a more effective and alternative way (Heins & Cho, 2002). From a health promotion perspective, media literacy is aimed at protecting children from harmful messages; It is emphasized that health-related messages that have the potential to affect their perceptions and practices are passed through a critical thinking filter. In this context, it is stated that the initiatives to be planned should be designed to increase critical thinking skills in order to improve the effect of messages received through the media and to make healthy choices (L. J. Bergsma & Carney, 2008). For this reason, it is stated by many reputable organizations such as the American Academy of Pediatrics, The Office Of National Drug Control Policy and Center For Disease Control that improving media literacy is an effective health promotion strategy; It is recommended to be used in applications to improve the health of children and adolescents (Levitt & Denniston, 2014; O’Keeffe & Clarke-Pearson, 2011).

All over the world, reveals the necessity of addressing the importance of this issue (Organization, 2013; Yilmazer, 2013). Therefore, different and effective approaches are needed in school-based health promotion interventions. In this chapter, it is aimed to raise awareness about the media literacy approach within the concept of health promotion and to emphasize that it can be used within the scope of school health practices.

MEDIA LITERACY

Media literacy is expressed as an educational tool that has been widely used in recent years and aims to protect individuals against the negative effects of the media. Its first use dates back to England in the 1930’s. Canada has played a pioneering role in the development of this concept in many areas (Castellanos, 2007). Its generally accepted definition is the ability to reach, analyze, evaluate and convey messages in various ways (Aufderheide, 1993). Accessing, critically analyzing, evaluating and using the information contained in this definition constitute different dimensions of media literacy (see table 1.)

Could There Be an Alternative Method of Media Literacy in Promoting Health in Children and Adolescents?

Table 1. Dimensions of Media Literacy

Accessing information	Accessing information Accessing useful / useful information
Being able to analyze	Analyzing media messages using critical thinking skills (identifying the bias and credibility of a source, distinguishing the truth in an opinion, determining the true meaning in an unrealistic message)
Evaluating and using	Being able to evaluate the accuracy and applicability of a message
	To be able to use the messages obtained to achieve certain goals
Reference (L. J. Bergsma & Carney, 2008)	

The World Health Organization (Wade, Davidson, & O'Dea) defines media literacy as not protecting adolescents from unwanted messages, but as empowering them to critically analyze and use the messages they receive from media sources, and emphasizes that an effective media literacy education should be skills-based. (Castellanos, 2007). Because it is stated that an education based on life skills will provide individuals with the necessary equipment in the process of social development and transformation of the environment (Botvin, Griffin, & Nichols, 2006).

At this point, WHO underlined that the focus of health promotion is the development of critical media health literacy. In this context, some core concepts have been developed in order to enable individuals to show a correct approach to media messages (*see table 2.*)

Table 2. Core Concepts of Media Literacy

Media messages are all structured	How to really distinguish media messages, what are the messages given compared to real life, and what is the main point?
Media messages are created using creative language within their own conventions.	Getting to know advertisement / production techniques
Different people may interpret the same message differently.	It is important how the media affects people, how people can avoid the negative impact of the media and how they will act in creating change in media.
Most media posts are built for profit.	Skeptical attitude towards marketing strategies
Reference (Thoman & Jolls, 2008).	

It is stated that ensuring the use of core concepts by the target group will enable individuals to gain the ability to analyze and interpret by taking into account the basic concepts behind the received media messages (Castellanos, 2007; Thoman & Jolls, 2008). Considering our country, it is seen that media literacy has been included in the curriculum as an elective course since 2007-2008.

However, the studies conducted show that this way is not sufficient and the media literacy levels of even those who take this course are not at the desired level (İnan, 2015). In this context, it is highlighted that those dealing with adolescent health in the world should focus on studies on media literacy (Brown, 2006; Moore, DeChillo, Nicholson, Genovese, & Sladen, 2000).

Media Literacy Approach to Health Promotion

Media literacy is defined as an approach that helps children / adolescents to make the right decisions regarding their health. Brown (2006: 460) expressed media literacy as the process of teaching young people how to correctly read all the messages they will watch and listen to, in short, all the messages they interact with. Studies showing the negative effects of the media on health support this necessity. Because the most important point emphasized by the studies conducted in this context is that the media is like a peer that makes unhealthy behaviors more attractive and normalizes (L. Bergsma, 2013; L. J. Bergsma & Carney, 2008).

The goal of making media content a tool that gives healthier messages is always a priority, but it is a fact that health professionals have little chance of limiting access to media or changing content. Considering this situation, what can be done to strengthen the target group in this regard comes to the fore. The study of Austin et al. (2006: 555-560) shows that even the education given on media literacy once is effective in creating a skeptical attitude towards advertisements in adolescents. Austin's "message interpretation process model" forms the basis for media literacy trainings carried out within the scope of health promotion. According to this model, the processes of children and adolescents to interpret media messages; It includes both logical decision making and emotional processes (Austin, Roberts, & Nass, 1990). Bergsma and Ferris (2011: 3399) benefited from "planned behavior theory and" social learning theory "for the health promotion initiative with their media literacy training. These two theories point out that perceived locus of control and self-efficacy are important in the formation of behaviors (L. Bergsma & Ferris, 2011).

From a public health perspective, in a media literacy training to be planned within the scope of health promotion; empowerment approach, knowledge of media and health issues, environmental issues, critical analysis and expression skills are stated to be important (L. Bergsma, 2013; L. J. Bergsma & Carney, 2008)

In the model shown in Figure 1, it is shown within the framework of planned behavior theory and social cognitive theory that there is a four-stage process in the success of the media literacy and behavior change process based on health promotion:

In this context, media literacy and sexual health (Pinkleton, Austin, Cohen, Chen, & Fitzgerald, 2008; Scull, Malik, & Kupersmidt, 2014) substance use (Bier et al., 2013; Pinkleton, Weintraub Austin, Cohen, Miller, & Fitzgerald, 2007), nutrition, eating disorders (Evans et al., 2006; Wade et al., 2002), and violence prevention (Webb & Martin, 2012), with positive results. The sample groups of the studies in which media literacy trainings are used and information about their results are presented in Table 3.

The Use of Media Literacy Approach by Nurses in the Scope of School Health

Schools are the most favorable environments to reach a population that is quite large and important for social development, from primary school to high school education. Schools, which are accepted as an opportunity in terms of planning and implementing school-based health education programs (Langford et al., 2014), are the areas where nurses can be most effective within the scope of primary care services in order to improve health.

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Table 3. Studies Using Media Literacy Approach in the Scope of Health Promotion

Name of study	Sample	Interference / type of operation applied	Result
Pinkleton et al (2008) <i>Effects of a Peer-Led Media Literacy Curriculum on Adolescents' Knowledge and Attitudes Toward Sexual Behavior and Media Portrayals of Sex</i> ^[27]	532 adolescent	5 sessions of media readership training were given to adolescents in order to raise awareness of sexual depictions and myths existing in the media *	Compared to the control group, the tendency of adolescents in the intervention group to care about sexual activity and see it as a means of socialization decreased; awareness of sexual myths in the media was increased. At the same time, 85% of adolescents stated that they found this approach much more beneficial than other trainings about sexuality.
Scully et al (2014) <i>A Media Literacy Education Approach to Teaching Adolescents Comprehensive Sexual Health Education</i> ^[28]	13 – 14 ages 64 adolescent	Adolescents were given media literacy training on sexual health issues (pregnancy, partner violence ...) in a total of 8 sessions *	Compared to the control group, adolescents in the intervention group increased their tendency to make healthy decisions with their skeptical approach to issues related to sexual health, sexuality in the media, and sexual behaviors.
Bier et al. (2013) <i>School-based Smoking Prevention with Media Literacy: A Pilot Study</i> ^[29]	204 adolescent	A school-based anti-smoking, 1-year media literacy training was provided within the scope of the adolescent empowerment program *	There has been an increase in media literacy regarding smoking in adolescents, a decrease in smoking and an increase in skepticism regarding future smoking.
Pinkleton et al (2007) <i>A Statewide Evaluation of the Effectiveness of Media Literacy Training to Prevent Tobacco Use Among Adolescents (Pinkleton et al., 2007)</i>	723 adolescent	Media literacy training was provided to adolescents, which was planned as 6 sessions, including real life examples of smoking and the target group of the cigarette industry	Compared to the co-control group, the media literacy rate of both smokers and non-smokers in the intervention group increased, and it was determined that 83% of smokers did not smoke in the last month.
(Wade et al., 2002) <i>Enjoyment and perceived value of two schoolbased interventions designed to reduce risk factors for eating disorders in adolescents (Wade et al., 2002)</i>	86 adolescent	Media literacy training was provided to adolescents, which was planned as 5 sessions based on the effect of media on body image and increasing self-efficacy *	Adolescents have gained a resistant attitude to nutritional disorders and increased their tendency to accept themselves as they are.
Evans et al. (2006) <i>Changing the Home Nutrition Environment (Evans et al., 2006)</i>	13 age 39 adolescent and parents	12 sessions of media literacy training for adolescents and their families on the basis of health education and interactive nutrition education *	It has been ensured that the home environment is made suitable for healthy nutrition.
Webb and Martin (2012) <i>Evaluation of a Us School-Based Media Literacy Violence Prevention Curriculum on Changes in Knowledge and Critical Thinking Among Adolescents</i> ^[32]	1693 adolescent	Media literacy training was provided to raise adolescents' critical thinking skills and their awareness of violence messages in the media *	Adolescents' awareness of the fact that violent messages in the media can cause aggressive behavior and fear has increased, and their perception of critical thinking and other dimensions of media literacy has increased.
* semi experimental studies			

In the media literacy trainings on different health issues given above, those who usually provide training are educators who have received short-term training on health-related issues. However, it is stated that media literacy training is given by people who have health education knowledge on the subject (L. J. Bergsma & Carney, 2008) and it is recommended to be used by those who are interested in adolescent health (Brown, 2006). In this context, it is clear that nurses act with the principle of empowering individuals and take an active role in protecting adolescents from the harmful effects of media messages, especially in improving the health of adolescents, who are considered as a more vulnerable as in every period of life.

FUTURE RESEARCH AND DIRECTION

Different future research studies that will held in this purpose can be resulted supportive on this idea. Implementation of media literacy approach for health development by nurses who are active on schools may be considered as an opportunity on health development of children and adolescents.

CONCLUSION AND RECOMMENDATIONS

Studies show that the media have negative effects on the health of adolescents. Approaches such as restricting the media to reduce these effects of the media on adolescent health are considered as traditional practices. A more effective, alternative way of media literacy, which is defined as the ability to reach, critically analyze and evaluate the information learned through social communication tools (Aufderheide, 1993). and it is recommended to be used as an effective health promotion strategy in adolescents (Levitt & Denniston, 2014; O’Keeffe & Clarke-Pearson, 2011). The goal of making media content a tool that gives healthier messages is always a priority, but it is a fact that health professionals have little chance of limiting access to media or changing content. Considering this situation, what can be done to strengthen the target group in this regard comes to the fore. Studies on the subject show that positive results have been obtained in subjects such as sexual health, violence, nutrition and substance use. However, there is no study in which the media literacy approach was used by nurses in our country. In this context, it is thought that it is important for nurses to plan initiatives and take an active role in future studies in order to protect adolescents from the harmful effects of media messages, aiming the principle of health promotion, which is defined as a process that enables individuals to increase their control over factors affecting their health.

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KEY TERMS AND DEFINITIONS

Health Promotion: Is the process of enabling people to increase control over, and to improve their health.

Media Literacy: Is defined as accessing the information learned from media, analyzing and assessing them in a critical manner, is considered as a school based health development strategy.

School Health: Counseling, psychological, and social services that promote healthy social and emotional development and remove barriers to students' learning.

Chapter 14

Disinformation, Post-Truth, and Naive Realism in COVID-19: Melting the Truth

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ABSTRACT

Disinformation as an activity of disseminating misinformation finds its justification from the beliefs of individuals. These beliefs are like psychological barriers in minds to see the reality due to naive realism. The power and information relationship triggers authority seekers to produce their own truth. This truth mainly resembles what people want to believe. The post-truth era is proceeding to destroy the truth through making individuals skeptical to the truth. And their means to convey those misinformation is social media. In this chapter, the relationship among the post-truth era, naive realism, and disinformation is focused in terms of COVID-19.

INTRODUCTION

It is complicated to state how far the history of frequent usage of mass disinformation goes back. However, It was still an openly - now it is a ghost or specter used by anyone in a hidden way - used fighting method for the Soviet regime since the Bolshevik revolution to 1989 and Nazis and other states. As narrated by Borchgrave (1982), in a written memo to Tchitcherine, Lenin stated that “*to tell the truth is a petty-bourgeois habit, whereas for us to lie justified by our objectives*” (Borchgrave, 1982).

From this perspective, it is essential to differentiate misinformation and disinformation as a fighting method. Misinformation means false information; on the other hand, disseminating misinformation, in a systematic method is called disinformation (Fetzer, 2004). One can think that the propaganda and disinformation era has ended with the internet and open communication technologies since the 90s; no, it is not true; it has transformed into a new form. It now has a concept called “Post-Truth.”

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This new form has many differences from preceding forms of disinformation. The first and maybe the most critical difference is the actors of dissemination. Before the internet, particularly before social media, disinformation needed specific teams to plan and implement dissemination. These special teams are still active; mostly, these teams are composed of intelligence agency staff (Clogg, 1997; Pacepa & Rychlak, 2013). However, in this digital period, any individual can be a part of disinformation, both intentionally or unintentionally. It depends on the content of the disinformation. On the other hand, some professionals systematically do disinformation. Individual conspiracy theorists, hired trolls, independent trolls, bots, fake news websites, hyperpartisan media, politicians, foreign governments (Tucker et al., 2018) may be the head of the disinformation fountain.

The second difference is the visual and written evidence to strengthen the truth level of misinformation. Digital technologies can manipulate images, so one cannot easily understand whether someone manipulates it without technical equipment (Wallich, 1994). In older forms of disinformation, the visual and written evidence about misinformation were classical printing press products. There is a third difference called “logistics” of the dissemination. Information can go everywhere in seconds through the internet, while older forms of disinformation had to use specific logistics chains. There are many other differences between the new form of disinformation and older forms, but these three differences are the most distinguishing ones.

After all, disinformation needs a social base for being effective. If societies cannot reach the real information and are suspicious of existing information, disinformation finds its base. This base somehow exists in every society because of the poorly informed people (Borchgrave, 1982; Hernon, 1995). It may be a contradiction in the digital era, but this poorly informed people’s definition also contains less analytic ability to analyze existing information. Another contradiction is that many educated people are reported as victims of disinformation for fraud (Heilemann, 1987). Hence being poorly informed notion seems not to correlate with education. Besides, there is the fact that truth is still the first victim of disinformation before people (Ottosen, 1992).

The way to eliminate the right information is no longer by placing other contrasts against it. The new way is to ensure that people are always skeptical about the right information (Tekin, 2020). Social Media is just one of the instruments of this sneaky work.

In this chapter, the core point of view is how disinformation worked in social media during the COVID-19 period. Initially, the features of the new form of disinformation are handled in the first place with the post-truth concept. Afterward, as the chapter’s focus, social media disinformation during the COVID-19 period is explained.

NEW FORM OF DISINFORMATION in POST-TRUTH ERA

Disinformation can be used for different aims by different people. Therefore this notion’s discussion is not new, but most of the literature is full of war stories and debates among rival political groups for public opinion (Guarda, Ohlson, & Romanini, 2018). These debates are also valid for the pre-COVID-19 period of social media. Disinformation through social media to disseminate fake information in the COVID-19 period shows different features that have more global efficacy than previous disinformation problems. These features can be grouped into three sub-titles.

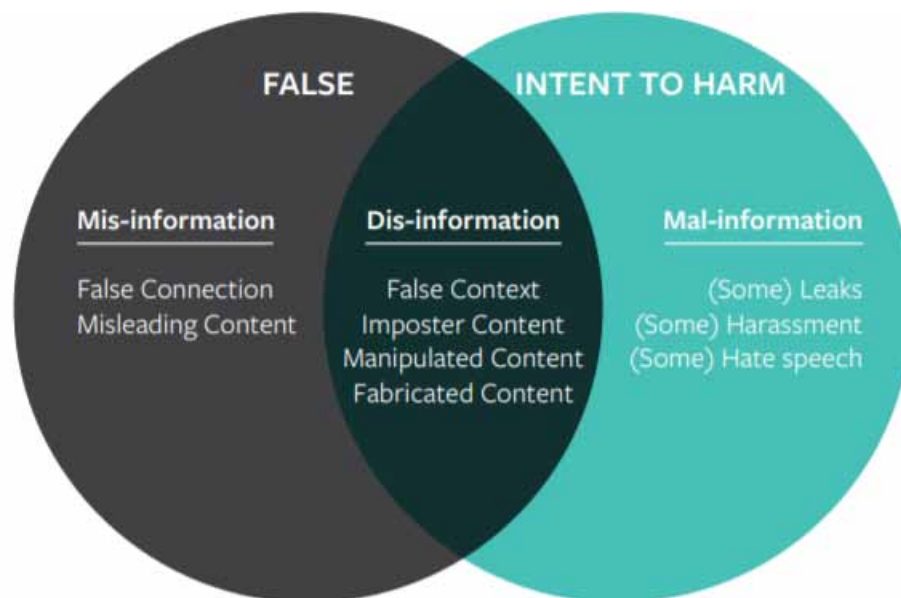
1- The pace of the disinformation worldwide

- 2- Turbidity among information types' meanings and turbidity between truth and lie
- 3- The size of the influenced victims from disinformation

As a means of disseminating information, Social Media is only a group of web-based software so that it is not a suspect of disinformation. It only allows users to post any content quickly without any judgment on the truth of the content and possible harms of the posts' contents. Only the first feature of the new form of disinformation is related to a technical point of view. On the other hand, the influenced victims' size differs due to the contents' persuasiveness.

Misinformation, disinformation, and mal-information are the most used terms under disinformation related studies. The distinguishing feature of disinformation from others is that misinformation and mal-information are the information used for disinformation. The former indicates false information, and the latter indicates right but dangerous information for anyone or institution (Guarda et al., 2018). The schema in Figure 1 demonstrates "Information Disorder" (Wardle & Derakhshan, 2018).

Figure 1. Mis-Information, Dis-Information, Mal-Information. Source: firstdraftnews.org via Wardle & Derakhshan, 2018



The pace of disinformation is the core distinguishing feature from older types of disinformation (Cosentino, 2020). The pace of disinformation is always higher than the recovery of the truth, and mostly this recovery is not one hundred percent (Rubin, Conroy, & Chen, 2015). There exist individuals with different attitudes, beliefs, and biases. Therefore, the truth is not always right for everyone. Political scientists agree that this fact is one of the justifications of political polarization. McEvan et al. (2018) proposed the "Mediated Skewed Diffusion of Issues Information (MSDII)" theory to explain the dimensions of polarization in this scope, and one of the results in their study is that polarized sides are under the influence of opposite arguments disseminated through social media, which makes polarization more powerful (McEwan, Carpenter, & Hopke, 2018).

“People readily believe what they want to believe.” ~Julius Caesar

Post-Truth, which Oxford chose as the year’s concept in 2016 (Kathleen Higgins, 2016), is perhaps the best concept to describe how reality loses clarity in the digital age. Post-truth offers individuals to select their reality among countless bunches of information (Lewandowsky, Ecker, & Cook, 2017). Post-Truth and Fake News are called mostly with the same meanings. However, Post-Truth is different from being just a fake news image. It is a phenomenon of losing the truth, not for a while but also forever. It destroys minds through crushing the truth with skeptic information flow.

“Post-truth is an adjective defined as ‘relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief’”

(Source: <https://languages.oup.com/word-of-the-year/2016/>)

In an era where tons of information flows over the internet, it is only possible to determine reality through the vital sources that can verify reality. However, Post-Truth’s main characteristic is that there are no specific verification centers. Tekin (2020) expresses this because post-truth is not getting the right sources of information toward the center, but rather getting the right of powerful (Tekin, 2020).

If it is assumed that the only reason why the lie is replacing the truth is the power and the information cycle that Foucault talks about (Foucault, 2000), it can be said that the objective of producing the misinformation is the power. The main question is that who is pursuing this power in COVID-19? It is almost impossible to find who the criminals are and why he pursued power in such complex information unless the perpetrators admit themselves. However, the purpose of this study is not to answer this question. Social Media, as a means of disinformation and its location in the post-truth era, is the core of this study.

It is not surprising that social media where interaction is global becomes the primary source of information flow. In terms of disinformation, it is essential to understand how lies replace with truths through social media. What shapes individuals’ posts on social media? Do individuals post lies while they know the fact? All these questions are prepossessing everyone.

Apuke and Omar (2020) found that individual motivations for altruism, information sharing, information seeking, socialization, and passing the time lead them to share fake news related to COVID-19 in Nigeria (Apuke & Omar, 2020). In Nigeria and Africa, health advice efforts collapsed due to disinformation (Ahinkorah, Ameyaw, Hagan, Seidu, & Schack, 2020). Italy, the most harmed country in Europe from the COVID-19, also showed the same symptom (Moscadelli et al., 2020). China, where the Pandemy started, and India, with the crowdest populations in the world, are also under the attack of misinformation dissemination from social media (Rodrigues & Xu, 2020), while Montesi (2020) was demonstrating the same situation for Spain (Montesi, 2020). All these researches agreed on a concept called “Infodemic.” Infodemic continues to spread through social media, as the pandemic infects people through physical contact among people.

In the COVID-19 period, Social Media seems like a pan where the truth is melted with a high volume of information oil. Governments’ efforts to avoid their citizens from the pandemic through acknowledging them by scientific developments are disrupted by fake news from social media. Harsin explains this as a fiduciary problem – distrust about officials and trust about rumors - of the Post-Truth era (Harsin, 2018).

WHY DOES IT APPEAL TO PEOPLE TO DISSEMINATE FAKE NEWS and RUMORS INSTEAD OF THE TRUTH IN SOCIAL MEDIA?

Before focusing on people's intentions for fake news, it is crucial to differentiate between intentional and unintentional fake news dissemination. Is there a purpose for millions of people to spread information from scientists, which is then considered inaccurate, from tools such as social media and WhatsApp? Orso et al. (2020) took attention to scientists' responsibility to be careful (Orso, Federici, Copetti, Vetrugno, & Bove, 2020). If news comes from authority and people tend to disseminate it, that does not mean an intentional disinformation activity.

Between 31 December 2019 and 30 April 2020, over 2 million fake news is shared through social media in Italy (Moscadelli et al., 2020). Then, what factors are motivating people to disseminate fake news? Appuke and Omar (2020) found information sharing, socialization, information seeking, and time spending as an answer (Apuke & Omar, 2020). On the other hand, Montesi (2020) addresses the absence of cognitive authority for analytical analysis of the news by ordinary people while there are emotional mechanisms active in influencing people by discrediting people and ideas (Montesi, 2020).

As defined above, The Post-Truth era has a malicious feature that Montesi (2020) addresses; the absence of truth verification in the center. Furthermore, individuals' innate characteristics that have turned into a form of reflexes, as defined by Apuke and Omar (2020), are great settings for disinformation to find a place.

Are people aware of what news are true or lie? Do they disseminate intentionally? These are the initial questions in identifying a process that becomes a vicious cycle, and eventually, lies become real. This cycle also has another factor; naïve realism.

NAÏVE REALISM

The loss of credibility of information can result in the loss of the information's reality. Ignoring the loss of real information by most of the society surrounding the individual accelerates the transformation into artificial reality. This transformation somehow indicates the development phases of naïve realism.

If someone believes that his/her view for any real-world issue is objective and unbiased while others' not, that means this person is in a naïve realism position (Ross, Lee, and Ward, 2013). This description demonstrates who the naïve realist is; however, the main question is how people become naïve realists?

Naïve realism starts from birth. Narratives that individuals heard from their environment – initially from their families – start to shape their truths. By the time, individuals start to judge the world with these narratives from members of their society. Group members' cognitive patterns formed by narrations about any social issue also compose a collective narrative, and this collective narrative generally seems like a one-dimensional story (Adwan, Bar-Tal, & Wexler, 2016). These collective one-dimensional narratives create such an illusion and a strict rule of being accepted by society.

One-dimensional social media posts – without any knowledge verification – can be seen as collective narratives, too. That means social media disinformation may cause such an illusion, as defined above. The illusion process, which started with individuals doubting the factual information, can lead society into misleading collective narrative and, consequently, move away from reality. At the end of the process, individuals with naïve realism symptoms will defend the fake against the truth.

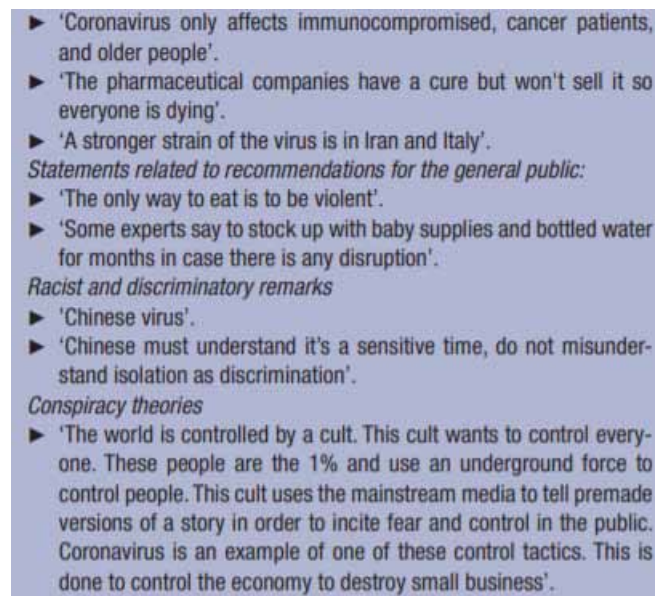
MELTING THE TRUTH WITH SKEPTICAL NEWS in COVID-19

It may start with a little lie. Afterward, people can create a butterfly effect, thinking that this lie is either their desire or right. People's beliefs can derive from different reasons. Clore and Gasper (2000) explained these reasons in seven different principles; the experience principle, the information principle, the attribution principle, the immediacy principle, the attributional constraint principle, the elaboration principle, and the processing principle; the authors found that emotions are informative and persuasive on the development of the beliefs (Clore & Gasper, 2000). Each principle has a different influence on the development of the beliefs and may affect one's belief in a cooperative style.

During COVID-19, people developed and are still developing their beliefs. Some of them do not believe what the authorities say, and some of them believe. The reason is that individuals tend to believe what they want to believe according to the effects of principles defined above.

For example, according to Li et al. (2020), % 27.5 of youtube videos about COVID-19 are fake, but over sixty-two million people viewed those videos (Li, Bailey, Huynh, & Chan, 2020). They defined some fake news dispersed through the youtube platform.

Figure 2. Examples of quotations from non-factual videos. source. (Li et al. (2020))



If people are curious about something or find it interesting, they may need to look at everything on social media. If a piece of information comes to screens several times, it is normal for anyone to remain in doubt even if it is not believable. So why are people being asked to be raised for suspicion?

There may be more than one reason. For instance, people opposite the government may want people to lose their trust in the existing government. Alternatively, people who have extreme beliefs may want others to join these beliefs, or people who want to gain a commercial advantage may manipulate others or etcetera. Ultimately, all of these have the same aim; replacing the fake with the real.

DISINFORMATIVE TOPICS IN TWITTER IN COVID-19

This section of the chapter is the core of the study. Truths and fake news about five different topics are examined through data gathering from Twitter.

1- Transmission of the virus to the human body

Since the beginning of the pandemic, the most confusing information is about the way of virus transmission. At the earlier stages of the pandemic, researchers were warning people to avoid close contact with people, and they also informed the international community about the researches that they proceed to identify virus infection ways. Even though researches were not completed, mosquitos were being accused through social media. Fortunately, there is no evidence for mosquitos as infectors. All scientific authorities address droplets from infected people; it is the main reason for infection, and almost everyone heard about it up to now. However, though today, there is disinformation through social media about this fact. The data gathered from Twitter between 25 October 2020 and 03 November 2020 (282 tweets) shows that people are still skeptical of mosquitos.

Figure 3. Geographical Distribution of Tweets related to Mosquito and Covid-19



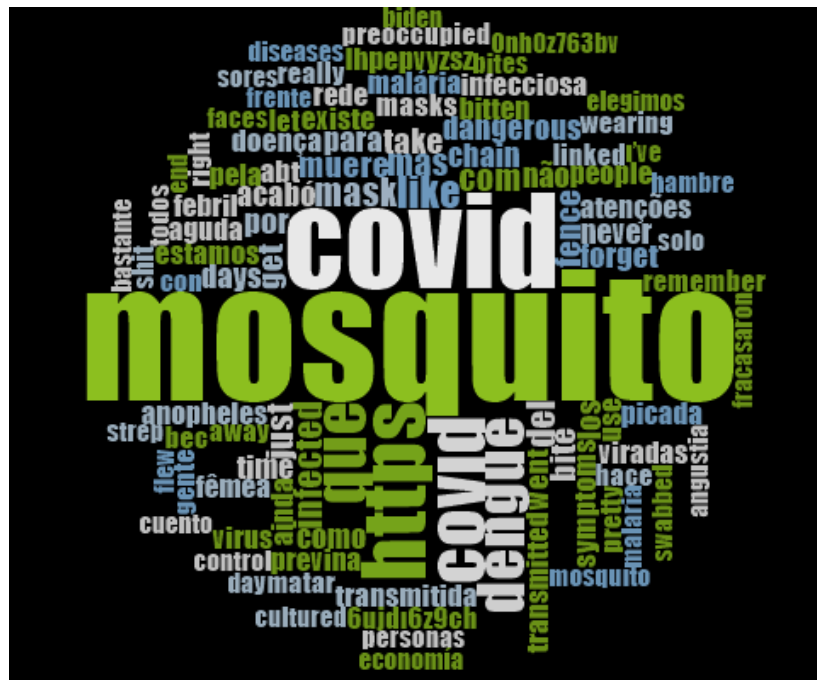
These tweets' WordCloud image shows the frequency of the words used in posts. Tweets also indicate that most of the tweets related to mosquitos and COVID-19 came from the North and South American Continent. Almost 40 percent of the tweets were tweets retweeted from others.

In the search for knowledge verification in Google about mosquitoes and COVID-19 relationships, one can see many websites reject mosquitoes' role as an infector. However, people still go on to disseminate this misinformation.

2- Antibiotics

Antibiotics and their effect on viruses were another subject of the world for the COVID-19 pandemic. Scientists warned people that antibiotics' effect is only for bacterias, not for viruses. The search for “antibiotics” and “COVID” keywords together from twitter allowed 1341 tweets between 25 October 2020 and 03 November 2020.

Figure 4. WordCloud Image of Words' Frequencies for Mosquito and COVID



Most of the words are indicating an awareness about antibiotics' ineffectiveness on viruses. However, there are still tweets that are offering some antibiotics brands to people for the COVID-19 cure.

3- Coronavirus as a Bioweapon

There is an unending debate over whether coronavirus is a biological weapon. The Chinese army and other potential resources are shown as the source of COVID-19.

Figure 5. Geographical Distribution of Tweets related to Antibiotics and Covid-19



Interestingly, there is no tweet from China, Russia, and Africa. And significantly less (only one tweet) in South America.

4- Bill Gates

Some science fiction stories and movies focus on digital ids that can remotely monitor people through equipment like biochips. Since the beginning of the outbreak, Bill Gates and his company have been the target of conspiracy theories. According to conspiracy theorists, Bill Gates is behind this outbreak and wants to sell a new product to monitor everyone.

As shown in Figure 9, this topic has the highest number of tweets in the same period (25 October 2020 and 03 November 2020).

5- Masks Do not Work

There is an obvious fact that humanity has been facing a virus. Although, before the pandemic, everyone was aware of the masks to protect against viral infections. Interestingly, during the COVID-19 period, some social media posts claimed that masks are not effective against coronavirus.



A world map showing the distribution of the genus *Phlox*. Blue pins indicate collection sites. The map is labeled with the names of the continents: North America, South America, Europe, Africa, Asia, Australia, and Antarctica. The pins are concentrated in North America, Europe, and Asia, with a few in South America and Australia. Antarctica is shown at the bottom of the map.

Figure 8. WordCloud Image of Words' Frequencies for Bioweapon and COVID



These tweets are gathered almost ten months later than the pandemic beginning. As shown in Figure 11, the world is still discussing whether masks are useful or not.

Fortunately, figure 12 shows us that mask usage is still being advised. After several months of debates on social media, people still need to discuss masks and other topics. Why? It may seem because of anything but not information. Science and rationality indicate reality; however, it is not right for everyone. The next section of the chapter contains probable answers to this question.

SOLUTIONS AND RECOMMENDATIONS

Before diving into the solutions and recommendations section, to take attention to the topics' geographical distribution figures and the period that the tweets gathered are essential to see the post-truth. For instance, although tweet amounts relatively less, mosquitoes' innocence in COVID-19 is still skeptical. On the other hand, people hardly talk about conspiracy theories. Furthermore, these tweets gathered at the end of October 2020, which is almost ten months after the pandemic started.

At the beginning of the section, the lies and truths are discussed according to their aims.— There should be a minimum of one reason - As Lenin stated, “our lies’ justifications are our objectives.” - for lying. At first glance, the topics mentioned earlier seem different, unrelated, and have no specific aims. On the other hand, all have a common denominator.



Making people think skeptical about the information from formal authorities such as WHO and governments as a fact of the post-truth concept describes this common denominator. Disinformation destroys bearing points of knowledge verification. The Post-truth offers individuals select their reality (Lewandowsky et al., 2017). People are ready for this selection. They select their truth related to their expectations. Even worse, after a while, they set up their reality on this selection.

There is an “egg and chicken” cycle among this denominator and naïve realism. Most of the biases are coming from birth. One-dimensional narratives of the societies to their members create a naïve realism (Ross, Lee, and Ward, 2013). Naïve realism based psychological barriers of individuals cause to select fake news as the truth. Moreover, this selection strengthens naïve realism.

Briefly, the only way to avoid a chaotic future is to settle effective education systems worldwide. It should be worldwide because disinformation has no border due to social media. Social media usage as a lesson in the curriculum will help this effort. In this post-truth era, this educative recommendation is not less valuable than a math lesson for youth.

FUTURE RESEARCH DIRECTIONS

This study aims to take attention to naïve realism and the post-truth era’s collective dangers in protecting healthy social life. Sided facts of different societies trigger naïve realism, and this reaction completes its cycle by joining with the post-truth era’s skeptical society. Disinformation and the disappearance of the truth may cause social disasters in COVID-19 and other worldwide sensitive situations.

In the post-truth era, research trends about disinformation turn to search the individuals’ motivations in terms of reluctance to verify the information come from unknown sources. These motivations’ roots can be found in any factor, but one can see in simple research that individuals’ prejudices are vital factors.

CONCLUSION

The post-truth era is being shaped by naïve realism and social media. Everyone wants to believe in the information in line with their wishes. These wishes reflect individuals’ past experiences gained from their social environment. Sided education systems and societal rules are the supporters of the post-truth era. If the efforts against disinformation lose the fight, the world will face another outbreak called infodemic, which is hundreds of times more dangerous than viruses.

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KEY TERMS AND DEFINITIONS

Disinformation: Dissemination of misinformation.

Mal-Information: A truth for harming another person, institution, or state.

Misinformation: False information.

Naïve Realism: To define personal views for any real-world issue as objective and unbiased while others’ views not.

Post-Truth: Is an adjective defined as ‘relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief.’

Chapter 15

The Role of Social Media on Dissemination of Information During the COVID–19 Pandemic: Social Media, Dissemination of Information, COVID–19

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ABSTRACT

This study reveals the role of social media tools and applications in disseminating information about COVID-19 in the COVID-19 process. While discussing the role of social media in the ongoing COVID-19 pandemic process, it will be evaluated with the applications of different institutions. In the study, which will be considered from a public relations perspective in general, it is aimed to reveal a general perspective on the communication activities of the institutions with the target audience and their followers through social media practices. In this study, which is a compilation in this direction, the changing motivations of the followers and the role of social media in this process will be revealed.

INTRODUCTION

The pandemic process and its effects, which started with the Covid-19 virus in the recent past, manifests itself in almost every field. The concept of quarantine draws attention as one of the most important requirements of the pandemic process. It can be said that people spending more time at home reveals many different elements in their life practices. At this point, communication is one of the most important needs. During people's stay at home, communication tools are important both in personal communication activities and in their desire to get information about the pandemic. The communication tools used in

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this communication process also appear with different roles and practices. Internet-based applications draw attention from these communication tools. Especially, social media tools and environments attract attention at the point of message dissemination, transmission and circulation of information. Studies conducted in the relevant field in the literature part of the study show that social media plays an active role in receiving and sharing information. In the pandemic process that started with the virus in question and is still continuing, there is a change in personal life practices as well as institutional practice practices. It is observed that there are motivation and behavioral changes in subjects such as obtaining and interpreting information, consumption motivation, content creation and sharing. The role of social media tools and environments in these changes cannot be denied.

In addition to personal practices, the role and reflections of social media in corporate communication processes draw attention. In this process, they use official social media accounts to convey information about the pandemic process in corporate brands. They provide information and social messages about the pandemic through social media. At this point, this study includes personal daily life practices that have changed with the pandemic and the messages of institutions. From this point on, the study is a compilation within the scope of this purpose. Especially in this process, the reflections of social media on personal and corporate communication processes are mentioned in the study, which includes the results of related research and literature information.

Social Media and Pandemic

The new type of coronavirus (COVID-19), which has been on the agenda recently, first appeared in the livestock market in Wuhan, China in December 2019. It was later declared as a ‘Pandemic’ by the World Health Organization. In this process, people have increased their use of media and internet in order to maintain communication (Summak, Aytakin, Gençoğlu, 2020: p. 485). The new coronavirus pandemic (Covid-19), which has important effects, is a disease caused by a severe acute respiratory syndrome coronavirus (Sars-CoV-2). Since the type of the disease is unknown, it was initially thought to be pneumonia (Sucu, 2020: p. 560). The reflections of this new pandemic process on our daily lives are seen. The isolation process in the Kovid-19 outbreak and the social distance we put between us has taken its place in social media as digital proximity. Social media usage time has increased remarkably (TRTakademi, 2020). Social media environments emerge as an effective communication tool during the pandemic process. At this point, Facebook users in Turkey are faced with a message pop up that directs the Health Ministry’s official website. With the message titled “Help Prevent the Spread of Coronavirus”, users are provided with the latest information provided by the Ministry of Health (Pazarlamasyon.com, 2020). With the pandemic process, many studies on the use of social media have come to the fore. According to the report that social CRM and social data analysis company Adba Analytics and The Brand Age magazine prepared together based on the dates of January 21-March 11, 2020, analyzing the shares and speeches of social media users regarding the Kovid -19 outbreak (TheBrandAge, 2020); it has been observed that the number of posts made by social media users worldwide has exceeded 275 million. At the time of the research, the most shares were made from Japan, the United States of America and South Korea, respectively. Sharing rates countries according to their ranking as follows: Japan, the United States, South Korea, Britain, France, Brazil, China, Malaysia, Taiwan, Italy and Turkey. Sharing ratio in terms of Turkey, report described the 10th position when the first cases in Turkey on March 11, 2020 862 747 thousand sharing is made. Some of the prominent issues in social media globally; What can be done to prevent the disease, how the disease affects human life and the desperation caused by the disease, the

airline cutting off the service due to the epidemic, the closure of the schools and the consumption of the market stocks of the people (TRTakademi, 2020). On the other hand, according to the report titled “State of Social Media Report: The Impact of Kovid-19” by SocialBakers, which shares important statistical information about social media usage, the hashtags most used in Facebook and Instagram posts between February 1 and March 21, 2020 are as follows; the 6 most frequently used hashtags in Facebook and Instagram posts about the Kovid-19 outbreak are the same. #Coronavirus, # Kovid19, # Kovid_19, #corona, #staysafe and #Kovid are the most used hashtags, respectively (SocialBakers, 2020; TRTakademi, 2020). In addition, according to the report of We Are Social, which shares important statistics on the use of social media worldwide, Facebook, YouTube and WhatsApp were mostly used during the Kovid-19 outbreak (MarketingTurkiye, 2020). There is research conducted in Turkey as it is in the world. One of them, Anadolu University Social Media and Digital Security Training Application and Research Center (SODİGE), conducted a survey of 73 provinces in Turkey with the participation of 1293 people. According to the survey, it was stated that there was an increase in digital habits. The time spent by individuals in the digital environment and with their mobile phones has increased significantly, 70 percent of the respondents stated that the use of computers and 80 percent of them increased their mobile phone usage time. In addition, it was stated in the research that the frequency of using video chat and video conferencing applications increased by 78 percent (Anadolu Ajansı, 2020; TRTakademi, 2020).

There are some innovations made by the most used social media platforms during the new type of coronavirus epidemic. These are included in the table below (See Table 1) (TRTHaber, 2020).

Table 1. The Social Media Innovations During Pandemic Process

Instagram	“Instagram, Turkey offered its users pandemic in the process of five new features. First, that can be used in many countries Instagram music label opened to users in Turkey. In a live broadcast offering to make donations to non-profit certain profit new feature testing Instagram, coronavirus days of the users in the story to create awareness ‘thank you clock’ and ‘stay at home’ tags that can be used.
Facebook	“Facebook has introduced Messenger Rooms for group video chats, which is increasing in use these days. Newly, it will be possible to chat without time limitation in rooms created via Messenger or Facebook.
Twitter	On the other hand, Twitter announced the “Coronavirus Control Panel” feature that will enable researchers to access tweets about Kovid-19 more easily. It was noted on Twitter that a “blue tick” will be applied to the accounts of healthcare professionals who have an e-mail address associated with an authorized health institution or organization in order to give priority to verifying information during the coronavirus period.
Whatsapp	The person limit of video calls, which could be made with a maximum of 4 people before, has been increased to 8 people with the new update.
TikTok	It was reported that TikTok, the short video application, also announced a feature that would make it easier for users to donate to charities during the Kovid-19 period.

Source: TRTHaber, 2020).

In addition to the daily use of social media during the pandemic process, there are also different effects. During the pandemic, there was a decrease in the use of social media despite the more people being at home and using the internet. Instagram saw a drop of 14% and Facebook 13.5% for the week ending March 11 from the previous three weeks. Twitter, on the other hand, performed better with only a 7% drop. So people still look at Twitter for critical information and news, and then re-tweet and discuss these topics. (InfluencerMarketingHub, 2020). In addition to these, changes are observed in the consumption motivation of the people. Consumers started to spend more time at home with the pandemic. Therefore,

it is seen that homes are transforming into shift offices, classrooms, broadcast studios, gyms, places of worship and doctors' offices. At this point, it can be said that personal computers have become the gateway to socialization, a evolution towards digital. Although widespread adoption of social media and other transformation technologies usually takes years, it can be said that consumers have had to get used to this transformation process and have been relatively successful (Kirka & Rifkin, 2020: p. 127). In the pandemic process that comes with the Covid-19 virus, it may not be possible to talk about a very definite vision of how the social media's reactions in the purchasing and social media practices of consumers or followers will be. This study focuses on the role of social media in the formation of panic people experience with the pandemic. In the light of the findings obtained, it was seen that the information they wanted with social media was at their fingertips and they could access real information in real time. However, it seems that this situation can put them in a state of anxiety and panic about the future. Therefore, it can be said that under these conditions, social media has opened a window for the spread of information, what causes the behavior of consumers / followers and creates a human evidence, and in a panic state of purchase motivations (Naeem, 2020: p. 1). In a complex process such as the current global pandemic, there are reflections on public policies and communication styles in their countries. Particularly in this process, dividing local government institutions into specialized departments may limit coordinated communication during a crisis, unless there are purposeful efforts to coordinate communication. In this respect, it can be said that effective communication and communication tools are important during the pandemic period (Zeemering, 2020: p. 12).

In the light of the findings of a study, it can be said that users have more information about COVID-19 and follow the latest information through social media showing the transition to digital media. In addition, it shows that users are aware of fake news and follow official sources. It can be said that social media is positioned as an effective communication tool during the pandemic period (Kaya, 2020: p. 1).

Corporate Brands, Social Media and Pandemic

The new virus that has emerged recently and has reflections all over the world draws attention. The Coronavirus (Covid-19) pandemic, which emerged in late 2019, caused very important changes in economic, social and pedagogical terms, especially in health all over the world. Education systems are one of the areas most affected by this pandemic (Can, 2020: p. 11).

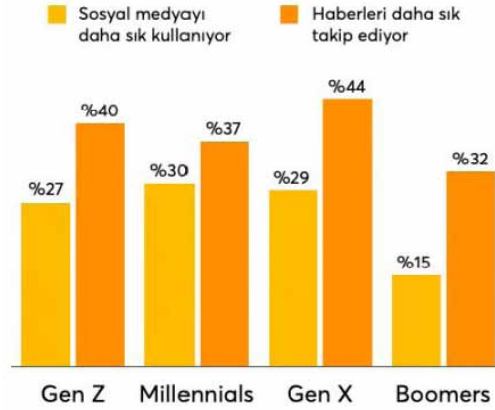
Social media has an important place in the digital marketing system. Thanks to social media, brands make their products reach the target audience more easily and realize the sales action faster (Bulut, 2020: p. 521). Due to the features of social media, it is an effective communication channel at the point of communication with the target audience and followers.

The effectiveness of social media in brand communication is known before the pandemic. Social media is distinguished from traditional communication environments, thanks to its unique features. For example, social media based on user-generated content, internet-based connection and simultaneous participation differentiates with these features. Therefore, it has become a new environment for brands to attract attention and establish lasting relationships with customers and followers/fans. At this point, using social media tools has started to play an important role in brand communication. In these tools, it can be said that interacting with the followers, allowing them to listen and cooperate, has led to an effective communication. (Dias, Pessôa & Andrade, 2020: p.1). During the pandemic process, institutions started to systematically carry out image management, crisis communication, sponsorship activities and event management through online systems. Brands have increased their promotion through webinars by using

opinion leaders. Billboards and digital advertisements came to the fore in outdoor advertising during the pandemic process. With the Covid-19 process, it is striking that e-commerce structures have increased in the direction of brands and shopping habits have also changed (Sucu, 2020: p. 563). At this point, many different studies draw attention. TBWA \ Istanbul focuses on these difficult days we live after COVID-19 is on the agenda of the whole world and examines what is happening in the advertising industry. When looking at the changing consumer behavior in the COVID-19 period, we see the following. During the virus period, both the use of social media and the habit of following the news increased, while the time spent on the internet increased by 20%. It is seen in the related graphic below (See Graphic 1)

Figure 1. Generations and Social Media Followings

Source: CampaignTurkiye, 2020



Emrah Pamuk, CEO of Digital Exchange, stated that it should be a priority to reach target audiences that grow with the increase of brand awareness and digital use, and said, “We see this pandemic process in which influencer marketing is used most actively as the period when all social media channels are used most actively. According to a study examining 1 million 400 thousand posts of Instagram influencers, the most commonly used hashtags in this period were # coronavirus, # covid19, #covid, #pandemic and # coronavirus epidemic (Üçhisarlı, 2020). In this process, some suggestions about how corporate brands can position themselves and communicate are included in the items listed below (Ipsos, 2020).

- It must be sincere, honest, and reliable.
- Brands should fulfill their statements.
- Campaigns that are integrated with each other and touch multiple touch points are good communication tools.
- Communication tone. A delicate balance needs to be struck to ensure that the brand’s step does not have the perception of “turning a crisis into an opportunity”.

In related research, Covid-19 process, protection from disease for three GSM operators operating in Turkey as long as the path to the centers and community health strategy has been shown to give weight to the message field. In this study, it was concluded that the creative strategies of the brands examined

were informative about both their products and services and methods of combating the epidemic, while creative tactics changed (Cılızoğlu, Dondurucu & Çetinkaya, 2020: p. 296). Corporate brands carry out various communication studies on the COVID-19 outbreak and the importance of social distance. 83% of the respondents stated that brands follow these communication activities (Pazarlamasyon.com, 2020).

A study by Deloitte Consulting team reveals data on consumer interaction. Covid-19 global outbreak of the effects of different categories in Turkey, according to the study which aims to analyze customer interaction through; It can be said that the most positively affected categories are Internet TV with high interaction. These platforms have managed to keep the increasing demand with their aggressive campaigns and new content (Deloitte, 2020). Effects of Different Categories of Global Covid-19 outbreak in Turkey - II (2020) shows digital interaction changes according to the report. However, it is observed that the demand for media institutions has started to move towards social media (Deloitte, 2020).

Although many consumption habits change with the epidemic, the adaptation of brands to this process is progressing in parallel. In the fight against coronavirus, brands also emphasize that they stand by the consumer in communication activities and social marketing efforts (Summak, M.E., Aytekin, M., Gençoğlu, 2020: p. 502). Another study draws attention. The data obtained from the research on the brand communication strategies of airlines in the Covid process are as follows. It has been found that airline companies' brand communication strategies and ways of reflecting their brand personality differ in the pre-crisis and post-crisis periods. This result reveals the importance of maintaining brand communication activities in social media during crisis periods like pandemic (Benan & Aysel, 2020: p. 325).

Especially, the information and messages spread by corporate brands in social media platforms attract attention. Those who did not leave the house due to the coronavirus and those who heed the #home warnings started to do their exercises online. PTs and gyms continue to work by giving sports lessons on live broadcast so that people staying at home do not miss sports from their daily lives (Campaign-Turkiye, 2020). Network technologies that allow the physical boundaries to be overcome have enabled the diversification of social media platforms, whose users are increasing day by day and diversified in context (Subölen, 2020: p. 141). Some of the applications of global corporate brands in this process are given in Table 2.

Kantar surveyed 35,000 consumers worldwide about their views on brands advertising through the COVID-19 crisis. The findings obtained show that 78% of the consumers think that brands should help them in their daily lives. Besides, 75% stated that brands should inform people about what they are doing. 74% think that companies should not abuse the situation. In another similar study, Marketing World and Econsultancy surveyed 887 British brand marketers. Accordingly, 39% say that the demand for the services of their companies has decreased. The coronavirus appears to have a significant impact on pre-booked advertising campaigns. 34% of advertisers claim that they canceled a campaign completely (pre-launch) and 45% stopped or retracted a campaign in the middle of the campaign process. (InfluencerMarketingHub, 2020). Twitter, one of the social media tools, touched on an important issue of COVID-19 in March. It stated that as the USA declared a state of emergency in mid-March, the follow-up increased to 20 million a day. For the remainder of March, Twitter conversations on the topic were between 13-20 million posts per day (InfluencerMarketingHub, 2020).

Table 2. The Applications of Global Brands

Name of Application	Features of Appliations
Brands that fall outside the category	Louis Vuitton announced that some perfume producing factories will produce hand sanitizer during the virus era. And these disinfectants will be distributed to official organizations in France.
Empathetic heroes	Facebook announced that the “Small Business Grants” program will provide \$ 100M to small businesses and give each employee a \$ 1000 bonus to make it easier to work from home.
Anti-censors	In the face of China’s censorship of the flow of information on COVID-19, Minecraft led citizens to their uncensored digital libraries in-game to support their freedom of information.
Virtual assistants	One Medical answers people’s questions about COVID-19 through the app and provides support as needed. Thus, it helps reduce the density in hospitals.
Those who take precautions	To highlight the importance of social distancing, Dunkin Donuts gave an extra 100 points to “on-the-go” order customers to use in their loyalty program.
Advertisers for good	SKYN encouraged people to stay home using the hashtag #staythefhome. Reddit advertised in Times Square, “Staying home saves lives.” replaced it with written billboards.
Those who adapt their brand	Time Out replaced the “out” in its logo with “in” and announced that “we will continue to present the beauties of London in the comfort of your home, not outside”.
Free content providers	Ubisoft has released an in-game update to offer the popular game Assassin’s Creed for free. In this mode, players can travel to places such as Alexandria, Syria and learn about the Great Pyramids, daily life in ancient Egypt and the Cleopatra era.
Emphasize contactless shopping	Chipotle became the first brand to offer free and limited contact delivery service. The brand also applies extra hygiene rules to the elderly at risk.
Supporters of home learning	Google has partnered with UNESCO to develop a hub for educators to facilitate learning from home.

Source: CampaignTurkiye. (2020)

During the pandemic process, it has been observed that many companies also proactively participated in various CSR activities. Undoubtedly, the current epidemic offers a wide range of important opportunities for those who have a more careful and rigorous approach to CSR. For example, UK manufacturing companies sell their factories on fans, personal protective equipment, hand sanitizer, etc. and some donated these products instead of selling them (Hea & Harris, 2020: p. 177). In this process, most corporate brands adopt meaningful approaches that aim to convince the masses that we will overcome the crisis together and overcome the difficulties. Three effective methods used by advertisers to determine communication strategies during the crisis period and to show their support to people in the coronavirus process experienced in the last weeks are presented below (Shipley & Loar, 2020).

1. Alleviating customers ‘concerns about COVID-19: Cottonelle, one of the world’s largest toilet paper producers, shared a direct message to calm customers’ anxiety and prevent them from panicking when they saw products run out quickly in stores. The brand encouraged people to “stock for those who need it” instead, and partnered with United Way Worldwide, a US-based charity, to launch the #ShareASquare campaign.
2. Acting and communication solutions focused on crisis management: The brand adapted the “Ask a Pharmacist” series and started to publish short and informative videos containing the answers to

frequently asked questions by customers about COVID-19. In addition, Walgreens quickly transformed an existing campaign creative into a video ad. This ad explains how customers can take advantage of online care services and free delivery for prescription medicines.

3. Bringing together people who are physically separated for security during the crisis: Ikea called on the Spanish and English audiences to return to their homes. With this approach, IKEA aimed to remind people of the safe lives they already have. As the world around them changed, people could play with their children, dance, play music or have fun with their loved ones. #YoMeQuedoEnCasa (Shipley & Loar, 2020).

In this context “Advertising Sector in Turkey and Its Impact on the Corona and ad Predictions on the Future entitled” There are notable spots in this investigation. Covidien least 19 commercial concerns in the process of brand advertising will make in Turkey, friendly, positive emotions and social benefits that appeal to creative editing is advisable focused with content updates. At this point, they benefit from the power of TV and digital, do not interrupt their advertising communication processes and investments, go to collective advertisements that will involve the consumer in the process, acting with a sense of unity and solidarity in the balance between advertisers-advertising agencies-media, business models of all parties in the advertising industry, recruitment and internship. It is important that they be prepared for changes and possible crises in the relevant issues (Öztürk, 2020: p. 2). It can be said that corporate brands include corporate-based information in their messages they spread through social media. İsmail Erkan (2020: p. 585) stated that advertisements with the theme of unity, solidarity and motivation are a glimmer of hope for some of the consumers and make them feel that they are not alone; however, it shows that it is found artificial and perceived as emotional exploitation by some consumers. It is understood that such ads do not change the brand preferences of consumers, but concrete ads that contribute to the fight against the epidemic play an important role in consumers’ preferences. However, to the existing literature offered understanding about consumer panic behavior without involving the social media channels which can engage the World in a one global society. Therefore, present study offered understanding about social media channels which enhanced social exchange and developed social influence which ultimately enhanced the consumer panic buying (Naeem, 2020: p. 7).

FUTURE RESEARCH AND DIRECTIONS

In the light of the findings obtained from the study in question, some suggestions can be made in order to provide suggestions and guidance for further studies. The importance of communication tools cannot be denied in the ongoing pandemic process. In addition to the dissemination of institution-based information on social media, studies can be conducted to address the role of social media in the dissemination of information regarding the pandemic in personal use practices. In addition, studies can be carried out with analyzes for the comparison of traditional and new media tools and environments under the cultural context regarding message strategies and persuasion tactics.

CONCLUSION

Recently, changes and relative developments have been observed in daily life practices and corporate communication activities in the process that has affected the whole world and is expressed as a pandemic. Undoubtedly, the effect of this process on almost every field is indisputable. Its reflections in areas such as social life, economic sphere, psychological dimension and artistic activities draw attention. Differences are also observed in the daily life practices of people and the communication tools they use. It is possible to say that there is a dramatic increase in the effectiveness and use of social media tools in interpersonal communication processes. It can be said that they are active in interpersonal matters and in matters such as producing and sharing content for the brands they follow. Especially the effectiveness of social media tools in the transmission and dissemination of information about the pandemic is remarkable. On the other hand, the existence and sharing of such information reveals a separate situation. Therefore, it is necessary to pay attention to disinformation and misinformation issues in such a vital issue. It is of great importance that people pay attention to the source of information shared about the pandemic. It can be said that the global SARS-CoV-2 pandemic provides an opportunity for new researches and trends in terms of public health, education, changes in personal and institutional practices and social media communication (Zeemering, 2020: p. 1).

On the other hand, communication activities of institutions and messages regarding the pandemic are observed in this process. The effectiveness of social media as a means of communication is important for corporate brands / institutions as well as personal. Social media takes its place as a very important communication tool in establishing effective communication and interaction with the target audience / followers of the institutions. In this period, it is seen that information and social messages about the pandemic were produced and spread in terms of institutions. It can be said that social media tools are used effectively to convey these messages to the target audience. During the Covid-19 outbreak, in social advertisements that mediate the desired attitude / behavior change such as social distance and staying at home; different attractions, creative strategies and tactics are used. In addition, for-profit businesses had to publish versatile advertisements that both gave social messages and promoted products and services during the epidemic process (Cılızoğlu, Dondurucu & Çetinkaya, 2020: p. 280). In the ongoing pandemic process, it can be said that the followers' use of social media and social media platforms have also changed. The contents and shares in social media tools are different. This change can be evaluated mostly within the framework of togetherness messages, messages directing to spend time at home and information messages about the pandemic.

It can be said that the focus of personal life practices and corporate communication processes have also changed and evolved during this pandemic that has emerged recently and is still ongoing. Generally, it can be said that there is an evolution and change towards social media tools and digital platforms in most of the practices. It can be said that social media tools are positioned as a very effective communication tool in interpersonal communication processes and target audience / follower communication processes. It is observed that institutions effectively use social media to convey and spread information about themselves and the pandemic to the target audience. In addition, it can be said that social media is an important communication tool in creating and maintaining interaction with the target audience / followers.

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KEY TERMS AND DEFINITIONS

Brand Communication: It is the communication process that brands realize with their target audiences and include brand values.

Brand Engagement: It points to an effective communication process that institutions/brands have with their target audience/followers.

Consumption Motivation: It refers to the motivation of the target audience/followers to consume the product or service.

Corporate Brand: It can be called a name given to brands with corporate core values.

COVID-19: A virus that rapidly spreading and threatened all of the people worldwide. Especially elderly immune compromise people.

Online Engagement: It can be defined as a process that takes place in online environments and expresses the mutually effective communication process.

Pandemic: It can be expressed as the general name given to epidemic diseases that spread and show their effects in a wide area in more than one country or continent in the world.

Social Media: It can be expressed as the communication medium: which is one of the internet-based applications. It is a communication environment where users can create content, share, and socialize without time and place limitations.

Target Group/Followers: It can be expressed as the audience/group that the institution/brand wants to convey its messages and communicates with.

Chapter 16

Media and Public Health in the Context of HIV/AIDS

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ABSTRACT

AIDS (acquired immunodeficiency syndrome) caused by the human immunodeficiency virus (HIV) is one of the deadly epidemics that affected millions of people, especially in poor sub-Saharan Africa. Sexual intercourse is the most important transmission route of HIV. Condom and mutually faithful sexual relationships are accepted as the main methods of protection against HIV risk today. Media is an important tool that informs, enlightens, and affects the public. Scientific studies have revealed that the media has important functions in prevention from HIV. This study focused on the media's role in HIV prevention. Today's media is generally divided into mass media and social media. Exposure to mass media programs about HIV prevention topics generally can help increase HIV/AIDS awareness and reduce risk behaviors. Social media, even if not used sufficiently in countries where HIV is common, has also an important role in informing and educating people about HIV/AIDS, its transmission, and prevention.

INTRODUCTION

Epidemics have threatened public health from past to present. AIDS (Acquired Immunodeficiency Syndrome) caused by the Human Immunodeficiency Virus (HIV) is one of the deadly epidemics that affected millions, especially the poor sub-Saharan African people. HIV/AIDS is fatal in many African countries, while in some other developed countries it is seen only as a chronic disease. While the medicines developed in recent years have greatly reduced deaths in developed countries, deaths from AIDS continue in regions without access to this kind of medicines. Unprotected sexual intercourse, anal sex, using the infected injection, drug and alcohol use before or during sexual intercourse that reduces the possibility of using condoms, sexual concurrency, starting sexuality at an early age, and infected blood transfusion are among the main routes and risk behaviors in the spread of HIV. Regular use of condoms and mutually faithful sexual relationships greatly reduces risk of HIV transmission. However, sometimes

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people may not avoid risky behavior even if they know about the risk. Here it should be taken into account other psychological and social variables such as self-efficacy, socio-economic level, and the need for sensation seeking also affect the behavior of individuals.

There are great differences in the spread of HIV by country, region, and economic situation of the household and country. While HIV is mostly transmitted through homosexual relationships in North America and drug addiction in Russia, in sub-Saharan Africa, it is generally transmitted by heterosexual relationship. People living with HIV/AIDS and dying from the illness are generally poor individuals living in countries and regions with lower socio-economic levels. Those people are unable to access essential medicines and or do not know protection methods. For example, people living in sub-Saharan Africa or blacks in the United States of America (USA).

When HIV/AIDS were first introduced in 1985, it was understood as an illness that only affects homosexuals. Over time, it has been determined that this epidemic can affect everyone living in the community. As the Chinese researcher noted HIV/AIDS has evolved in China from a disease of “the other”—foreigners, minorities, and the rural, peripheral, disadvantaged and vulnerable groups of people—to an epidemic that threatens the general population (Yu, 2012).

Media is one of the important tools that inform, enlighten and affect the public. Scientific studies have revealed that the media has important functions in prevention by providing information from this epidemic. Media is sometimes used to frighten people. Health news is often given in exaggerated ways to arouse people’s attention and avoid risky behavior. Lack of knowledge about how HIV spreads is being eliminated to a large extent through the media. Especially in recent years, it has become very easy to reach the media as a result of the spread of the internet. While young people generally access information about AIDS on social media, older people try to access information on mass media via internet, print media, TV or radio.

The mass media reach millions of people, but they are more likely to reach persons of better socio-economic and educational status, and those more active in the community activities than those of lowest socioeconomic status, education, and participation in community affairs. As stated by the authors, the major concern in teaching prevention methods is not one of reaching all people but rather of reaching the desired audience (Griffiths and Knutson, 1960, p.516). The desired target group for HIV/AIDS is undoubtedly the group with a tendency to take risky sexual behavior, those who have had sexual intercourse with the effects of drugs and alcohol, and those who have unprotected intercourse without using condoms

While many news in the media help protect individuals from HIV, some of them can cause a stigmatization to those living with HIV. The purpose of this study is to explain the role of the media in HIV prevention. In this part of the book, firstly, how news about HIV/AIDS appears in the media was explained. Then, the role of mass media in HIV protection, one of the most important sources, was evaluated. At the end of the chapter, the role of social media, which has become widespread among young people in recent years, in protection from HIV was summarized. Due to the lack of sufficient literature on the treatment of people living with HIV/AIDS and the effectiveness of providing social support to these individuals through the media, this area was not included in the chapter.

1. Media Coverage of HIV/AIDS

HIV/AIDS can be displayed in different ways in the media. There are studies on how the media coverage of HIV/AIDS news in different countries changed over time. After giving examples of research related

to the subject, the studies will be tried to be interpreted. Starting from countries and regions where HIV/AIDS rate is high.

Studies on the media frame have reached different results. Media frame can be defined as the point of view used when reporting news. A Kenyan study examined the most prevalent HIV frame in the country's media: valence, the action frame, victim frame, severity of HIV/AIDS in Kenya, and causes, solutions and beliefs about who is at risk, in the nation newspapers between the years 2011 and 2015. Findings show that the action frame and victim frame were the most prevalent both appearing in 61% of articles. Most of the articles taken as a sample showed positive valence making up 52.5% of the articles. The severity of HIV causes and solutions frame appeared in 36.3% of the articles. The group of people who believed to be most at risks consists of infants and children, men, gay/lesbian people and drug users, prostitutes or women (Kiptinness and Kiwanuka-Tondo, 2019, p.6).

Other researchers evaluated HIV/AIDS coverage by Ugandan press from 2000 to 2004 and found curative medicine as the most prominent issue frame. Interestingly, higher-risk behavior was the least prominent issue frame overall (Kiwanuka-Tondo et al., 2012, p.361). Bolivian media framed people with HIV as faceless, and the constructions of risk groups fuelled stigma and blame in the early years of the HIV/AIDS epidemic. In subsequent years, researchers have detected that activism helped mediate the health inequities perpetuated by earlier discourses of blame (Heckert, Wright et.al., 2019, p.415).

Another study in Africa, where HIV/AIDS rate is very high, during a 17-year period (1981–1997), HIV/AIDS, a stigmal disease in Africa, dominated the coverage of the Sub-Saharan African popular magazines and medical journals from the early to the mid-1990s. Unlike medical journals, in popular magazines, AIDS was framed as a homosexual, deadly, and lethal disease (Pratt et al., 2002, p.889). Another interesting finding in South African newspapers was that media representations reflect narrow understandings of HIV/AIDS as a mainly medical problem (Campbell and Gibbs, 2008). In Lesotho, one of the African countries where HIV/AIDS are dramatically increasing, the researcher stated that the high level of HIV/AIDS media coverage is most likely the result of a dedicated media corporations and continuous efforts by political leaders to keep HIV/AIDS on the agenda (Strand, 2010, p.231).

The relevant studies outside Africa are as follows: Lupton argued that (1998) HIV/AIDS has defined as a medical problem, rather than a public health problem, and affecting gay men rather than the general population in Australian press in middle of the 1995 (Lupton, 1998, p.33). Jung (2013) analyzed the Korean Integrated Newspaper Database articles containing “AIDS” or “HIV” over 5 years from 2005 to 2010, and found 6 following frames: AIDS/support, accident, human rights, risk, prevention, and biomedicine.

The following results have been obtained from studies in China. Gao et al. found that (2013, p.1174) coverage rates of HIV/AIDS in newspapers remained low between 2000 and 2010. The sources focused primarily on prevention methods (23.7%), development of a cure or vaccine (21.2%), and education and awareness (17.2%). Totally, more articles were classified positive than negative from 2002 to 2010. Findings reportedly pointed to the HIV/AIDS news-reporting pattern has shifted in the past decade, with more news stories uncovering information about prevention or treatment. Researchers found coverage of HIV/AIDS insufficient.

As a result, it seems that different media frames were used on HIV/AIDS in the media of different countries and these frames could possibly have changed over time. While HIV/AIDS was featured in the media as a homosexual disease in the past, it has become better understood over time and main rote of transmission has been underlined in the media that is sexual relations. The media coverage of HIV/AIDS only as a medical problem and not including other important variables such as psychological, social

and economic factors are not a positive development in terms of individual and public health. Broader coverage of the issue in the media will contribute to the solution of the problem. While the subject of the handling of HIV/AIDS in the media ends here, in the next subsection, the role and influence of mass media on HIV/AIDS has been evaluated.

2. The Role and Influence of Mass Media on HIV/AIDS

Mass media can help protect individuals by increasing their knowledge about HIV/AIDS, may also affect the negative attitudes and behaviors of individuals towards those living with HIV/AIDS. First of all, how effective mass media in informing the public and individuals' sources of information on HIV/AIDS was summarized below.

Researchers pointed out that education and mass media are particularly effective in reducing myths and stigma about those living with HIV/AIDS in rural Pakistan (Iqbal et al., 2019). Similar to previous findings, it was found in India that married women with higher education, higher income levels, more media followers, and those who know the subject of condoms have higher HIV/AIDS knowledge (Chatterjee, 1999). In a Malaysian and Cameroon studies, health professionals and media organizations were the most preferred sources of information on HIV/AIDS by citizens (Sern and Zanuddin, 2015; Tandi et al., 2018).

Information obtained from small media, friends and acquaintances related to HIV/AIDS was found to be associated to asking partners about their HIV status (Hormes and Theall, 2013). In the study, which examined the detailed knowledge level of Ethiopian women aged 15-49 on HIV/AIDS, it was concluded that highly educated and wealthy women, mobile phone users and TV watchers had more detailed information about HIV/AIDS (Agegnehu et al., 2020).

As a result of the study covering the years 2012-2013, which measured the knowledge of married Pakistani women on HIV/AIDS; it was found that 42% of women heard about HIV/AIDS at least once. Another important finding in the same study is that 55% of these women who have knowledge about HIV/AIDS have positive attitudes about AIDS patients (Iqbal et al., 2019).

In the study in which the knowledge of women living in rural Nigeria, which is one of the African countries with a high HIV/AIDS rate, on HIV/AIDS was measured, young girls were informed mostly from TV, while women were generally informed from their relatives and friends (Nwagwu, 2008). In a study comparing the knowledge of rural and urban residents on HIV/AIDS in Ethiopia, it was argued that large differences occurred between regions and that the media had no effect on increasing the knowledge of rural residents and additionally put these people in a disadvantaged position (Bekalu and Eggermont, 2013).

Media impact on HIV/AIDS is not the same in all countries. In a Pakistani study, it was found that TV was not effective in raising awareness and reducing misunderstandings on HIV/AIDS among individuals, although it was widely watched in the country (Zia, 2016). Although a large amount of information on HIV/AIDS was obtained from mass media in a survey conducted in rural areas of the USA, it was not found to be associated with risk and protection behaviors (Hormes and Theall, 2013). Studies on the effects of mass media in the context of prevention from HIV/AIDS are summarized below.

Mass media has been shown to be an effective tool in the context of HIV prevention. Studies have reported that entertaining and educational mass media campaigns lead to a reduction in risky sexual behavior. Although TV dramas are said to be the most expensive media program, it has been disclosed in studies in the North India that they are the programs most effective in reducing risky sexual behav-

ior (Sood and Nambiar, 2006). Another Indian study linked partner violence in intimate relationships with HIV. Women in Indian society are expected to obey their men that are consistent with femininity. The aggression of men and the use of violence against women have been supported by the films in the media, making it a social norm (Khan et al., 2020). We can conclude that gender roles also contribute to the problem in India.

In a study with broad participation in sub-Saharan African countries covering the years 2004-2010, researchers found a positive and strong association between education and wealth and HIV/AIDS awareness. Besides they found strong links between ways of HIV transmission, prevention from HIV and using condoms (Jung et al., 2013). Studies also showed that male circumcision reduces the risk of HIV transmission. Another study in the same region of Africa examining how male circumcision for the prevention of HIV/AIDS was covered in print newspapers, found that 56% of these newspapers handled the circumcision with a positive perspective (Wang et al., 2009).

Advertising messages used in mass media can be effective in persuading individuals and changing their behavior. A study in Kenya investigated the effects of advertising messages on variables such as self-efficacy, perception of personal risk, and possession of condom in sexually active individuals aged 15-39. Individuals exposed to brand advertising messages found themselves at greater risk and recognized that AIDS is a serious disease. Researchers also found that individuals exposed to generic advertising messages were less frequently associated them with positive health beliefs (Agha, 2003). Finally, the relationship of mass media with HIV/AIDS stigmatizing behavior was summarized below.

Stigmatizing associated with HIV/AIDS is one of the major health problems and media are used to reduce this problem. In a study of women in Ghana, a negative correlation was found between the frequency of exposure to mass media and stigmatizing for HIV/AIDS. Therefore, it was underlined that the knowledge of Ghanaian women about HIV/AIDS should be increased through mass media (Asamoah et al., 2017). A similar result was reached in a study conducted with supermarket workers in China, and it was concluded that informing employees about HIV/AIDS through mass media reduces stigmatizing of those living with HIV/AIDS (Li et al., 2009).

In the study investigating the effect of stigmatizing as AIDS patient on HIV testing in Zimbabwe, it was determined that women were tested for HIV more than men. In addition, the study revealed that exposure to mass media; using condoms, religion and education increased the likelihood of HIV testing (Sambisa et al., 2010). In Malawi, another African country, the effect of a radio program titled “radio diaries” on HIV-related stigmatizing was researched. In the flow of the program, individuals living with HIV described their daily lives. Researchers stated that four stigma outcomes which were fear of casual contact, shame, blame, willingness to disclose HIV status partially were reduced by the radio show (Creel et al., 2011, p.456).

In the study examining the knowledge of women between the ages of 15-49 living in Ethiopia and stigmatizing those living with HIV, it was found that the more educated and those who follow the media stigmatize and discriminate these people living with HIV less (Gurmu and Etana, 2015). In the Hong Kong study, it was determined that three variables were effective in stigmatizing people living with HIV, one of which was not knowing HIV sufficiently (individual level), the other was social discrimination (interpersonal level), and the other was mass media (social level) (Phoenix and Charlson, 2017, p.943).

As a result, studies have generally achieved the informative effect of the mass media on HIV/AIDS and directing the use of condoms as the main method of protection. However, this effect seems to be weaker especially in rural areas. Another important feature of the studies is that they were generally conducted

on women and young girls and in African countries, where HIV/AIDS are most prevalent. While mass media issue ends here, the effect of social media was examined in the next subsection.

3. The Role and Influence of Social Media on HIV/AIDS

Social media has turned into a social support platform in the last 15 years. It is widely used especially in developed Western countries and Far East Asian countries. Due to technological and economic impossibilities, social media is not commonly used in African countries where HIV/AIDS is pervasive and an important public health problem. Compared to mass media, academic studies on the social media are more limited.

Social media is related to prevention and treatment aspects of HIV/AIDS in addition to informing individuals about HIV/AIDS. A common point of the studies on the subject is that most of the studies have been conducted on the HIV risk of men who have sex with men, one of the most vulnerable groups. These studies were briefly reviewed below.

According to researchers, advantages of the Internet interventions include the potential for consistency in delivering an intervention, the potential low cost once developed, and the ability to spread it to a wider population (Muessig et al., 2015, p.186). Significant findings have been obtained in the digital media intervention for HIV prevention with men who have sex with men in the USA. In the study, two web pages and two videos with information about HIV prevention were shown to the experimental groups. As a result of the study, a comparison was made with the control group. Low-cost digital media intervention has been evaluated by researchers to be functional in high-risk individuals in reducing sexual HIV risk (Hirshfield et al., 2012). Similarly, in another study in the same country with young men who have sex with men, a live social media chat intervention was used to reduce HIV risk, resulting in a reduction in anal sex without condom, as well as in alcohol and drug use in pre and post experimental design (Lelutio-Weinberger et al., 215).

Another interesting study was made using Facebook, one of the main social media platforms, and it was tried peer-led HIV prevention methods to men of African descent and Latino minority living in United States who have sex with men. In order to carry out the study, peer groups with social media experience were reached by the researchers. In addition to the interactive social media-based HIV prevention methods, communication methods in the education of peer leaders and basic information on HIV/AIDS constituted the content of the training (Jaganath et al., 2012, p.593). In the literature review study using new digital media to protect the sexual health of adolescents between the ages of 13-24, studies in the USA were generally included. Researchers found that some digital media-based intervention studies significantly delayed the age of onset of sexuality in adolescents, as well as the majority of the studies affecting the self-efficacy of adolescents for using condoms (Guse et al., 2012, p.535).

To summarize, studies on HIV/AIDS prevention are limited due to the introduction of social media and mobile technologies in our lives in recent years. However, the fact that it is easy to reach individuals over the internet, one of the most important reasons that increase the effectiveness of internet media, especially in developed western countries. It will be one of the trend intervention issues to reach individuals at risk of HIV over the internet and implement intervention programs for protection issues in the coming decades.

FUTURE RESEARCH DIRECTIONS

HIV/AIDS will likely continue to be a major health problem in underdeveloped and developing countries for years to come. Intervention programs and research should be conducted directly on individuals and groups at risk of HIV in these countries. In addition to being a medical problem, HIV/AIDS should be considered in a wider context, which also has psychological, social and economic aspects. Care should be taken to prepare programs considering the culture and socio-economic level of the countries in the interventions aimed at reducing the HIV risk in these countries. Intervention programs and research should be developed by taking into account the culture of the countries and groups.

Media can also inform those living with HIV/AIDS about what they should or should not do, making it easier for them to comply with medical treatment. Apart from that, in the context of providing psychological and social support, those living with HIV/AIDS can strengthen their immune systems by receiving significant support through the media. However, there is a lack of scientific studies on how effective the media are in treating AIDS patients and facilitating the adaptation of those living with HIV. Therefore, it is necessary to increase the scientific studies related to the subject in the future in order to reveal the effect of the media on the treatment.

CONCLUSION

AIDS is an important public health problem, affecting the whole world which has no definitive cure today. Media is an important tool that enlightens individuals, brings information to the attention of individuals and societies, and thus helps them protect themselves. The appearance of information on HIV/AIDS in the media has changed over time. While HIV/AIDS was featured in the media as a homosexual disease in the past, it has been demonstrated that there is more or less HIV risk in all kinds of sexual relationships without using condom. On the other hand, showing HIV/AIDS as a medical problem in the media of some countries and not mentioning its social, economic and psychological aspects is not seen as a positive development. Therefore, broader coverage of the issue in the media will contribute to the solution of the issue.

Scientific studies have showed that the media has important functions in prevention from HIV. Generally speaking, the effectiveness of mass media is directly related to the ability to reach individuals in the risk group who need information related to HIV prevention methods. This risk group may be represented by homosexual men in North America, while heterosexual young women in sub-Saharan African countries where AIDS takes the most lives in the world. Today's media is generally divided into classic media that is mass media and new media, in other words social and digital media. Although there are many studies on mass media, there are fewer academic studies on the effectiveness of social media in HIV prevention because of its relatively recent nature. Academic studies related to topic have also been conducted more on women and younger individuals.

Individuals living in western countries benefit the most from the media in terms of protection from HIV/AIDS, and media has less impact on underdeveloped countries, poor and rural residents. The best example of the economic aspect of HIV/AIDS is that the mortality rate due to this disease in underdeveloped and developing countries is much higher than in developed countries. In this context, economic and social inequality not only affects deaths rate from AIDS, but also stands before us as one of the important factors on the effectiveness of the media. Producing projects to reduce socio-economic

inequality in less developed countries and rural parts of the countries would be a positive development for future HIV prevention, treatment for AIDS, and effectiveness of the media.

Although the scientific literature generally provides research on the methods of protection from HIV/AIDS and how effective it is, it is seen that it does not give enough information about its effect in the treatment of HIV/AIDS patients. When HIV/AIDS was first defined, it was introduced as a very scary disease in the media and this image has taken place in the memory of individuals to a large extent. Perhaps for this reason, the media does not give enough coverage to those living with HIV/AIDS when discussing protection methods. One of the things that people living with HIV/AIDS need most is social support. It will be an important step for the media to be effective in supporting individuals living with HIV/AIDS, especially in individualistic western societies.

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KEY TERMS AND DEFINITIONS

AIDS: Acquired immunodeficiency syndrome is a chronic, potentially life-threatening condition caused by the human immunodeficiency virus (HIV). By damaging your immune system, HIV interferes with your body's ability to fight infection and disease.

HIV: Human immunodeficiency virus is a virus that attacks the body's immune system. If HIV is not treated, it can lead to AIDS (acquired immunodeficiency syndrome). There is currently no effective cure. Once people get HIV, they have it for life. But with proper medical care, HIV can be controlled.

Homosexuality: Homosexuality is romantic attraction, sexual attraction, or sexual behavior between members of the same sex or gender. As a sexual orientation, homosexuality is an enduring pattern of emotional, romantic, and/or sexual attractions to people of the same sex.

Self-Efficacy: It is a person's belief in his or her ability to succeed in a particular situation.

Sexual Concurrency: Sexual concurrency is defined as overlapping sexual partnerships where sexual intercourse with one partner occurs between two acts of intercourse with another partner.

Sexually Transmitted Diseases: Sexually transmitted diseases or sexually transmitted infections are generally acquired by sexual contact. The organisms (bacteria, viruses or parasites) that cause sexually transmitted diseases may pass from person to person in blood, semen, or vaginal and other bodily fluids.

Stigma: Stigma is when someone views you in a negative way because you have a distinguishing characteristic or personal trait that's thought to be, or actually is, a disadvantage (a negative stereotype). Unfortunately, negative attitudes and beliefs toward people who have a mental health condition are common.

Chapter 17

Competitiveness in Medical Tourism: An Evaluation on Kocaeli Medical Tourism Market

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ABSTRACT

For people who want to be healthy, contemporary developments have made it possible to meet this need from other countries. It is the distinctive feature of medical tourism that those who want to be treated outside their own country for various reasons travel for treatment purposes. The aim of this study is to evaluate the medical tourism potential for Kocaeli. For the research, 15 health facilities, including one public university, two public health facilities, and 12 private health facilities which have deserved Health Tourism Certificate, have been determined in Kocaeli. In addition, officials from the accommodation sector and public bureaucracy who are competent, and decision-makers on medical tourism were interviewed. The medical tourism potential of Kocaeli has been determined in terms of competitiveness criteria by analysing the data collected as a result of the interviews. As a result, even if the government puts emphasis on health tourism in Turkey, it has been observed that there isn't enough competitiveness in public hospitals.

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INTRODUCTION

Tourism has a significant share of revenue within the budget of many countries. Medical tourism, which is a sub-branch, also have a rate that will not be underestimated in the share of Tourism. Health tourism has been the focus of attention of governments and investors worldwide with a transaction volume of over 50 billion dollars. When Health Tourism is mentioned, it has become a position containing medicine practices, in other words Medical Practices, except for the wellness tourism (“Selus Per Aqua”), which means “Health coming from water”. Prolongation of human life, increased opportunities to travel, and the fact that people can make health expenditures at a lower cost than their own country are some of the reasons that have increased health tourism (Soysal, 2017). Like other countries, Turkey has evaluated the tourism sector and the health tourism issue within sectors of strategic importance and has tried to develop strategies and policies related to this issue.

In 10th Development Plan (2014-2018) and 11th Development Plan (2019-2023), the development of health tourism in Turkey is targeted and strategies in accordance with this goal are included. The restructuring of health care services with the development of technology has made the information of treatment and the treatment itself which is more inviting in terms of price and quality in our country possible to reach more easily and the health tourism sector has been aimed to expand (KP, 2019).

Medical tourism has been developing rapidly in Turkey. In the past, patients living in developing countries used to go to more developed countries in order to receive better quality health care and benefit from advanced health technologies compared to their own countries. Nowadays, this situation has changed and people are travelling to the developing countries like India, Thailand, Malaysia, Singapore, South Korea, Costa Rica and Mexico because of the fact that the cost of health insurance is high in the developed countries like American and European countries, the coverage of health insurance doesn't cover the cost of some serious illnesses, the time of waiting for treatment is too long. There is also Turkey among these countries. It has been mentioned in lots of national and international publications that Turkey would be a country which could be an important destination in terms of health tourism and the potential and studies that Turkey owns have been exhibited (CNBC, 2014).

Within the scope of the research, the analysis of medical tourism on the World and Turkey scale has been completed. With the survey study having been completed, the evaluation of the significance level of global competitiveness components which have been customized according to health tourism and the case study of Turkey and Kocaeli in terms of this significance level has been completed. At the end of the study, the results of the study and the recommendations have been supplied.

CONCEPTUAL FRAMEWORK, DEFINITIONS AND CONCEPTS

Medical tourism which consists of combination of medicine and tourism activities is defined as the patient's inability to meet his/her health need in his/her own country for various reasons and going to another country for treatment as a result. While the ones with good economic conditions were going to developed countries to meet their health needs in the past, health tourism has turned towards to developing countries in recent years with these countries' improving themselves on a competitive level in terms of medicine and technology (Barca, Akdeve & Balay, 2013, p. 103).

Tourism activities of human beings have gained momentum with the development of communication and technology, and the ease and possibility of transportation to wherever desired. After the II. World

War to which a lot of countries were party, the tourism sector were considered as a serious source of income by many countries and a lot of counties turned towards investing in tourism sector (Yıldız and Kalağan, 2008, p. 42). The dominance of mass production and consumption understanding all over the world contributed to the rapid development of this sector by increasing the demand for tourism (Weaver & Lawton, 2010, p. 253).

Medical Tourism in the World and Turkey

Medical tourism is not only made up of medical diagnosis, treatment and rehabilitation implementations but also needs a multidisciplinary perspective in terms of promotion, hotel management, agentship, environment, architecture and economy etc. Medical tourism can be defined as people's traveling to a country other than the one in which they live in order to receive any treatment application within the scope of surgery, medical or dentistry (Harahsheh, 2002, pp. 23-24).

It is seen that the new medical tourism trend is quite different from the traditional trend. Although economically and technologically developed countries such as America, Germany, England and Canada attract some rich medical tourists, it is seen that the direction of medical tourist movement is directed from Europe to Asia, that is, from developed countries to developing countries. Nowadays, the Far East countries like India, Malaysia and Singapore come into prominence on medical tourism as they are advantageous in terms of price and serve a service of good quality. The countries like Turkey, Jordan, Israel and Iran from the Middle East and South Africa from Africa have been the centre of medical tourists' attraction and lots of countries are looking for ways to enter medical tourism sector or increase their competitiveness power in the sector.

The developments encountered in the health technologies, easier transportation and communication between countries make it more accessible for people to have health service in another country and extend tourism movements focused on health. The gradual increase in the elderly population worldwide, especially in developed European countries, and the serious differences in treatment costs from country to country accelerate the development of health tourism. In countries such as the Netherlands and Canada, long waiting queues for treatment (Özsarı & Karatana, 2013, p. 141), as well as the cheapening of transport costs with the diversification and dissemination of means of transport are among the factors that contribute to the development of medical tourism

Asian continent is one of the most important regions for medical tourism in the World. While medical tourism in Southeast Asia grows in parallel with the development of the private sector, it is considered as a lucrative business opportunity for entrepreneurs and a catalyst factor in the development of countries (Pocock & Phua, 2011, p. 1). India is considered as the centre of medical tourism today. The country has renewed its technology to become a global centre in terms of health tourism, has adopted medical practices with European origins by internalizing it, and has created a rapid treatment process that can be offered at reasonable prices. Well-trained and experienced doctors having international experience and can speak English have an important share in this success. While the widespread use of English in India is an advantage for this country, special translators are employed for foreign patients in different languages and cultures in big hospital chains (İçöz, 2009, p. 2263).

Looking at other countries, Singapore is known for its advanced medical applications such as neurosurgery, cardiovascular surgery, stem cell procedures and joint replacement therapy, Thailand is known for its plastic surgery and sex reassignment operations, which are prohibited or have no legal infrastructure in many countries, and Malaysia is known for heart and aesthetic operations Thailand attracts

more health tourists from the USA, Japan, England, South Asia, Middle East countries and ASEAN member countries, while Singapore attracts more health tourists from Indonesia, Malaysia and Middle East countries, and Malaysia attracts more health tourists from Japan, India, Indonesia, Singapore and European countries (Pocock & Phua, 2011, p. 7). The widespread use of English in countries such as India, Thailand, Singapore and Malaysia have made significant contributions to the development of medical tourism in these countries. There are translators in 15 languages working at Phuket Hospital in Thailand, 70 professional translators and 200 U.S.A. certified surgeons working at Bumrungrad Hospital in Bangkok (İçöz, 2009, p. 2264).

The developing health tourism sector affects health education, pointing to new education programs and new investment areas such as health management, health tourism-focused undergraduate and graduate programs, field-specific nursing and caregiver training programs. Proliferation of medical tourism which is mutually interacted with innovation and R&D, the usage of medical devices and also R&D activities related to this constitutes an important market potential. The health insurance sector is also directly affected by the developments in medical tourism and renews itself according to international norms. Nursing at home, aged-home care and disabled care services also develop parallel to the development of medical tourism and this situation offers the investors new opportunities on this field (Ekonomistler Platformu, 2012, p. 10).

As in many goods and services, the price factor is one of the main competitive factors in health services. The prominent countries in medical tourism serves a service of good quality as well as try to attract price sensitive patients on treatment services by using price advantage as a competition factor.

Turkey competes in the field of medical tourism with price advantage and tries to increase its share in the market. It can be seen in the price comparison which has been done among Turkey, America, Germany, England, Singapore and Taiwan that the lowest priced operations with the price of 11.375-15.000 dollars for bypass operations are done in Turkey. Turkey is in the most attractive country position on spinal fusion operations with 7.125 dollars after Taiwan and Thailand (Ekonomistler Platformu, 2012, p. 19).

Treatments that stand out in medical tourism can be grouped into nine groups. These are (SB, 2010, p. 31);

1. Cosmetic surgery (Aesthetic surgery, breast augmentation-reduction, face operations, body contouring and liposuction)
2. Dental Operations (Cosmetic Dental Operations, Dental Treatment and Dental Prosthesis Applications)
3. Cardiology and Cardiac Surgery (By-pass operations, heart valve replacement, coronary angiography, coronary angioplasty, stent placement, stem cell therapy for heart failure)
4. Orthopaedic Surgery (Hip replacement, knee replacement, joint operations, Arthroscopic Operations, Disc Replacement and Lumbar Hernia Operations)
5. Organ and Tissue Transplantation (Kidney and Liver Transplantation, Stem Cell, Heart Failure Operations, Neurological diseases)
6. Obesity Treatment (Gastric bypass, Gastric banding)
7. Sex Operations and Infertility Treatment
8. Eye Surgery
9. Diagnosis and Check-up.

Competitiveness in Medical Tourism

According to the research conducted by SB, 11% of foreign patients coming to Turkey are treated in the field of eye, 8% in orthopaedics and 5% in cardiology (SB, 2013:45). Treatment costs vary from country to country and the table below provides information about some treatments and their fees for 2019 (Kaya, 2019).

Table 1. International Price Comparison in Medical Tourism

The Name of Treatment	Price in Turkey Euro	Other
Hair Transplantation	1.300-1900	England 4.500-8.000 Sterling
Nose Remodelling / Rhinoplasty	2.100-3.500	USA 8.500-12.000 Dollar
Liposuction	1.700-3.800	England 6.700-16.000 Sterling
Lasik Surgery	1.100-1.900	Holland 2.800-4.500 Euro
Breast Implant	2.300-3.400	Romania 5.200-7.800 Euro
Dental Implant(Per Tooth)	450-800	Germany 1.600-2.800 Euro

The Development of Medical Tourism in Turkey and Assessment of the Current Situation

Although Turkey is considered new in the field of medical tourism, the number of health tourists coming to the country has increased significantly as Turkey has kept up with technological developments, paid attention to and increased quality standards in health.

Turkey is shown among the most institutional, most experienced and high-quality service providing countries which offer service in medical tourism sector as well as the countries like India, Malaysia, Brazil, Thailand and Brazil (Connell, 2010, p. 96). In the last 20 years, by making significant improvements in health, Turkey has started to compete with the most successful countries in the field of health tourism in the world, such as India, Malaysia, Thailand and Hungary. In order to make use of the opportunities which health tourism has created and to be able to increase its contribution which it will provide on the economy to the highest level, a series of innovations devoted to the increase of the quality of health services has been performed and new investments have been made in lots of cities particularly in the big ones (Ekonomistler Platformu, 2012, p. 15).

Public investments and modern technological equipment of private sector has increased the --quality of the national health services and has contributed Turkey to proceed fast on the way of being a global player on medical tourism. Within the scope of the “Health Transformation Program” carried out by the Ministry of Health, it is aimed to provide citizens with an affordable and quality health service on one hand, and on the other hand, to increase the contribution of the tourism sector to the economy by reaching medical tourists. In the Ninth Development Plan (2013-2017), the subject of improvement in the health system, and in the Tenth Development Plan (2014-2018), the issue of developing health tourism was given a wide coverage and it has been included as one of the important goals in the Strategic Action Plan. As for the Eleventh Development Plan (2019-2023), it has been aimed to provide the integration of medical tourism with both thermal tourism and elderly and rehabilitation tourism as well.

In Turkey, it is observed that mostly the treatments like hair transplantation, eye surgeries, plastic and aesthetic surgery, check-up, ear-nose-throat operations, dialysis, cardiovascular surgery, orthopaedics,

dens, gynaecology, neurosurgery, in vitro fertilization, cancer treatments, dermatologic diseases, physical therapy and rehabilitation are at the forefront as medical tourism activities (Woodman, 2014, pp. 73-79; Gülmez, 2013, p. 152). When Turkey is evaluated in terms of “Medical Tourism”, it is seen that its promotion and marketing side is considerably weak (Kılınç, 2017).

COMPETITIVENESS AND COMPETITIVE CRITERION IN HEALTH TOURISM

By examining the factors in Porter’s Diamond Model, Ritchie and Crouch’s Conceptual Competition Model of Tourism, Dwyer and Kim’s Integrated Competition Model, health tourism competition criteria have been classified as follows:

Human Capital and Education Factor: Human Capital is simply the sum of the knowledge and skills of a country’s workforce (Koç, 2013, p. 242) This concept has gained importance after the 1960s as an important element of economic development, its importance has increased in the process of growth and development as knowledge and technology-oriented production became widespread, it has become building block for sectorial and national competition (Koç, 2013, p. 241). An econometric study was conducted by taking the 2012 data of 27 European Union member countries using the cross-section method of the interaction between human capital and economic development (Koç, 2013) and economic growth has also been found to be positively affected by the improvement in human capital variables in EU countries (Koç, 2013, p. 256). Healthcare is a service sector that depends on technology and human resources. Patients’ demand for better services, the use of high technology in the sector, the increase in the weight of private enterprises and global competition have caused health services to become more complicated. As in the world-wide, the level of specialization in health services is high in Turkey (Marşap et al., 2010, p. 34).

Efficiency, Price and Cost Factor

Effective use of resources is essential for a company to be long-lived and compete in the global market. Price, cost and efficiency factors are closely related, affect and change each other. Putting out the basic principles of scientific management, Taylor focused on how to organize production with the least cost and labour. Accordingly, for an efficient and effective production model, it should be known how to benefit from the energy of the employee in the most intelligent way and production organization should be done accordingly (Özer, 2014, p. 56). Turkey, which sets out with the strategy of attracting health tourists from countries with high income levels, is considered as a model country in health tourism (Labonté, 2013, p. 194). Linking long-term competition in medical tourism to the cost of treatment alone will not make it sustainable (Zoltan & Maggi, 2010, p. 2). It is necessary to support the price advantage offered by the country for treatment with auxiliary factors such as quality of service, easy invoicing, ease of transportation, transparent and understandable, easily applicable procedures, post-operative rehabilitation and care services. Medical tourists receive international treatment in general in all-inclusive packages and these packages include diagnosis and treatment, as well as transportation and transfers and accommodation services (Zoltan & Maggi, 2010, p. 2).

Information Technologies and Technological Development

The traditional understanding of development has also changed in today's world, where information is spread rapidly and distances are near with the effect of globalization. The approach that countries that lack financial capital and lack natural resources lag behind has been replaced by the approach that countries that cannot produce up-to-date information and technology and whose human accumulation is weak cannot develop (Demir, 2002, p. 2). Technology, by reducing cost and reinforcing differentiation, affects the company's value chain and contributes to its competitive advantage (Porter, 2010, pp. 117-118). The expansion and development of medical technology and the ease of access to new information positively affect the quality and duration of patient life (TÜBİTAK, 2003, p. 3).

Service Quality, Customer Satisfaction and Trust Factor

With the development of countries, the importance and share of the service sector in the overall economy is increasing. The weight of the service sector in the overall economy in a country is considered a kind of "development criterion". With the introduction of a marketing approach focused on customer satisfaction, organizations operating in the health sector have aimed to increase the quality of Service and increase customer satisfaction by taking various initiatives. Meeting the customer satisfaction by offering a service of good quality is considered as the key to long-term managerial success in healthcare (Yağcı & Duman, 2011, p. 219). Companies and institutions that can correctly perceive customer expectations and provide satisfactory services will have a greater chance of success (Zengin & Erdal, 2000, pp. 45-50).

Other factors that affect the quality of service are the attention of the personnel serving the patient and their willingness to do business, the understanding of helping, the simple and fast delivery of the service. The duration of waiting and treatment time in the treatment services offered by hospitals also affect the level of patient satisfaction. For example, the imbalance between supply and demand in countries such as England, the Netherlands and Canada causes long waiting queues (Özsarı & Karatana, 2013, p. 140) and directs many patients to receive treatment abroad. In a country in the West, an appointment is made for a long period of 18 months to have a knee cap surgery, while the waiting period in India for the same operation is no more than 10 days (İçöz, 2009, p. 2266). In general, the security level of the country, the security level of the target destination, the trust in the facilities and the services which the institutions providing health tourism service in private sector influence the service demand (Ekonomistler Platformu, 2012, pp. 36-37).

Marketing Strategy, Image Management and Branding

The focus and movement point of marketing is the customer. For companies that have to sell more every day and compete fiercely, winning customers and retaining what is earned is a consideration that companies focus on, devote time and money (Demir & Kırdar, 2000, p. 294). Like technology, globalization reaches everywhere in the world and creates an economy in mutual interaction (Kotler et al., 2011, p. 24). With the change of trade and competition conditions, today's companies have turned to customer-oriented applications. All companies determine their own competitive strategies to keep up with the tough competition conditions on a global scale. Some of the enterprises are trying to achieve competitiveness and differentiate from their competitors by following innovations before anyone else while others by focusing on their customers. In order to differentiate, strategies based on brand leadership, product or

service leadership, or customer relationships can be determined. Companies that follow the product leadership strategy, such as Apple, target customers who want the latest technology and products, while companies that position themselves as brand leaders choose to develop strategies that give confidence to their customers (Demir & Kırdar, 2000, p. 298).

Increasing competition in the health and tourism sector, like other sectors, has increased the importance of branding and marketing. In order to get the expected result from marketing activities, there must be a fast and quality service delivery. For this purpose, measuring and estimating the desires and needs of consumers come to the fore. Customer-oriented companies compete with their competitors and increase their preferability by developing products that meet the wishes and needs of people (Gümüş et al., 2014, p. 2). In order for health tourism to be marketed and successful, success stories in the field of Health, the reputation of the doctor, the correct, reliable and timely fulfilment of promised services are of great importance (BAKA, 2013, p. 15). When the demand structure in health tourism is examined, it is seen that patients who will receive treatment abroad usually choose the country or region to be treated first, then the health institution to receive service, and finally the doctor or team to perform the treatment (SB, 2012, p. 60). Successful medical operations, which are also very important in terms of health tourism marketing, contribute to the brand value of the region and the country as well (BAKA, 2014, p. 16).

R&D and Innovation Activities

Innovation will increase the competitiveness of companies by reducing cost and ensuring differentiation. The ability to differentiate depends largely on being able to see tomorrow's expectations from today, shaping strategies by accurately predicting future needs (Gürsu, 2014, p. 56). R&D activities in the health sector are becoming more important for the pharmaceutical industry and medical devices. At the heart of the success of the USA, Western European countries and Japan which are the world leaders in medical device development, the importance given to innovation and supported R&D investments and activities lie (YASED, 2012, p. 46).

State Factor, Legal Legislation and Political Stability

In an experimental study conducted by Gür and Akbulut using the panel data analysis by reviewing the 1986-2003 data of 19 developing countries, a positive relationship was found between political stability and growth. Again, in this study, it was determined that economic growth was negatively affected by political turmoil and conflicts (Gür & Akbulut, 2012, p. 297). Looking at successful countries in health tourism; hospitals in India are audited by international accreditation bodies such as JCI, but are also strictly supervised by state-run top boards. In order to promote health tourism, India gives health tourists, who come to the country for treatment, visa that provides multiple entry-exit opportunities and is valid for 6 months to one year. The Ministry of Tourism of India undertakes the task of promoting and supporting accredited hospitals and health institutions; other public institutions also support the health tourism sector with facilitating legislation and regulations (SB, 2011a, p. 44).

Malaysia, on the other hand, has established a separate health tourism unit within the Ministry of Health and made health tourism a long-term policy. The Malaysian Ministry of Health develops and implements strategic plans for the development of health tourism, and ensures cooperation and partnerships between sector representatives and the state. The Malaysian government accelerates customs procedures, facilitates visa obtaining and extension procedures, and effectively carries out international

promotion and marketing activities through the ministry of health (SB, 2011a, p. 54). Malaysia supports the development of health tourism with tax incentives and exemptions in areas such as hospital construction, medical equipment purchase, healthcare personnel training, marketing, promotional activities and the use of information technologies (Leng, 2007, p. 13).

The health tourism which has become popular in Turkey in recent years was given a place in 2010-2014 Strategic Plan of The Ministry of Health and It has become a state policy by entering the 2023 vision of the Ministry of Health and the 61st Government Program. In the tenth development plan, it was envisaged to diversify and differentiate tourism revenues by strengthening the sectorial infrastructure in tourism; health tourism was emphasized within the diversification of alternative tourism (Kalkınma Bakanlığı, 2013, p. 130). Cooperation between public institutions and private sector has been increasing for the development of health tourism, the radical changes made by the state in the health sector has been strengthening the health system of the country, making it simpler and increasing the accessibility to health services (Ekonomistler Platformu, 2012, pp. 20-21).

Standardization, Accreditation and Audit Factor

Today, standard practice has become widespread in goods and service production methods and techniques, various processes and measurements, and it is seen as an element of quality (Tönük, 2014, p. 255). With standardization, waste of resources in production is prevented and costs are reduced, it protects the interests of the consumer, safety of life and property by raising the level of quality and increases the competitiveness of the manufacturer in the local and global market (Bıyıköğlu, 2008, p. 296).

The quality of the products and services produced in a country is among the factors that determine the development level of the countries (Bıyıköğlu, 2008, p. 296). The indispensable elements of the quality management system needed for quality products and services are standardization, accreditation and audit of these services. The definition of accreditation can be made as the approval of the conformity of a product or service to the standards determined by conformity assessment bodies (Bıyıköğlu, 2008, p. 299).

It is vital that standards in healthcare services are determined and controlled. Each state determines and audits health standards according to its own means. The Joint Commission International (JCI), headquartered in the USA, meets a great deficiency in the field of standardization, quality and control in health services. JCI identifies, measures and shares best practices in patient safety and quality with stakeholders around the World. It offers innovative solutions to improve the performance and output of the health facilities it has accredited. The JCI team works in cooperation with hospitals and other health facilities, health systems, public health organizations, ministries, academic es and businesses to achieve the highest level of performance in patient care (JCI, 2019). Due to the cost of being a service provider with high standards to obtain a JCI Certificate, the high cost of the document and the requirement to be updated every 3 years, it is striking that the number of those who have this certificate is low and the potential to continue is low.

Natural, Cultural Resources and Values

Although natural resources is not the only factor that determines competitive power (Porter, 2010, p. 218), when they are included in production, they are one of the factors that affect competitiveness. Along with the richness of natural resources, proximity to transportation networks, strategic location, population

densities of the region and countries in the vicinity are among the factors that affect the competitiveness in tourism (Bulu and Eraslan, 2008, p. 6). Patients and their relatives coming from different countries and cultures will have various expectations from health institutions. In this case, it is extremely important for businesses and employees operating in health tourism to provide the services they offer in accordance with the needs of patients and to prevent wrong attitudes and behaviours that may be caused by cultural values and ethical perception (SB, 2012, p. 50). In a study on health tourism in Istanbul (Ekonomistler Platformu, 2012, p. 37); geographical proximity, the location of the destination in a Muslim country, and the trust in healthcare professionals were among the reasons for patients to choose Istanbul.

Transport and Communication Infrastructure

Developments in the field of transportation and communication provide a wide range of mobility chance for both goods and services and individuals, and also enable the economic and social integration of the modern world. This interaction and integration in question have an impact on many results, from shaping the supply and demand in the market to economic development (Meçik, 2012, p. 23). Turkey is located on a junction point where three continents intersect. Being a country located at the crossroads gives Turkey the position of being the centre and nodal point in the field of energy, transportation and communication. Along with highway, railway and seaway corridors, the most important transportation options of Asia-Europe connection pass through Anatolian territory. Turkey is located in a location accessible to 52 countries and a population of 800 million by two-hour flight (Ulaştırma Bakanlığı, 2011, p. 34). The fact that Turkey is a close and easily accessible country is a catalyst that supports and improves the development of health tourism.

Relevant and Supporting Institutions

Having supportive institutions and suppliers that can compete on a global scale and produce quality products and services in a sector positively contributes to other sectors where it provides input (Porter, 2010, p. 222). Regional suppliers provide that the sectors they feed into develop new processes and technologies. When the companies that make up the cluster turn the positive effects of geographic proximity into opportunities, costs will decrease and productivity will increase. Efficient flow of information and technical exchange in relevant and supporting sectors accelerates companies' development and helps them gain superiority (Akbaş, 2012, p. 42). As well as the services provided by health care units, the services provided by intermediary institutions, are also important. In Turkey, transportation, food & beverage, insurance, accommodation, counselling and guidance services have also developed inasmuch as health sector. While 52 airports give domestic and international flight service in Turkey, more than 70 airline companies fly to Turkey. The number of passenger traffic of two international airports in Istanbul is 70 million on annual basis (IDA, 2014, p. 10).

Infrastructure, Physical Properties and Technical Equipment

Physical infrastructure and superstructure were evaluated among factor (input) conditions in the "Diamond Model" developed by Porter (Porter, 2010, p. 258), are among the resources that constitute a comparative advantage in the "Destination Competition Model" developed by Ritchie and Crouch (Bahar, 2004, p. 46), in Cho's "Nine Factor Model", which tries to explain national competitiveness, physical factors

were also emphasized and it was considered as one of the most important factors determining competitiveness (Çivi et al., 2008, p. 9).

Physical and institutional infrastructure, technical hardware status is among the external (non-company) factors that determine competitiveness (Türker, 2009, p. 61). Technological infrastructure, information infrastructure, basic infrastructure, technical equipment and accessibility capacities are among the factors of competition outside the firm (Özer, 2007, p. 391) and are mostly shaped by the services provided by the state. The city hospitals project is one of the most important projects in the Turkish health system. It is envisaged that large recreation areas, advanced technology centres, R&D units and social life areas will be located in the same environment as well as health facilities within the huge city hospitals that have started to be built in many provinces with a public-private partnership (SB, 2015a, p. 109). Constructions of the city hospitals have begun to strengthen the medical tourism infrastructure in Turkey (SB, 2019, Date of Access: 01.01.2020).

In Mersin, Yozgat and Kayseri City Hospitals, in-building navigation systems working with the Central Physician Appointment System (MHRS) and Hospital Information Management Systems (HBYS) are used through City Hospitals Information Infrastructure mobile applications. The city hospitals of 2023 in Turkey are seen as the last point in health and services reached. It has been aimed to reach 44,409 beds with 32 city hospitals. 9 of these health facilities have been opened, patient admissions have started and 11 of them are under construction. It has been aimed to establish centres of excellence in cooperation with universities, especially city hospitals, in order to use the country's resources more efficiently and to strengthen the education and research environment as well as specific health services (SB, 2019, pp. 3-19).

Other Competitive Factors

Among the other factors affecting competition in health tourism, the size and proximity of the target market, the demand conditions, the purchasing power and size of the domestic market, the richness of historical, natural and cultural tourism resources, medicinal plants, acupuncture, thermal resources, ozone and leech therapy, alternative and traditional treatment methods such as cupping therapy can be counted. The methods used for treatment in modern medicine and the side effects of synthetic drugs lead people to alternative medicine and natural-herbal solutions and approximately 80% of the world population is trying and using medicinal herbs and traditional treatments to regain their health (Toksoy et al., 2010, p. 623). Alternative medicine and thermal therapy have been scientifically handled in many countries together with modern medical methods (Bookman & Bookman, 2007, p. 14), in Turkey, on the other hand, they have been ignored and haven't been considered important until recently. The humiliation of herbal therapy by doctors and insufficiencies in legislation and supervision have left herbal treatment, traditional and alternative medicine practices to unconscious people who are not authorized and competent.

RESEARCH AIM AND METHODOLOGY

In this section, information about the purpose, importance, constraints and method of the research whose theoretical information has been examined will be given. The questionnaire forms prepared for the research and the data collection process, how the area and sample size were selected have been explained in detail. Quantitative and qualitative evaluations of the data obtained through the survey and interview method have been made.

Theoretical framework was drawn by scanning domestic and foreign sources related to health tourism in Turkey, the process of obtaining permission from the Kocaeli Governorship was initiated for the institutions to be surveyed.

In the research; Survey technique, one of the quantitative approaches, was used as data collection method. In a last question, the evaluation was asked to be made in terms of “private health institution and public institution,” in the last question, an open-ended question was asked.

In the scope of the research; the examination of the development of medical tourism, which is a sub-branch of the health tourism sector, in Turkey in the world, the scrutinising of the competition criteria in medical tourism, Kocaeli’s position in the sector and the determination of strengths and weaknesses of its, the detection of the problems encountered in the sector and solution suggestions have been aimed to be investigated. With the survey organized, the opinion of authorized people with knowledge and voice about the medical tourism in Kocaeli will be evaluated.

As a result of the researches, although we try to narrow the subject as medical tourism for our study, medical tourism and health tourism have been evaluated together in many aspects. For this reason, it is important to examine the health tourism sector sophisticatedly and in detail for medical tourism. The information and findings obtained by examining the health tourism in the scale of Turkey in detail has been aimed to identify the improvement level for medical tourism and to give ideas about the strategies and policies which will be determined to improve the sector by enabling the detection of problems experienced in the field and their solutions. Within the scope of the research, a number of sector representatives such as health and tourism professionals, hospital and hotel managers, public employees and representatives of non-governmental organizations were reached and the opinions of the relevant representatives were received.

Research Design, Population and Sampling

Our research reflects the opinions and thoughts of health institutions that deserve to receive Health Tourism Certificate in Kocaeli, hotel management managers with A class certificate, Kocaeli Tourism Directorate, Kocaeli Tourism Association, knowledgeable and competent officials related to medical tourism as the time is limited.

The questionnaires were delivered face to face to the people who will conduct them. Therefore, other evaluations during the interview have also been helpful in our study.

The universe of the research consists of health facilities in Kocaeli that deserve to receive Health Tourism Certificate, hotels with A Class Certificate, Provincial Tourism Directorate, Tourism Association Management.

There is no agency in Kocaeli that deserves to receive Health Tourism Certificate. The list published on the website of the Health Tourism Department has made it easy to identify the health institutions that deserve to receive the Health Tourism Certificate. However, conducting our social survey took a long time due to the official permission process and legal procedures. There are 15 healthcare facilities in our province that deserve to receive Health Tourism Certificate, and a total of 9 questionnaires from 2 hospitals, one hotel, and tourism authorities could be applied.

Due to the fact that a specific scale prepared previously for the competitiveness of the medical tourism sector could not be reached in the literature review on the subject, the questionnaire form questions were changed and corrected in the framework of the information obtained in the theoretical part of the study and the questionnaire was prepared, questionnaire application was carried out afterwards.

The questionnaire form presented in the annex of the research consists of three main parts. The first part consists of 7 questions for learning demographic information. In the second part, there were 64 questions in 7 main headings to measure the perception of competition criteria for medical tourism. The two questions added later as the third part were intended to take the participant's other thoughts and they also stated their evaluations. The propositions regarding competition criteria in the second part are evaluated under three headings. The participant was asked to score these criteria in three different dimensions. It is coded as "Firstly, (Column A), they were asked to rate how important this score is in terms of medical tourism from a minimum of 1 (not important at all) to a maximum of 10 (very important), secondly (Column B), they were asked to rate how many of the points which they have given to the relevant criteria Turkey deserves, thirdly (Column C) how many of the points which they have given to the relevant criteria Kocaeli deserves. For Columns B and C, it will be scored from a minimum of 1 (not meeting at all) to a maximum of 10 (meeting all), Column B and C score will not be higher than Column A score. "

The survey was conducted with medical tourism unit managers in hospitals, senior managers related to the subject, doctors serving within the scope of medical tourism, hotel managers, Tourism Provincial Manager and Kocaeli Tourism Association managers.

Research Findings

In 2002, Turkey put into practice "Health Transformation Program", set and implemented many policies which are both structural and functional in the health sector. Developments such as increasing the number of hospitals and beds, improving emergency healthcare services, renewing and increasing the number of medical imaging and treatment devices such as MR, CT, X-Ray, strengthening the technological infrastructure, modernizing the automation of patient registration and drug processes have increased the quality of health as a state policy (Ozan, 2015; Kaya, 2015).

Turkey has been rapidly increasing its competitiveness against Europe's aging facilities and equipment under favour of renewed health equipment by the new health institutions which have constructed by private and public sectors (Ozan, 2015). The accomplishment of successful policies in health and the success of physicians make a significant contribution to health tourism (Kaya, 2015).

In terms of human resources, the education and experience of physicians is generally sufficient; however, it is stated that doctors, nurses and other healthcare personnel have insufficient knowledge and use of foreign languages (Ozan, 2015). The foreign language issue is tried to be solved with an interpreter in many hospitals, this practice decreases the quality of communication between the patient and the doctor, leads to incorrect applications in diagnosis and treatment, and increases costs. The patient, who communicates through an interpreter, feels insecure without interpretation; Emergency situation and thought of not being able to reach interpreter make patients uncomfortable (Alzuru, 2015).

In order to eliminate the lack of intermediate staff in the sector, applied training programs should be developed and implemented in cooperation with relevant ministries, universities, professional organizations and companies operating in the sector (Kaya, 2015).

The geographical location of Turkey, its being accessible easily and in a short time from many countries by plane, its ability to offer a variety of high quality health care services at affordable prices and its availability to offer its cultural and touristic wealth while marketing services are among the existing cultural and offer the tourist wealth of health tourism in one of the advantageous aspects that Turkey has in health tourism (Alzuru, 2015). Turkey's natural and historical beauties and climate, cultural and

commercial interaction with European countries, modernized accommodation and health care facilities, the compatibility of health system with European health system can be counted among other advantageous aspects of the country (Ozan, 2015).

Among the areas to which Turkey is weak, branding, promotion and marketing activities are located. While health tourism in Turkey has also become state policy as in many countries, public practices in promotion, marketing and branding are also considered to be insufficient (Kaya, 2015). Promotional activities are on individual basis (Kaya, 2015; Ozan, 2015).

The state has three important roles in health tourism; regulatory and supervisory role, supporting role, and service provider role with public hospitals. The state fulfils its regulatory and supervisory role through legal legislation and audits. While making regulatory policies, a process that is in line with the principle of continuity and essentially has an element of trust should be developed. Following a main legislation, sub-legislation should be developed with the contributions of sector representatives and non-governmental organizations. It is not known how hospitals, intermediary firms and insurance companies will follow a path in health tourism. Organizing all these activities is vital (Kaya, 2015). Today, on the website of the Ministry of Health of Turkish Republic, there are legislation on health tourism, health facility and brokerage firm information as well as new international patient information entry (SB, 2019, Date of Access: 01.01.2020).

The state fulfils its supporting role as incentives and state supports. Support given to the health tourism activities in Turkey have also increased. Ministry of Health organizes various fairs, congresses, symposiums and workshops, and also wins a name for Turkey in health tourism by providing support to many national and international organizations.

Looking at the survey results, country environment in terms of the level of importance received 557 points in total, Turkey received 456 points and Kocaeli received 423 points. Travel safety and low corruption and bribery environment have been seen as the most important criteria.

The first action of health tourists in the country of destination is travel, and it has been found important for them to provide a safe environment in order not to encounter a fraud and hope merchants when they arrive. Safety of life and property is the most important factor in the country environment.

Factor 1. Country Environment

Cultural and linguistic similarity are the least important factors. During the treatment process, the patient feels safer if s/he is in an environment where she can express herself correctly and is understood. However, the language and cultural similarity of people who travel abroad for treatment for a certain period of time is not considered as important. In order to solve the communication problem, the service provider uses methods of having an interpreter working, continuing with existing employees, getting support from the Ministry of Health's "International Patient Support Unit and Interpreting and Call Centre" (SB, 2017). It has been reported that the facilities that do not have permanent translators within their structure generally solve the language problem with medical tourists by means of the employees who speak English, a person is found within the working team for the translation in Arabic to communicate with the tourists coming from Morocco, Lebanon and Beirut, an interpreter service or Ministry of Health's translation support service by phone is utilized for the need of French translation.

Table 2. Country Environment

	Level of Importance	Score of Turkey	Score of Kocaeli
Factor 1: Country Environment	557	456	423
1. Low corruption and bribery environment	84	70	61
2. Cultural similarity	67	65	54
3. Language similarity	69	59	58
4. Economic stability	77	56	57
5. Travel safety	90	80	75
6. Overall positive country image	89	72	67
7. The existence of a fixed exchange rate	81	54	51

Factor 2. Tourism Destination

In terms of the level of importance, tourism destination received 780 points in total, Turkey received 762 points and Kocaeli received 628 points. It has been stated that people traveling for treatment also want to benefit from the traditional touristic features of that region. This is especially important for health tourists with long treatment periods. Kocaeli is evaluated at a lower level in this respect. Hospitals with long-term patients support their treatment services with trips or activities such as Maşukiye and Gökaypark. It is seen that the festivals for medical tourism in Kocaeli are not sufficient and there is a gap in this direction. Promotional activities are important for medical tourism, and hospitals in Kocaeli, treatments performed, doctors being worked together, documents and certificates owned, positive patient and treatment stories should be shared through festivals to be organized in our city, festivals to be organized in other provinces and countries etc.

Factor 3. Medical Tourism Costs

In terms of the level of importance, tourism destination received 603 points in total, Turkey received 552 points and Kocaeli received 538 points. The cost of the fee to meet the health care needs that is the reason for cross-country trip has been assessed approximately same with Turkey in general for Kocaeli. For people traveling for treatment purposes, it has also been deemed important that the cost of transportation and accommodation is low. It has also been preferred that the accommodation is close to the hospital and it has been reported that the patients are also satisfied with this situation.

Factor 4. Medical Facilities and Services

In terms of the level of importance, medical facilities and services received 1411 points in total, Turkey received 1195 points and Kocaeli received 1107 points. The criteria that have gotten the full score in this question group have been the availability of quality treatment and medical supplies, the presence of doctors who could be recommended to their relatives, and a generally positive medical tourism image. It has been reported that in the current situation in Kocaeli, the target market finds the healthcare facility providing healthcare services mostly on the recommendation.

Table 3. Tourism Destination

	Level of Importance	Score of Turkey	Score of Kocaeli
Factor 2: Tourism Destination	780	762	628
Attractive tourist destinations	81	81	66
Popular tourist destinations	83	83	65
Cultural attractions	80	79	65
Exotic tourist destinations	79	79	64
The fineness of the weather	82	77	60
Tourist hospitality eagerness of the locals	79	75	70
The richness of historical touristic places	81	77	66
Natural attractions	79	79	75
The attractions of local life for tourists	72	70	59
Various festivals organized	64	62	38

While the presence of physicians and hospitals with certificates indicating quality is an important criterion, Kocaeli scored lower in this respect. The presence of internationally trained, certified physicians and staff has been considered important, and received 86-87 points. Turkey received 62-63 points and Kocaeli received 53-54 points. When the importance of the subject and the low score are examined, it is seen that although there are physicians who have international certificates working in Public University and Public Health Facilities in Kocaeli, the information of these physicians is not included in the “Academic Data Management System”. Since the first information channel for medical tourists is the internet, it should be ensured that health facilities publish the certificates of working doctors on their websites.

Table 4. Medical Tourism Costs

	Level of Importance	Score of Turkey	Score of Kocaeli
Factor 3: Medical Tourism Costs	603	552	538
Low travel costs	85	79	72
Low accommodation fees	88	80	79
Low treatment cost	85	74	75
Affordable flight ticket for travel	88	80	71
Low health costs	88	79	79
Low eating and drinking costs	83	76	77
Lower cost compared to similar destinations	86	84	85

Competitiveness in Medical Tourism

Table 5. Medical Facilities and Services

	Level of Importance	Score of Turkey	Score of Kocaeli
Factor 4: Medical Facilities and Services	1411	1195	1107
Availability of quality treatment and medical supplies	90	82	77
High standard hospital / medical facilities	89	77	72
The presence of experienced doctors	88	83	77
Presence of well-trained doctors	87	83	80
Presence of reputable doctors	87	84	80
Presence of internationally certified staff and doctors	86	62	53
Presence of hospitals / healthcare facilities with good health indicators	89	73	66
Presence of doctors who can be recommended to relatives	90	78	73
Presence of reputable hospitals / medical facilities	89	76	73
Friendly staff and doctors	86	75	74
Overall positive medical tourism image	90	73	69
Availability of cutting-edge medical equipment	89	76	70
Presence of internationally accredited hospitals / medical facilities	87	61	55
Internationally trained doctors	87	63	54
Presence of hospitals / health facilities that can be recommended	88	74	65
High quality in healthcare	89	75	69

Factor 5. Ease of Access to Treatment

In terms of the level of importance, ease of access to treatment received 608 points in total, Turkey received 538 points and Kocaeli received 507 points. Kocaeli has been evaluated positively in terms of cross-border arrival and transportation to the hospital. The waiting time for treatment has been one of the most important criteria of travel for medical purposes, Kocaeli has been seen on the same level with overall Turkey.

Factor 6. Destination Satisfaction

In terms of the level of importance, destination satisfaction received 781 points in total, Turkey received 592 points and Kocaeli received 571 points.

When Kocaeli is considered in terms of satisfaction with the destination satisfaction, it is seen on the same level with overall Turkey. Although sub-heading of destination satisfaction have a high level of importance; both Turkey and Kocaeli have been scored low points. As well as the number of patients coming with the advice of those who received treatment before seemed to have low points for Kocaeli, it has been stated in the face-to-face interview that the arrival of patients both coming back for treatment and new patients coming as a result of their recommendation is intense. This difference is thought to be due to the fact that the people completing the questionnaire are not represented at the same rate in the health facility group.

Table 6. Ease of Access to Treatment

	Level of Importance	Score of Turkey	Score of Kocaeli
Factor 5: Ease of Access to Treatment	608	538	525
Easy access to hospitals from all over the city	86	81	82
Sufficient transportation facilities of hospitals and hotels	88	80	78
The destination's providing well-organized transport services	87	79	77
Providing different transportation possibilities that can meet individual needs	83	74	72
Cleaning and hygiene of accommodation facilities	90	77	74
Modern facilities of accommodation facilities	87	75	70
Waiting time for treatment	87	72	72

Table 7. Destination Satisfaction

	Level of Importance	Score of Turkey	Score of Kocaeli
Factor 6: Destination Satisfaction	781	592	571
Satisfaction of service users with medical services	88	66	66
Satisfaction of service users with communication services of the hospitals	89	67	67
Satisfaction with the culture of service providers	84	63	61
Satisfaction with the safety and cleanliness of the medical destination	88	66	66
Overall satisfaction with the medical destination	89	67	65
Feedback on service users' advice on the destination to others	88	67	64
The eagerness of those receiving treatment to visit the same hospital again	86	66	64
Recommending the medical service provider to others	85	67	65
Number of patients who come with the advice of those who have received treatment before	84	63	53

Factor 7. Patient Satisfaction

In terms of the level of importance, patient satisfaction received 681 points in total, Turkey received 549 points and Kocaeli received 517 points. Kocaeli has received the lowest score in the “Professional approach to make patients feel special” evaluation. It is thought that it is necessary to evaluate the professional approach in terms of both health service and hotel services. Because when the issue is handled in terms of health service, it is thought that it has been already preferred and that the treatment will be satisfied. However, it is estimated that this grade is low since hotel services are not adopted and implemented in public institutions that provide health services. If there is a study that will be evaluated throughout the country, it will increase the score within public health facilities, since 11 city hospitals have been put into service with this philosophy.

Table 8. Patient Satisfaction

	Level of Importance	Score of Turkey	Score of Kocaeli
Factor 7: Patient Satisfaction	681	549	517
Standard information to be given to patients by healthcare professionals	84	64	58
The skill of healthcare professionals in communicating with the patient	85	64	58
Friendly attitude of health staff	81	68	62
Professional approach to make patients feel special	85	66	54
Medical staff to give confidence to those receiving treatment	87	72	71
The perceived reliability of the service provided by the staff	86	72	72
Feedback on patients' feelings of "I feel I have been treated"	85	70	68
Feedback from patients that they have been effectively treated	88	73	74

CONCLUSION

The aim of this study is; to examine the competition criteria in medical tourism and to make a situation assessment for Kocaeli. In the scope of the study, tourism, health tourism, medical tourism issues have been discussed and developments in the world and Turkey have been examined. By sorting the competition criteria according to the information obtained by the literature review, the survey has been prepared and the opinions of the participants have been evaluated. Meeting the participant face-to-face was productive in terms of evaluation. Representational weight is not balanced due to the fact that the targeted number of surveys cannot be conducted, for this reason, generalization cannot be made. Considering that the permit process will take a long time for a more comprehensive study, more surveys can be conducted.

In order to be successful in health tourism, it is necessary to carry out an effective and result-oriented marketing and branding activity. While determining the market position in the medical tourism sector, aiming to be a market with a quality service image rather than geographic proximity and cheapness will increase the earnings and added value from the sector. Turkey must decide whether it will be a Middle Eastern country providing cheap health care or a European country providing quality health care as a positioning in health care and shape its competition and brand strategy accordingly. Promotion strategy should be prepared according to the needs and characteristics of the target audience abroad, different promotion and information channels should be used for foreign insurance companies, intermediary institutions and the target patient groups.

Patients who want to be treated abroad use the internet for pre-examination and information, also investigate the plus and minus aspects of the destination via the internet. News and advertisements on the internet affect the image of the destination. Internet should be used effectively in creating a destination brand, The emphasis should be put on the placement the quality certificates of health facilities, the awards and awards received, physicians and certificates with international education and certificates, positive developments, successful treatments, the numerical data regarding treatment on the internet.

It should not be forgotten that health tourism is a teamwork. It is obvious that the Quality Unit and Health Tourism Team should work in integration. The fact that the health tourism team consists of people who know the subject, who want to work in this unit or who want to learn and work in this unit will provide improvement in the service of the desired tourism patients.

Standardized services represent a quality standard. A well-functioning accreditation system ensures that the country is accepted worldwide. A decrease in the quality standard, which expresses the value of the hospital, will cause a decrease in health tourism satisfaction. Conscious patients want to have a certain quality standard in medical services. The American and European countries constantly monitor the quality of their service by effectively operating certification and accreditation systems such as JCI and TEMOS. Due to the difficulty and high cost of obtaining a JCI certificate, it does not seem possible for every hospital to have it. Quality Standards for Health have been established within the Ministry of Health in Turkey and it has been aimed to provide quality, efficiency, patient and employee safety and patient and employee satisfaction within the supply of health tourism service in Turkey. In this context, annual audits are carried out over 100 points. Neither quality principles and audit should be seen as a burden nor audit time as problem by health institution employees, it should be adopted that they have to practice and document them throughout the year.

Although it is not possible to separate the people serving this group within the health facility, it is stated that personalized applications increase satisfaction when evaluated from the perspective of tourists. In a facility where medical tourism patients are admitted mostly from a region, employing a cook appealing to their tastes, organizing a trip or organization in accordance with their expectations will add vitality to health tourism and increase the income from health tourism.

According to Visit Turkey for healthcare data, as of February 2012, Turkey is ranked second in the world with 37 accredited hospitals. There are two health facilities with JCI accreditation certificate in Kocaeli province. These are the private Anadolu Medical Center (ASM) located in Gebze district and the private Acıbadem Hospital in Izmit district (Visit Turkey For Health Care, 2020, Date of Access:01.01.2020). Turkey ranks in the top three in the ranking of accredited institutions in the world with a total of 44 health institutions receiving JCI certification. There are 44 health institutions with JCI certificate, including 3 in Adana, 4 in Ankara, 1 in Antalya, 2 in Bursa, 30 in Istanbul and 4 in Izmir (Sağlık Akademisi Yönetimi, 2020, Date of Access:01.01.2020). Although Kocaeli is not on the list, Private Anadolu Medical Center (ASM), located in Gebze district, is a health institution with JCI Accreditation Certificate in Kocaeli and Private Acıbadem Hospital in Izmit district, a chain organization based in Istanbul, also has JCI Accreditation Certificate.

Although there is no health tourism agency in Kocaeli, it is seen that it provides health tourism and medical tourism services in private hospitals. It is seen that these organizations solve the issue of reaching the target market from here, the issue of finding customers in terms of the business, without “intermediary organizations that receive a medical tourism Certificate” in the current province, individually/institutionally or provide it with intermediary organizations outside the province. Looking at the websites of the hospitals with Health Tourism Certificate in December 2019, it is seen that the websites for international health patients are insufficient. In order to reach potential patients, it is thought that information and promotion desks providing information about health tourism and consisting of people who have a good knowledge of the subject in transportation centres where foreign tourists are concentrated and in traditional tourism regions will be useful.

Medical visa application will increase the competitiveness of health tourism, as well as cause some disadvantages. Providing visa exemption for medical purposes for the citizens of Europe and developed countries will contribute positively to the increase of medical tourists from this region and will also ensure the development of commercial, economic and cultural relations. It is observed that some adverse events can occur; like some patients, who are apparently sent for treatment by the government of developing and underdeveloped countries, who receive treatment and care services with international patient status

during hospitalization, take refuge in our country and are included in the scope of SGK(Social Security Institution of Turkey) by our country when it comes to payment.

When comparing public health facilities and private health facilities in the country, it is seen that private health facilities dominate the issue of medical tourism and they embraced the issue as a team with four hands, knowing that their share would be higher. It is thought that the biggest disadvantage of our public health facilities is the stage of supply of medical equipment necessary for the provision of medical services. Businesses that have a health tourism certificate will pay a health tourism tax of 0.75% as of October 2019 (Official Gazette dated 02.11.2019 30936), it can be seen which facility receives a greater share of 50% discounted income tax paid within the scope of the incentive. Additional regulations are needed in order for public facilities to compete with the private sector on equal terms. Within the scope of the “DMO(State Supply Office) Health Market”, which has been put into practice as of 12.10.2018, it is thought that the material supply process will accelerate with the inclusion of materials (stomach surgery, eye surgery, organ transplantation, heart valve and pacemaker operations, etc.) for patients coming to public institutions within the scope of medical tourism.

A database and information management system for accurate and consistent collection of health tourism data has been created by the Ministry of Health and information entry has started (SB, 2020, Date of Access: 01.01.2020). Thus, there will be a source where the correct data is obtained. It is thought that the data can also be verified with the Tourism Tax, which has been introduced recently. It is estimated that the share of medical tourism will be high because city hospitals are included in the classification of public health facilities.

The evaluation made for the implementation and development of an effective and efficient medical tourism service in Kocaeli University Research and Application Hospital can be expressed as follows;

It is seen that the hospital has the necessary infrastructure for medical tourism. Hospital staff, especially those of the Health Tourism Unit, should be informed about the legislation. It will be useful to organize an effective health tourism internet promotion web page, build a hotel around the University Hospital for patients and their relatives (In this context, the support of the state can also be used. It is thought that such a hotel is an internship and practice area for Kocaeli University Kartepe Tourism Vocational School students and will contribute to the training of qualified personnel for hotel management services in the field of medical tourism), and provide incentives and support for hospital employees to learn foreign languages. Foreign doctors and their teams invited to the hospital from abroad, as well as the press in the country in which they came, should be invited and the hospital should be provided to include in the media of that country. For the current capacity, the determination of the target group, department (Which treatment do we want to be remembered with?) and the number of patients planned to be served within the scope of health tourism will be decisive in achieving the target. Although numerical data have not been evaluated due to the fact that it is not our subject of study, the continuity of service purchase of the local people will be ensured with a 10% health tourism patient admission, and at the same time, it will be ensured to be effective and efficient in the medical tourism sector.

FUTURE RESEARCH AND DIRECTIONS

In this study, it was found that the Turkey to have a significant potential for medical tourism. However, this potential compared to Turkey, is a very low share of the medical tourism market. The share of Turkey's medical tourism it deserves to be investigated why not get. Especially, public hospitals cannot

provide enough services in the field of medical tourism. Why are public hospitals with great facilities not enough in the medical tourism market? What are the reasons for this? What are the responsibilities of physicians, hospital managers, ministry of health or other stakeholders to better manage this process? Medical tourism potential and market share relationship should be compared with other countries. Concentration of research on these issues will contribute to academic and practical knowledge.

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KEY TERMS AND DEFINITIONS

Competition: Competition is a condition where different economic firms seek to obtain a share of a limited good by varying the elements of the marketing mix: price, product, promotion, and place.

Health Tourism: Health tourism refers to the travels of people to different countries for treatment purposes in order to receive health services.

Medical Tourism: Medical tourism can be defined as people's traveling to a country other than the one in which they live in order to receive any treatment within the scope of surgery, medical or dentistry. Medical tourism is not only of medical diagnosis, treatment and rehabilitation implementations but also a multidisciplinary perspective in terms of promotion, hotel management, agentship, environment, architecture and economy.

Tourism: It is all of the events and relationships arising from temporary accommodation of individuals, provided that they do not turn into permanent stay and do not engage in any income-generating occupation.

Tourism Industry: The tourism industry, also known as the travel industry, is linked to the idea of people travelling to other locations, either domestically or internationally, for leisure, social or business purposes. It is closely connected to the hotel industry, the hospitality industry and the transport industry, and much of it is based around keeping tourists happy, occupied and equipped with the things they need during their time away from home.

Chapter 18

Case Study of Gender and Career Choices: Being and Becoming Medical People

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ABSTRACT

This chapter aims to provide information about the situation of being female in the medical field and facing gender inequality. The medical education opportunities are put into the spotlight to see the possible factors affecting the choices and consequences. Apart from the traditional structure and the sociological analysis of the situation, the chapter also involves the results of two different types of research in the field. The data collection in general includes a close-ended questionnaire reaching 500 young females aiming to collect data in the field of education as well as face to face interviews with 30 medical field workers. The chapter is an attempt to prove that becoming an idealist person is the only solution left to the women to be and become a valued person in society.

1 INTRODUCTION

Planning a career is a primary problem not only in Turkey but also in the whole world, specifically for the girls. The lack of information, experience and guidance affect people's choices and most of the young people are choosing their careers with the hope that they'll be able to change it whenever they like. Due to the education system providing a setting for the future choices or blocked possibilities, people do not listen to their insight but obey the social norms. Furthermore, depending upon the marks of secondary

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school, high school or university entrance exams, students are forced to have certain choices related to their grades. Sometimes, even if they are very successful, usually their positioning within the bunch of others taking the same exam at that time could be a handicap.

The growing demand for the university education is another factor forcing the participants to choose whatever possible for the moment without thinking on more or develop upcoming strategies. Mainly, their marks throughout the high school education and their success in the graduate exams or university entrance exams could have a strange formula sometimes causing the ones to find themselves in the departments they have no interest, ability or capability. So, reluctantly they join the education system to guarantee their seats, assuming that they could somehow change it in future. Yet, it's mostly impossible due to the increasing number of the candidates every year and the limited number of the seats at the university level. This might cause millions of people to have jobs in the future, not specifically chosen but handed by chance or suggested by the social norms.

Most of the people are suffering due to inadequate information and experience they have before deciding on what to do with their lives. In most cases, either the traditions or the chances help people to decide on what to become. Not all the communities or families provide enough chances to children regarding their career planning or choosing the best jobs they'd like to work. A recent study in Turkey provides information that 84% of the workers do not like their jobs and 72% of them are thinking of changing it whenever it is possible (“Çalışanların yüzde 84’ü işini sevmiyor”, Milliyet Newspaper. [online]. [2018-01-08]. Available at: <<https://www.milliyet.com.tr/calisanlarin-yuzde-84-u-isini-pembenar-detay-ask-1839058/>>.). That means only 16% of the people like their jobs in general. With this result, it's easy to think that most of the people are somehow forced to find better jobs and this usually encourages the migration in the country. When they lose their hope for a certain city, they'd prefer moving to other cities to find better jobs or create alternative possibilities.

However, the second university, Open University and distant education rates are high enough to make us believe that Turkey is a country still having high hopes for education; believing in that the problems could be solved through education. Most of the participants of these programs are not the new graduates of high school but the ex-graduates of another department or discipline, now enjoying the second university. That's why in most branches, disciplines, Open University and distance education diplomas are equal to the others. Medicine on the other hand, in most cases is an area requiring more practice in the field during the education that's why in general, it is the most difficult and most popular branch of all.

1.1 Turkey in General

As a young country celebrating the 97th year of its foundation, the republic has 814.578 km² and there is not an even distribution of the population in each city. Turkey is a country reaching to 83.154.997 people having almost equal genders throughout the country and the female population seems to be as productive as the male ones and even more in certain areas of the country. The male and female rates of the country are almost equal to each other even if the working conditions and social status are not. Especially in the eastern part, the males are valued more than the others and having a son or grandson is looked upon as being successful and valuable as well. The males are usually expected to complete their military service to start a job or career or marriage. According to the statistics, the working people have a good proportion of gender, yet, there seems to be more positive discrimination for the girls.

However, regarding the career choice issues, males seem to be given more priority and support in the family and at school. For the study, there were the interviews with the medical school university students, both male and female ones to see how much they see themselves fitting into the job requirements. The interviews involved some questions if they have any experience about the gender inequalities in the field.

1.2 University Education

In Turkey, every year there is a great challenge for the university seats. According to the statistics, every year around 1.8 million students join to the marathon to take a seat at the university. Only 649,746 of them (36%) could take a seat at the state university which is almost free whereas 89,657 of the candidates (5%) found a place at the private or foundation universities (<https://www.ntv.com.tr/egitim/universitelerde-214-bin-430-kontenjan-bos-kaldi,dawKePhA0OZzII Ea>

aJ_2ZA). One of the leading universities of the country, having 90,000 students (5%) is a state university, namely, Istanbul University.

Istanbul University, as one of the oldest educational institutions, not only of Turkey, but also of the world, was founded when Mehmet the Conqueror conquered Istanbul in 1453. One of the main characteristics of Istanbul University is its leadership in higher education for centuries. It has a guiding and influential role in the social and cultural life of our country. We can clearly see this when we trace the line of historical development of the University.

Today, Istanbul University provides a rich educational atmosphere with its 16 faculties, 2 departments, 2 schools, 12 institutes and 77 research centers situated in many districts of Istanbul. In the first years of its establishment, the university was based in Beyazıt the historic area but now many new campuses have been established throughout the city (Beyazıt, Avcılar, Çapa, Bahçeköy and Kadıköy). Today, the University has 6 campuses scattered along the city. The university is unique having a research hospital and a well-known Faculty of Medicine. Istanbul University as one of the leading education institutions both in the country and the world is developing new applications and strategies to cope up with the expectations of the 21st century and leading innovative technologies.

Taking their roots from the earlier decades, the evening schools had an important impact on university education and in fulfilling the jobs required then. The first evening courses started to occur in Turkey by 1975 providing a kind of in-service training for the teachers to complete their degree programs. Later on, other disciplines required similar programs not only for in-service training but also for a new start. Depending upon the number of the people required in the field, the number of the seats were increased or decreased throughout the time. In the past years, the evening or part time students were accepted to provide chances to those who are already at work but would like to continue their career. The university also provided opportunities of having a minor branch or another major to the graduate ones or to those who are still continuing their career at the university. Apart from this, the university also provides distance learning courses and degrees in many branches and disciplines. The online courses are conducted through live courses on internet and the participants have an equal diploma upon graduation.

Istanbul University is important not only because it provides higher education for about 90 thousand students but also the concept of university education is associated with it for more than a century. Apart from this, the university is known to provide education to the female ones for the first time. It is also very famous for having two medical schools as well as two practicing hospitals. For many years it's been the leading institution of the country regarding its university research hospitals providing good opportunities for the employed medical field people as well as the medical students.

1.3 Gender Discrimination

Discrimination is providing a special status to one part instead of accepting the equality of the sides. Generally known as sexism or gender discrimination is mainly a prejudice stemming from the old traditions, social inequality putting the person's sex or gender rather than the qualities of the self to the primary position at certain decision making points. Even if it's mainly believed that this kind of discrimination might affect both men and women, usually women are the victims of discrimination or violence due to the stereotypes and gender roles intrinsically or extrinsically the implemented in the society.

Most of the people believe that the two sexes are equal in all cases, yet, there are so many different occasions that the two sexes have discrimination one way or another. The two sexes living in the same world, perceive the world in different ways and thus they act in different ways. Most of the communication research up to the date, tried to find out how the two parts come together and see each other. What could be the main things causing great debates, dilemmas or conflicts? The main discrimination starts at home by the very parents. The sexual discrimination in the society starts from the beginning, by birth. The girls are introduced by pink blankets and boys in blue. Not only their rooms are decorated in different colors but also the toys and all the objects provided to them look really different. After childhood, their occupations and expected life styles are designed to be different as well. .

People are not born with their ideals, in fact the reasons pushing them to be idealist show their faces later in life. For instance, an infant may be interested in the cars and because of this; her/his parents may want to block it by the means of suspending him from the cars. When this infant becomes an adult, s/he can recover this remoteness by fulfilling her/his ideals. This process can even lead this person to success in the field of automobiles such as industry, merchandise and commerce. In other words, the problems and the obstacles occurring in our lives are the most effective factors in the process of constructing our ideals. It can be seen that a lack of something always supports the creation of the ideals. These obstacles might be stemming from financial, emotional, individual and environmental factors. But this does not necessarily mean that an obstacle should include only one dimension. The obstacles might have more than one main source in terms of recurring problems. Nevertheless, the obstacles taking their sources from environmental problems can be more achievable and more realistic.

The women in the old texts were presented as the princesses or the goddesses specifically in the European literature. However, ironically we also see that the goddesses were accused of being witches in the 16th century. Following this century, the women were used as labor slaves during the Industry Revolution. Naturally, there have been also women who have tried saying `stop` to this Catch-22 and rebelled against it by being powerful in the society. But, unfortunately this inequality has never faded itself away. As a result, the women become the most suitable candidates for the term `idealism`. A simile can be made between women and the babies. Like babies losing their toys, the women lose their rights and freedom starting from their birth. The obstacles trying to block their way or to take them out of track make them more idealists to achieve their goals. For these women, each obstacle is a step to the ideals.

It has been known that not only do the societies construct the identity of the women, but also the governments take part in this process. In other words, the governments also have responsibilities and duties for providing the equal opportunities for women. Whereas, if the government does not carry out these responsibilities and overcome the problems, it would not be impossible for the citizens to still trust and believe in their government and their country. This statement leads us to the term "Citizenship" which is freshly mentioned here. As, the inequalities among the society can be solved by the help of the government, it is inevitable for us to see that the government has more rights to comment or to say in the society.

Case Study of Gender and Career Choices

Regarding all these factors, it's easy to see that usually, it's the woman suffering more in the society. Depending upon the research results, it could also be argued that the burnout syndrome affects the medical field people more than any other (Akbolat & Isık, 2008:249). According to Şavran, questioning gender inequalities in health, gender is accepted as a component of social gradient in health. Depending on the disadvantage of women's access to social, economic and political sources, gender stratification become visible in distribution of health risks, access to healthcare and individual health status. Drawing upon a field research conducted in Eskisehir, Turkey in 2009-2010 with a sample of 229, aiming to compare the health risks, healthcare seeking behaviour and health status of men and women in rural and urban areas there are few things to be said (Şavran, 2014). According to the findings of the study aiming to compare and contrast rural and urban women on issues related to pregnancy and giving birth, thus examines the relationship among gender, regional and health inequalities the research proves that women's health is worse than men in both rural and urban areas, even when men and women share the same educational and income levels. In addition, rural women's health is worse than urban women's. The findings point that gender inequalities intersect with educational, economic and regional inequalities and create a cumulative effect on women.

At the present day women have got a lot problem in working life although women have got a lot political and legal benefit. According to a survey prepared by Evrim Mayatürk in 2006 the problems of the women workers' were the choice of employment, wage and career development and providing equal opportunity to all workers to be a modern country (Dikmetaş, 2009:150-151).

In another research, Dikmetaş found out that the number of the women workers in the hospital is more than the men. However, the women workers think of the family as a more important factor than their job (Dikmetaş, 2009:154). They look at the situation of appointing to this special hospital as a way of enlarging their social circles. Only 20% of the workers in the hospital state that priority should be given to the betterment of the situation of the women and women in the medical field. The 66,3% of the workers prefer the men to have priority in job conditions due to their leading factor in the family. The older the age of the participants gets the more they think giving importance to women specifically in the leading roles of the family. According to the study, the staff thinks that the performance analysis are not lower for the female ones compared to the males and for the unmarried ones compared to the married ones. The males have expectations to have higher salaries than the women and to have higher authority in the institution. They also do not expect the women to be given paid leaves for educational purposes, suggesting that the women should be more responsible for their families. Instead they'd prefer to have a maternity leave. However, both men and women agree that the physical quality of work provided by the women should be improved.

Akpınar states that the medical workers are somewhat limited within the provided box of the institutions surrounded by the performance objectives to be met and thousands of patience to be controlled (Akpınar, 2014:196). These factors eliminate the best doctors and they move to the private offices or boutique hospitals instead of public, state research hospitals or more institutionalized structures. Because, after all those years of effort they do not want to be convicts or prisoners of the rules.

Regarding the conditions of the women in the medical field, the rate of facing any kind of violence throughout the occupation reaches to 86,8% in the last two years. The rate of having an experience of violence recently (in the last one year) reaches to 81,4% (Violence Report on Medical Workers, 2013). According to the statistics, 8 out of 10 medical workers come across with a serious violence during their working hours (Violence Report on Medical Workers, 2013).

In his dissertation Hıdıroğlu states that revealing the problems of women working in health sector may not be that easy but complicated (Hıdıroğlu, 2006). Even if the study is conducted both in public and private health institutions in Ümraniye district, which is a limited but crowded part of İstanbul, the largest city of the country, it gives important clues regarding the situation. According to the data 92% of the women workers in the area contributed to the study and it have been found out the highest risk they consider for themselves were the transmission of infectious diseases. Especially the females working in the field are in danger because, the population there requires more females to work with them since the number of the women and children are very high in the district.

The data provides the clues that 69,9% of the participants wanted solutions for problems of child-care most and 42% of the participants stated that they had some conflicts between the family and work life. Mainly half of them, 54,45% of them suffer due to the highs rates of the night shifts and 29,5% of the participants said that they were either victims or witnesses of sexual harassment. For the educated women and men, usually, there is a discussion between the couples on who is going to be the leader of the family. For the uneducated ones, this is not a question. But for these women working in the medical field, the leading position in the family does not mean a lot to them but their position as a mother puts on more responsibilities on their shoulders.

In their research “Quality of Life and Effective Variables among Health Care Professionals”, Yıldırım and Hacıhasanoğlu put forward that the depression and burnout levels of health care professionals were low and quality of life was medium (Yıldırım, A., Hacıhasanoğlu, 2011). It was also determined that depression, burnout and some of the variables have a negative impact on the quality of life.

Bekata, on the other hand, looking at the old statistics, states that in 1996 26% of the doctors and the 27% of the medical education students were women (Mardin, 2018). One of the main reasons underlying this rate is the presence of the nursery school starting from the secondary school and having other variations such as the high school or the vocational school, etc. Yet, after having all the education, what happens to women is a question mark. Because, depending on the statistics more than half of the people working in the medical field is women and almost 90% of the nurses is female. However the management roles are almost always occupied by the male ones.

Mardin also states that regarding all the preconceptions of the status of the women in the society, it's almost impossible to think of the females in authority or leading positions. In a sector where 8 out of 10 of all females experiencing the violence or sexual abuse, it would be impossible to think of their leading positions (Mardin, 2018).

In this respect, it could be said that the sector workers had a conscious decision making process to choose their way leading their career. Not only at the beginning, but also on the way leading to a complex and compound choices, help the females to emphasize their position bringing them not only authority but also more economic freedom.

1.4 Choice of Occupation

The children, starting from the early ages are exposed to certain dialogues. The families start with defining their hopes and expectations such as: “My son will become a doctor” or “My daughter will be a nice teacher”. At this level, it's the social choice rather than the individual one. But later on through this conditioning, the child preferences become somewhat similar to these expectations.

Case Study of Gender and Career Choices

During a research covering all the seven regions of Turkey (Pembecioğlu, 2013), the children were asked their preferences of occupation in future we found out that the students were as obedient as possible regarding the choices made for them and their own choices. These choices are in fact the tentative ones at the beginning. In time, the realities of life play an important role in the change of the decisions. In fact, deciding on what to become in future is a long process especially in the 21st century because being something is not enough in modern life conditions. You need to have more diplomas and better qualified positions to cope up with the stream. The new age of information requires more of everything, especially of hopes and expectations.

Even after the tentative decision making processes the little kids still are proud of their choices until they come up with their grades at the end of the high school. So, in fact, the system forces them to have a high school success to be able to choose what they'd like to be in life. In their decisions up to the date of high school, they seem to be so much specified in their choices and make very detailed plans. For example, being a doctor is not a decision for them; they plan to be an ophthalmologist, psychiatrist or neurosurgeon.

Apart from their career decisions, the children could also explain the reasons underlying their choices. Usually these reasons show the motives of emotional experiences, such as coming up with a skillful doctor to become a doctor or experiencing a fire to decide to be a fireman. Sometimes, it has some realistic reasons, such as helping the poor or humanity. Usually in their decision making process they share their ideals with the close friends and it's normal to come across with five kids, for example, all dying to become doctors. It could either be explained as the peer pressure or influencing, motivating one another in close groups. Anyway, it's nice for the children to dream to become something or to plan their future. At this level usually the families support their children with a little smile knowing that it might not be possible to actualize these dreams but they want to motivate their kids. This is also the sign of the hopes for higher education believing that achieving the future goals could only be possible with the help of education.

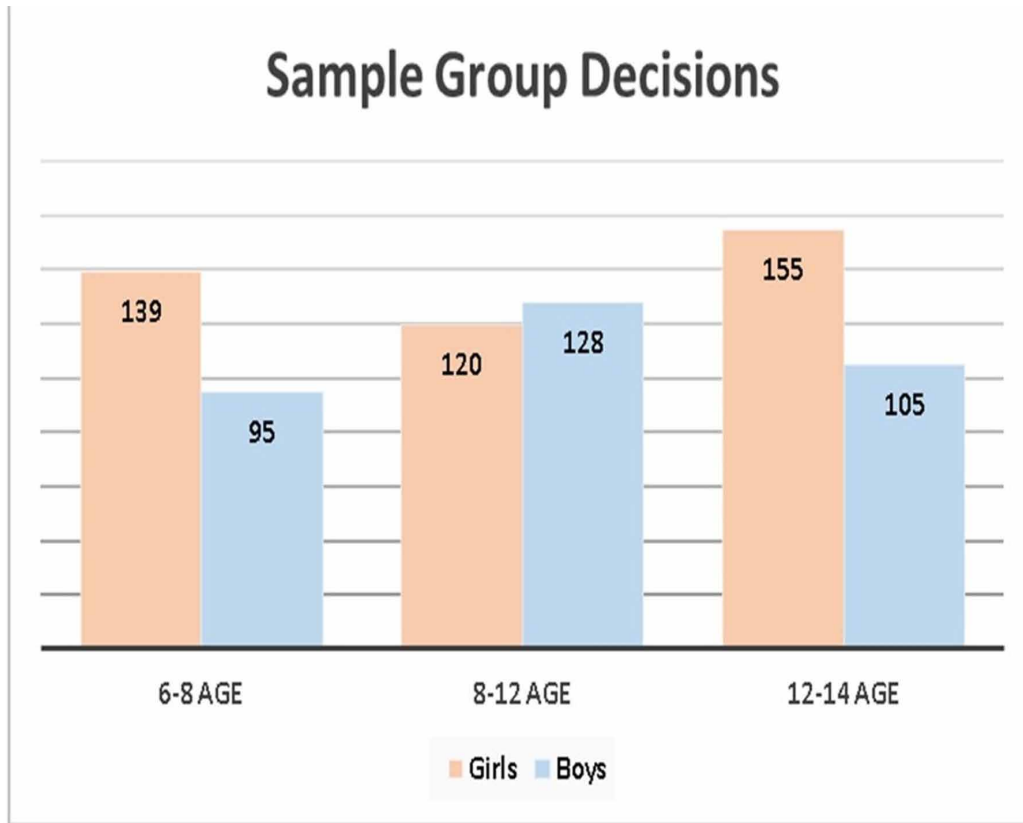
The children are keen on politics, management and they follow the world agenda in minute detail. They seem to be so conscious and while choosing their future careers and making up their minds this appears to be as an important factor since neither their decisions are just haphazard ones, nor they come all of a sudden. They filter all the possibilities and decide accordingly.

When specifically asked to children at the age of 8, the children can easily specify what they'd like to become in future. In their replies, as in the example below, they are so specific that it gives us the impression that these ideas were thought in details.

Depending upon the research with 742 children between the ages 6 and 14, it is clear that the future career planning starts at the early ages. All these children already decided on what to become.

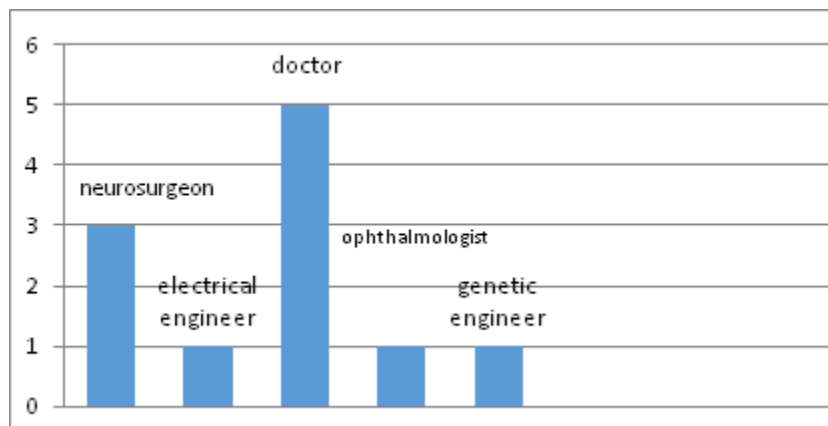
The girls are choosing the medical studies for various reasons. One is that they are usually spending their time in limited surroundings and left no chance than studying more and success carries them to higher positions. In other words, the limited conditions provide more opportunity for success in their career. The most successful and hardworking girls at schools aim to become doctors in general. The second factor is again about the limited conditions. Having low income and limited facilities they are more motivated to make up a flourished future for themselves and for the beloved ones. That's why they work harder to achieve to be the best ones in the society.

Table 1. Sample Group



Source: Own processing

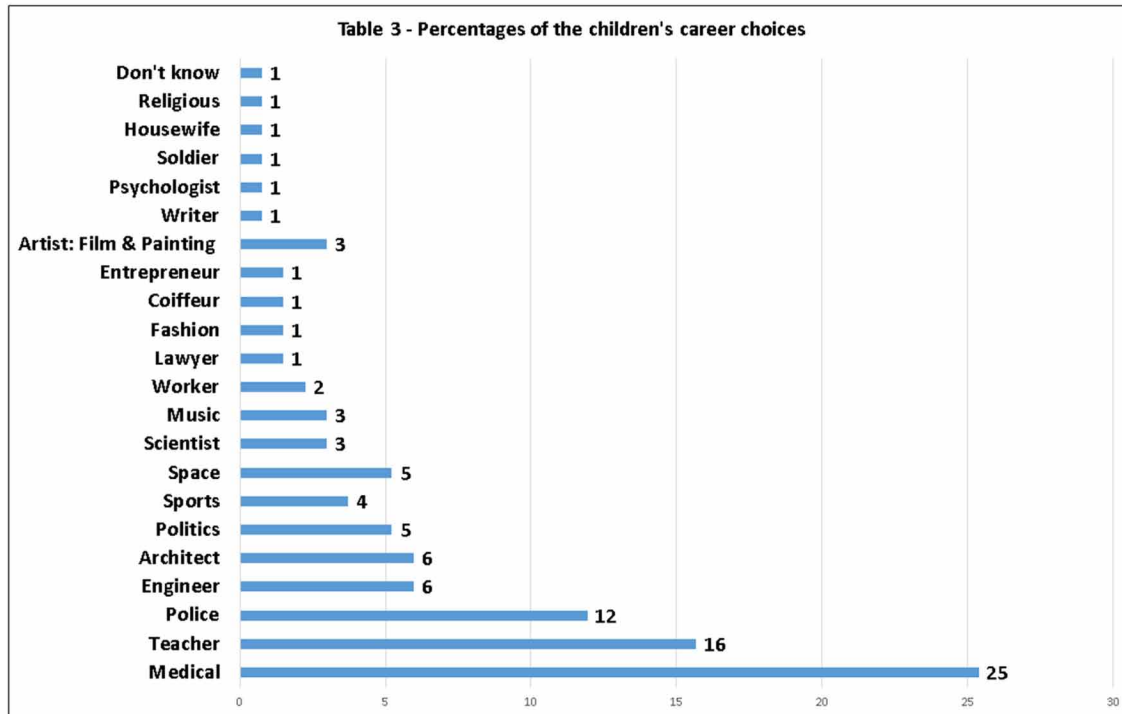
Table 2. Detailed “Medicine” responses expanding the question “What would you like to become in the future?”



Source: Own processing

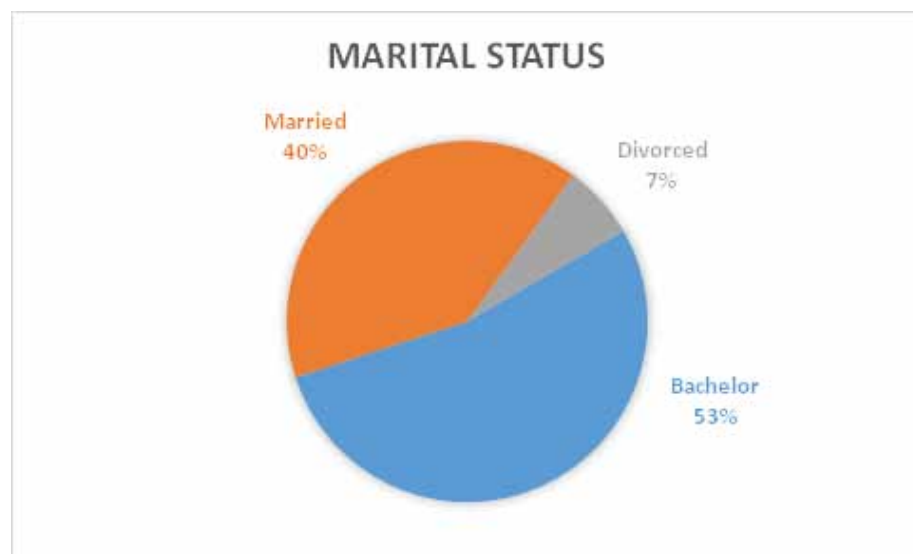
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Table 3. Istanbul sample for the question of what would you like to become in future.



Source: Own processing

Table 4. Regarding the whole sample of the children it would be easy to see how much they'd like to take part in the medical discipline.



Source: Own processing

The medical schools have more female students because; these institutions usually have boarding schools providing food and shelter for those who lack it during their education. The females attending to these schools feel lucky when they finish the school, because that means even before the university they may easily find jobs earning more than enough money to cover their own and family expenses. This is true specifically for those working in the intermediate segments such as laboratory assistants and nurses. The schools preparing them for the job are also very competitive and attractive due to their boarding school position appealing to most of the females of middle class coming from disadvantaged areas.

The families also approve this type of education and position because their employment opportunities are mainly in the institutionalized positions or governmental bodies. The social status of these workers are so specific as being appropriate to the female workers and they are not looked as the idealist women having high targets to be reached but the moderate ones more suitable providing a place to having families and children to be taken care of. These people have seldom find chances to improve their services through in-service education possibilities and the opportunities to learn a foreign language or to go abroad are so limited. These classes of medical people are almost wholly different from the medical doctors who really would like to improve themselves in their profession enlarging their knowledge through one or more foreign language and attending to different conferences in the country or in abroad. Since their position requires a competitive nature they force themselves to be better in the field and in practice.

However, the university and state hospitals are blamed to be the places where the conditions are insufficient with high number of the patients. These institutions are too much in comparison regarding the number of the people in service, yet, compared to the other jobs the income is so low. Furthermore, the academic promotion system does not work properly and in an equitable way. Regarding the long hours of working and the low payments, women usually give up their idealism due to their motherhood position in the family and prefer a more traditional way of living, putting their job in the side of their lives rather than the center. Even if their job require heavy duties and load of work, due to the lack of the betterment of the job such as the in-service collaboration, better payment or better job conditions the workers usually finish their working hours and do not feel more commitment or dedication for their job. In Turkey there is also the pre-condition of spending the first five years in the appointed cities in the eastern part of the country as a compulsory service in the field. That means living under poor conditions bearing to more victimization and disadvantaged situations. According to Urhan and Etiler, apart from all the difficulties faced by the females in the sector, the field is blamed to be more feminized (Urhan & Etiler, 2011). Moreover, the females are now under the threatening of being fired due to the new policies both in health and in employing females.

1.5 Being a Woman in Turkey

The main concern of this research is actually lies on finding out more concrete answers for the never-ending debate on if there is discrimination between the sexes or not in the field of medicine. To be a successful woman in Turkey is difficult because it means that women are more idealist than men. Regarding a certain discipline or field, in this case the medical studies, the research also concentrates on the issue if there is gender discrimination in this field or not. This classical dilemma produces its own dynamics as to make up new polarization points as well as more questions such as “Why do the women would like to be idealist?” and/or “What is the impact of the society on the idealist women?” Regarding the fact that most of the women in Turkey are more successful than their counterparts, the researchers question if it’s their natural capacity or the societies’ rules forcing them act in a more dedicated way.

Up to the date, the 21st century women passed through different eras as to become the women of today (Arat, 1996). Not only because of their fertility but also for the witty decision making strategies, women are put into the highest position and the innumerable examples could be found throughout the Anatolian history. Usually, the women representing the fertility, fate and wellbeing were positioned holly in the form of goddess. Yet, during the later ages specifically in the Europe based societies, the women are exposed to an unexpected dishonor blaming to be the consumers of the society without producing anything, due to their positioning as the second-rate citizens, as somewhat guilty for providing the forbidden fruit and expelled from heaven and even killed through the witch-hunts as a demonic entity. After many struggles and endeavors the present positioning is achieved even if it is still not the same equality with the man in the society that could only be achieved through the national and international laws. Today, even in the latest decade, still, the women in the society have to struggle and work harder to become an ideal one not only in the family but also in the society due to the stereotypes within the society affecting perceptions and value system for many generations. In order to deserve the place and values innate, the women have to be more hardworking and idealist, more dedicated to their work and family to stand still and provide the very best of all to be approved and valued.

2 THE AIM OF THE RESEARCH AND METHODOLOGY

The study mainly concentrates on the working people of university hospital for the data collection. After the questionnaire, the participants are given a situation in which they make up their decisions or comment on the given situation. This kind of an approach involves not only quantitative but also a qualitative perspectives. The data collected involve face to face interviews regarding 30 university hospital workers.

In another parallel research handled with the 500 university students regarding their career choices a questionnaire is provided in the form of a story. The questionnaire is prepared and tested on the two pilot studies involving 10 participants each and then revealed to 500 female university students. The data collection does not only concentrate on the direct questions and answers but also the implantation of a sample story and reviewing the main character's actions and activities, thus, mirroring the participants through the story. The research aims to evaluate the level of the impact on the new generation to assess if they would be following the way advised to the older generations or choose their own way, specifically in the choice of occupation and career. The research is believed to unveil many different perspectives on being a woman in Turkey in the modern ages. The demography of the participants and their reflections are collected through the story put them into the decision making position as an observer to write their own scenarios. It's a way of being an idealist woman in the society.

2.1 Data and Interpretation

The inequality of the sexes and the reasons behind is an issue discussed for centuries. In the past without the dense media impact, the inequality occasions were seemed to be rare and it did not have a huge impact on the society. Yet, today, even the minimal inequality situation is known almost by all the members of the society and a common reflection is established as a response. However, these instances become so much that a kind of normalization period appears. As in the theory of spiral of silence, the individuals having a fear of isolation might prefer to be silent instead of reflecting their own point of view. However, in Turkey there are hundreds of NGO's, foundations and associations regarding the women issues. Ac-

According to the latest results, almost 68% of the married women in Turkey seem to be experiencing some kind of violence by their spouses (Spotlight, 2017).

Regarding the society in general, having a study in the medical field is very prestigious attempt regarding the female specifically. Due to its long study reaching to minimum 6 and 4 more years for a full degree, this is not a way for ordinary people having no high expectations from life. Of course supporting such a long study is always a problem even for the rich families since the books and equipment usually require too much money compared to the other fields. Apart from the family support, the individual dedication is also very important. Medical field always requires updated information, long hours of study, field research and practice and an average income. The individual should have a more human side to devote the self to the betterment of the society with an unlimited energy.

The data collected has a threefold one mainly relying upon the research with 6-14 years old children having a questionnaire and face to face interviews about their future expectations. The other data relies upon a questionnaire of the 500 female university students on one hand and 30 medical workers face to face interviews on the other hand.

2.2 What Would You Like To Become In Future

The research conducted in 2013 with around 1000 children of 6-14 ages throughout Turkey yield important information about the future jobs of the country (Pembecioğlu, 2013). The research puts it clearly that medical field is for males and the education field for females. The other researches with the 500 university student females support the similar idea. According to the research, the most approved type of employment for the girls is the teacher position (87%). Only 6% of the families approve their daughter of becoming a nurse and 4% of these families agree with the idea of becoming a doctor. Pharmacy has only 1% rate of approval. The rest includes mechanics, arts and other jobs. Family decision and support is always important, however, sometimes, their wishes are not accepted by the younger generations. The research certainly proves that the families are always positive in their support even if it's not their choice. According to the same research, the families mostly approve (80%) their children, specifically the females' ones regarding the attitude of persuading their ideals even if they do not agree with their daughters. Still, even after their education 10% of the families expect their daughters get back home and live with them. The rest expects them to have their own life even if it's in another city or country. For some, life in big city is really a problem and they do not want to send their daughters to the cities (36%), away from home and authority.

2.3 University Students Survey

The field of medicine in Turkey, apart from being a field of work also represents some social values, such as optimism, modernism, multiculturalism, being well off and hardworking etc. So, in a way, one of the sub aims of this research was to see if the social values accepted throughout the society are still valid or not. The multicultural perspectives could also include modernism, tendencies for media, gender discrimination, exclusion, etc. The responses and the collected data were analyzed using the appropriate statistical data analyzing methodology and techniques.

The main question is if we expect the new generations to create a new culture having their own objective decisions or not. This requires creating a new society and values or resisting to the old one. How about the speedy improvement of the technology with the help of internet, television, cinema, radio and

mobile - phones. Do we now more look like each other or are we becoming more extinct and individual? Do we have the similar concepts, pleasure or standards, do we expect similar lives for ourselves? Could it be a way to a common citizenship all over the world or is it a way to over emphasize the discrimination.

2.4 Educating Girls Is Important

For the study aiming to assess the tendencies towards choosing a certain field of study, a story is made up regarding the possible steps and turning points of decision making process and the story is questioned using the five Likert scale. The responses and the collected data were analyzed using the appropriate statistical data analyzing methodology and techniques.

In order to find out their true approach we provided them a story for their projections of their own values. It was a story of a decision making process, having a model family with two kids at the age of university. This poor family could only support one of the kids, either the girl or the boy. And the candidates were expected to provide the answer to this dilemma. Depending upon the questionnaire the 59% of the participants approve the support for the female, only 10% of them agreed to support the male ones whereas the 19% insists to support both genders.

This reaction provides a clear answer that educating girls is becoming something very important in the society. Through different campaigns and media messages, the people understand the importance of sending girls to schools and helping them to achieve their goals in life. In the past, it was enough to get married and have children but now families are expecting more of their daughters with the consciousness that they'll need to support themselves in a possible future. However, in cases of having two children one boy and a girl, families might give importance to the boys since their responsibility as a future father would be more important and earning money is a very important issue for the family. As a result, the stereotypes and gender roles in the society might involve some cases that priority is given to the males.

2.5 Marriage Is Not That Much Important Anymore

In the past, marriage was introduced as the way of owning authority for the girls. The quicker they make their way the more authoritative they could become. It was seen perhaps as the only way of gaining their freedom from their family. This was the only way to get rid of the family authority and to become independent. But, as we have millions of examples in the newspapers and broadcasts, the rates of the violence in family are getting higher and higher especially in the uneducated and socially under the scale areas. With the other media call it to be the alternative or new media and providing instant information and social media providing wider support for the victims of the violence nothing is secret as it was before. Nowadays, anyone has clear enough clues to see that marriage is not the solution. The girls of the modern age think in a different way. That's why perhaps, out of 500 females only 3,7% of them are stated their replies as absolutely yes, regarding the question of "Do you think you're going to get married soon?" whereas 13,3% of them stated only "Yes". Mostly, the girls in the society do not expect to get married in the 21st century as it was the case just two decades ago. Today, 34,2% of them believe that they'll get married 'someday', 'perhaps' and 24,5% of them state that they'll never get married. This shows us that they do not have made up plans or future expectations dedicated to a possible marriage. This does not mean that they are against the marriage but they have an open door for other possibilities. Nevertheless, the percentage for the 'No, never' is something higher than expected.

2.6 Having Children?

In order to find out more about their choices, the questionnaire had a question assessing the value of a boy or a girl as a child. After marriage, almost all the females expect to have a child. And it was interesting to see that only 28,8% of them expect to have a girl and 46,7% of them expect to have a boy. 11,7% of the participants stated that they want both a boy and a girl whereas the rest of them stated that they do not care.

Regarding the conclusion to be drawn from this picture it is easy to see that even for the educated females, having a son is considered to be very important. Even if this situation is somewhat a hypothetical one, the number of the people expecting to have a child is very high as well as the number of the people expecting to have both sexes. This shows us that the family stereotypes that we used to have in the old Turkish films, a happy family with a boy and a girl are still valid.

However, in the 21st century, the people are about to lose their faith to marriage as an institution. They either think of marriage in a later age or never. They think of a child usually only in the limits of marriage. Less people have courage for children without marriage. Most of the hesitating responses stem from the unknown situations. In fact, even if the questionnaire is given to the individual candidates, none of the decisions are made all alone. In each step the individuals take, we may see the impact of the social rules, tendencies, traditions etc. That's why, their decisions of for example having two children is a hypothetical one. This also shows that the young people in Turkey are still looking forward to having children but nowadays they do not make any discrimination like the older generations did insisting on having boys only. The modern young people do not consider that boys are more valuable than girls.

2.7 Changing Values of The Past

Regarding the cultural values, the communication and media are changing the values of today and tomorrow. The cultures and values today, resemble to each other very much, nevertheless, this is not the main factor to leave all the old values and traditions. According to the data, the young people expect to convince their families in their difficult decision making process. They do not mean to break their hearts in spite of the differences of their thoughts. This shows how much importance is given to the educational part as well as the other parts of life. In the past, the education was somewhat limited to a certain part of life and if it is completed or not would be affecting the whole life style. However, life-long learning opportunities made it possible to change the standards of life providing people Open University or distance education facilities to improve their knowledge and get their degrees even after marriage and having children later in life.

The research with the female university students proved that the girls are expected to convince their parents (66.7%) to have a university education in another town or in abroad. If they could convince the parents they may continue their education as they like. Otherwise, they should stay at home and wait for some other opportunities usually a perfect match.

According to the data, the young people especially the girls are in a double fold decision making process, one for their own and one for the family. They are mainly expected to convince their families in their way if it is somewhat different from the family decision. This may take a long or short way but they do not mean to break their hearts in spite of the differences of their thoughts. This shows how much importance is given to the educational part as well as the other parts of life. The participants proved the traditional way of life is still valid stating a positive reply when asked if a girl should leave the city to

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go to abroad even if her family doesn't give permission. According to the results, the percentage of the participants certainly agreeing with the situation given reaches up to 28%. The ones stating that they agree with the situation but not that much (more positive) reach to the 15,2% and the ones agreeing with the statement partly (more negative way) reach to 21.8%. Only 9% of the whole participants stated that they don't agree with the statement.

This part of the questionnaire aims to assess the relativity of education in respect to the family values. The expectations of the new generation yields interesting information on the way of having a better education and better education is usually associated with the education in abroad. Yet, the expected outcomes of a better education should not be in spite of their family ties. In the story provided throughout the questionnaire the girl is not provided a chance for higher education by her family and had to wait for another year to be more successful to have a scholarship and gave way to her brother to start his education with the family budget. To get the scholarship the girls are in a way forced to be better than any other candidates for the education is a much desired point for them. But this is a point having contradictory values such as traditional values vs modernization.

The results show us that the concept of family is still an important one in the society. The family is also an institution where the decisions are taken and approved. The family members have their opinions during all the decision making process. It is even equal to the importance of education or marriage. The youth, doesn't matter how much educated or multicultural they become, they still need the family approval. Especially the girls...

Even if religion is still one of the main parts of the society this is not creating an obstacle as in the past generation. This shows how multicultural and tolerant the youth is becoming with the help of the technology, internet and mass communication. Depending upon the demographical data of the families' religion could also be a factor. Regarding the gender discrimination and schooling of the girls, the religious families were one step behind just a few decades ago, however, now almost all had the understanding of the importance of education. Regarding the research all the data shows that the demographics, the parent's level of education and other factors, social-level, education level could be one of the main factors affecting the decision making process regarding the career decisions within the family. One other important factor is that the youth seems to be very modest, very optimistic, very motivated to prove themselves to the society, especially to their families. They have a high level of tolerance, empathy, conflict resolution techniques, self-disclosure, self-governing body, self-confidence to convince all the others.

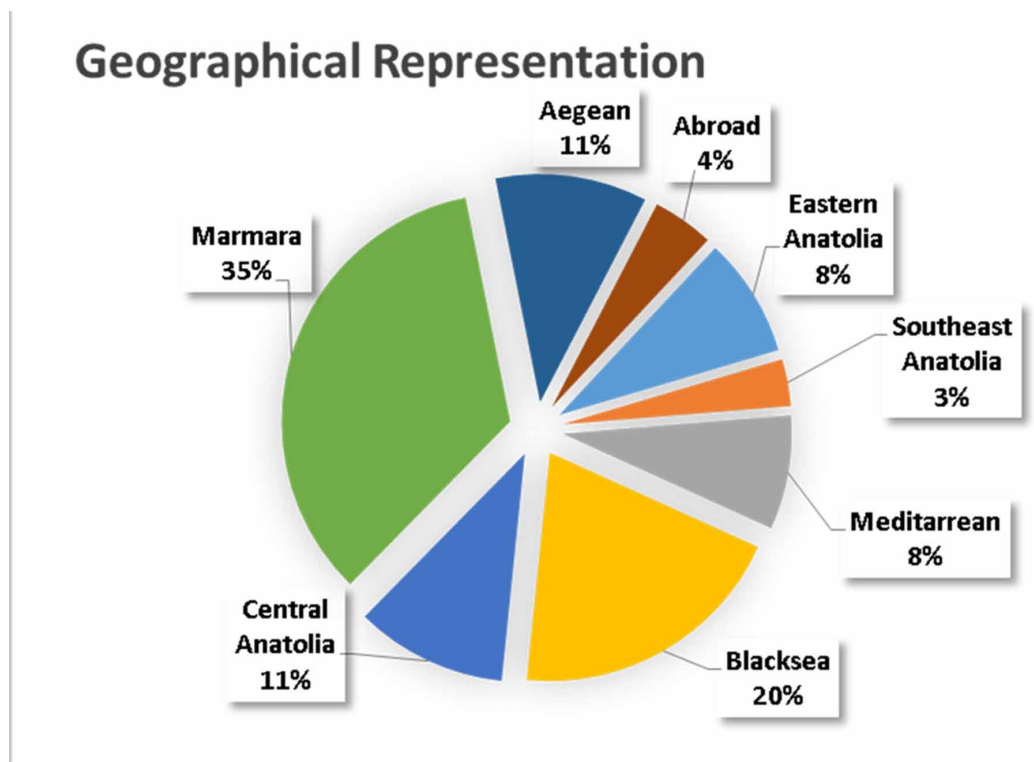
To sum up, women have survived in tougher conditions than men could have. These tough conditions have made women more idealist and even more successful and dedicated and each difficulty is regarded as a step towards their ideals not as an obstacle. This brought the optimism on their side to keep calm even if they're under the most difficult conditions. Besides this, feeling of belonging to a certain society or to a group has brought a kind of pursuit for the equality.

University education in Turkey is a very important event of the family. Providing enough time and money for the kids to pass the university entrance exams is the ideal of the whole family. They believe that all the possibilities should be considered to make a meaningful choice. At this point, the young people are also very anxious, some are determined to become what they would like some are hesitating on what way to choose, but all thinking on their life and career opportunities. So, in terms of age which can be a good determiner for the ratio of being an idealist, the questioned group is just the right one. During their university education, women are generally portrayed as idealist, famous for their future oriented

thinking. Usually this is the first time they get away from the rules of the society and family and start the new things such as perhaps moving to a new city, starting to a new life and having new friends, etc. So, they find more about themselves and others in life. They question the things in a more serious way, such as career and the targets in life.

The average age of the participants was 21 which is a common age average for the university students in Turkey. This age could be considered as a climax of the construction stage of the ideals and the plans according to these ideals. The representation group covers all Turkey including all different regions.

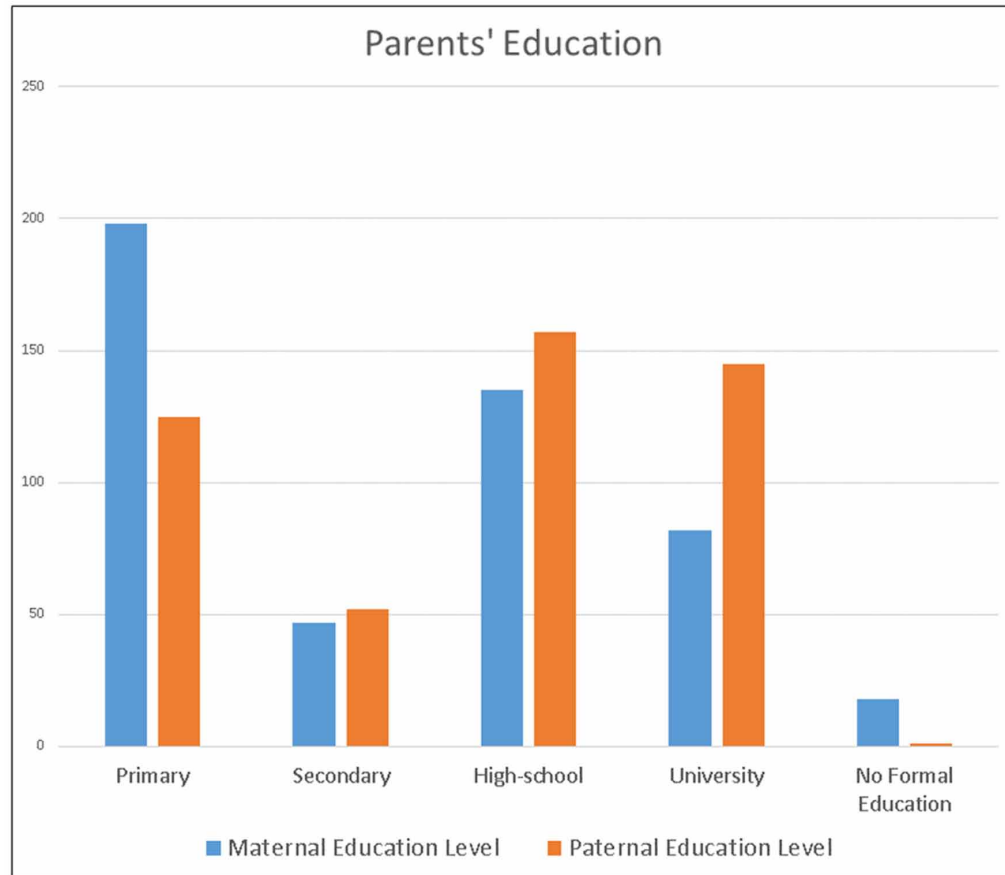
Table 5. Georaphical Representation



Source: Own processing

Educational level of the participant's family is another factor affecting further education and career choices. It is known that maternal educational level may have a great impact on the life of the educational life of the child. The graphics show us that the previous generation gave more importance to the education of the males rather than the females. Even if their number is higher in the primary school level, there seems to be more males for the secondary and high school especially the university education. At this level, not only the medical field but also all other fields are under the hegemony of the males.

Table 6. Parents' Education

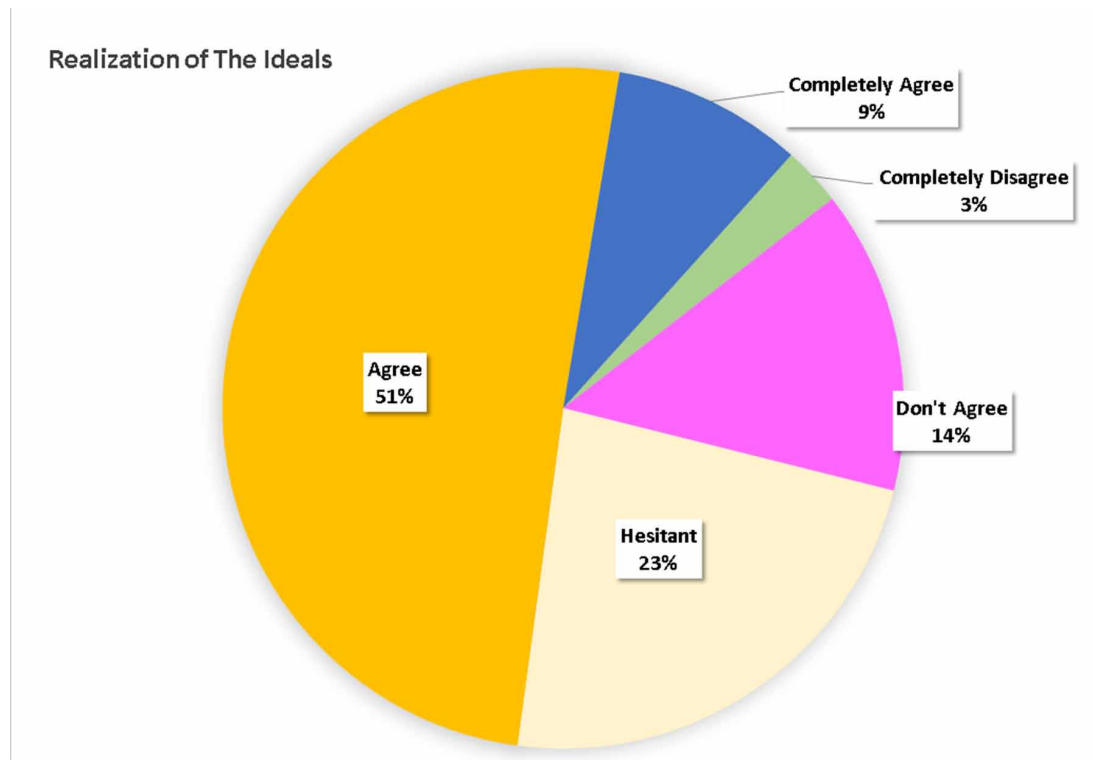


Source: Own processing

According to findings, we can see that the amount of the illiterate mothers is relatively low in terms of Turkish standards, but when the countries with high PISA results are taken into consideration (PISA, 2012 results), we can see that this %5 can be a high ratio for illiteracy. Following the steps of educational process, it is easy to notice that the males have achieved higher ranks of formal education compared to the females. In short, even if a woman starts being a part of the formal education, she may not have a chance to take it academically further like the men do. However, the participants taking the questionnaire replied the question regarding if they have any ideals or not as positive 98%. Only 7% of them stated that they had no ideals.

For the question “How many dreams or targets do you think you have achieved /fulfilled so far?” most of the participants evaluate themselves as the achievers. However, the rate of the hesitant, not specifically for educational ideals but probably partly hesitant for their achievements reach 23%. However, 9% of the participants position themselves as the ones really did something good.

Table 7. Realization of the Ideals



Source: Own processing

Depending upon the replies provided for the question of “How much impacts have the family and others had on you during the process of realization of your goals?” 44% of the participants stated that the family factors play an important role in their achievements and career planning whereas the percentage of the ones stating that the impact of the family is a lot (20%) and a little (23%) have also their own examples. Just 9% of the participants were hesitant and only 4% stated that they had no impact of their family.

One other question aiming to assess their opinion about gender discrimination proved that most of the females believe in discrimination to a great extent. Is there any gender discrimination? In this question, the main aim was to see whether the society and the family affect the process of having and actualizing a dream and a goal. It can be seen that, more than half of the subjects confirmed it. In other words, the women are subjected to discrimination by the close social groups and their families to a great extent. As stated by Isaac Newton “Every action has an equal and opposite reaction.” So this pressure can show itself with the reaction leading women to be more ambitious for reaching their goals. However, this great amount of pressure can suppress the person and cause her never to reach her goals /dreams. As the rates considered, 47% stated this rate as ‘much’, 33% as ‘a lot’ whereas 12% admitted it to be ‘little’ and 6% preferred to be hesitant and 2% said it was so less. One challenging question for the candidates was “How do you take on the challenges which you come across in your life?”

The way women struggle with several different obstacles in life is also another important concern. Certainly, there are many different ways to overcome the possible obstacles. The replies prove that the participants are all aware of the possible obstacles and developed certain strategies to overcome the

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Table 8. The answers on the question aiming to assess their opinion about gender discrimination

How do you take on the challenges which you come across in your life?	%
A give a totally opposite reaction and become more ambitious (Opposite Activism)	36%
I keep on living with the challenge and try to adapt myself to it. (Dignification)	35%
I use my energy to concentrate on something else and try to be successful (Compensation)	20%
I do not resist, I go on with my life as if it hadn't happened (Repudiation)	5%
I do not struggle, I prefer accusing the life (Reflection)	4%

Source: Own processing

problem. Usually the result is that females could overcome the problems by mainly becoming more ambitious. On the other hand, there are also the ones who are just giving up minimizing the possible harm.

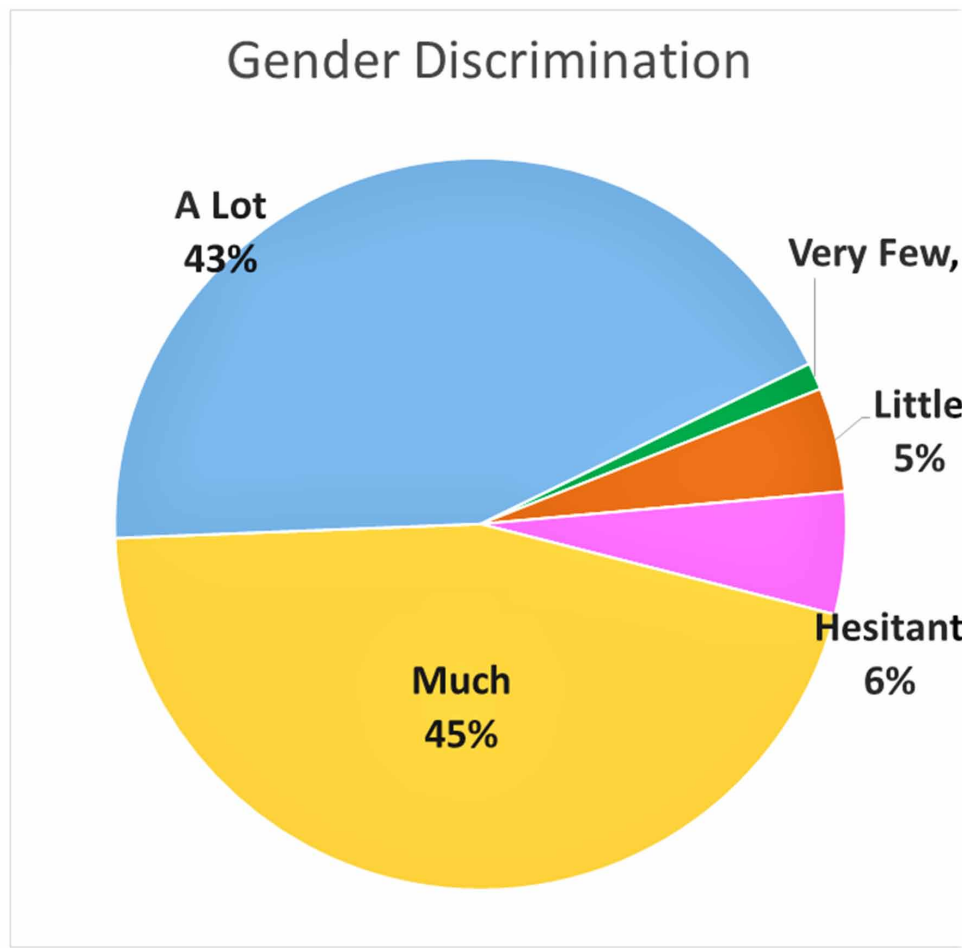
In real life, people usually do not realize their own possibilities or dilemmas. That's why providing them a kind of mirror in the form of a story would mean a lot. That's why the questionnaire involved a little story introducing a poor town family having twins, a girl and a boy and could only support one of them for the university education in the big city and their choice is to support the male one. The question "What is the possibility to happen this situation in Turkey?" yield 45% "Much" replies from the participants.

This is another case proving that the participants believe in the gender discrimination in society. That means in a way, almost all the participants experienced or witnessed a similar case once or more in their lives. Total 88% of the participants believe that it would be the male one to be supported. When their opinion is asked regarding which one of the twins should to be supported, 74% of them stated that the female should be supported. Whereas 13% of them insisted on supporting both and 12% of them supported the male one.

The next question is mainly related with a colloquial usage throughout the country. "What is the use of educating girls? In two days' time she'll get married to a stranger and all the effort will be in vain." This point of view shapes all the efforts even before starting the education or making career plans. The quotation which can be seen in this question is a very cliché sentence which anyone can hear and encounter in their daily life. Not only in Turkey, but also in other countries, we can still see this type of understanding all over the world. As women are still being considered as materials to be exchanged as one day, will go away from home and leave all the efforts done for her in vain. Whereas, some families can still think of the investment made on their daughters as a way to find a more suitable and wealthy husband for her.

The other issue requiring attention here is that families who support this ideology can also influence their close-environment and neighborhood with this specific thought. Even if a certain family might have a different point of view, the rest of the society would also affect them through their questions, obligations and attitudes, or vice versa. At this point, the position of the daughter in the family and in the society gains even more importance since it's seen, as a matter of fact, the name of the family and their honour. That's why most of the time, the females are not allowed to find or follow their own way if they have a split with the family or society at any point in life.

Table 9. Gender Discrimination



Source: Own processing

The concept of idealism and being a woman are hand to hand in Turkish society. As seen from the very beginning up to the end of this study and regarding the answers of the subjects, women are forced to be idealist in planning their career. Because if they have any ideals they are starting from one step behind men and they need to do whatever they can to cover and minimize this difference. In order to explain this extra effort we may imagine an escalator carrying people to upward positions and the only thing you should do is to stand still to wait for your turn. But if there is a long queue and perhaps there is no possibility for your turn then you should climb the stairs on your own through the next column. This means that while some people are getting to higher positions by just standing still you must pay an extra effort to reach to their level and pass them if you can. This means sometimes running through the narrow corridors left for you or rowing against the current. Looking at the successful women in the society you may easily see how far they struggle and for being able to take a part a certain position in the society, they have tried their best and won.

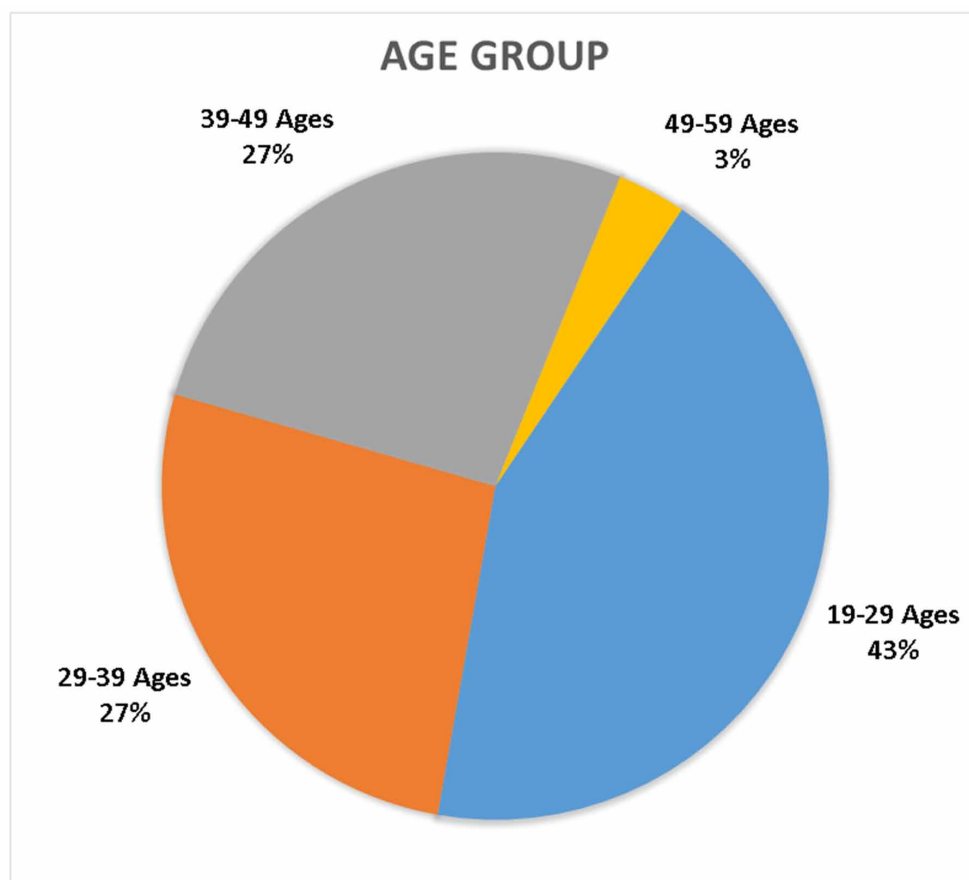
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Another important concept which should be mentioned here is 'citizenship'. In the old times, citizenship concept might be only associated with the land and the country, but now citizenship is considered together with the rights one has or should have. In a country, where a sort of discrimination or inequality is supported, it would be difficult to think of the rights or citizenship. In this case, when for example, women by being ambitious, determined and men by supporting women with the view of seeing them as equal powers can struggle this inequality. With the positive impact of the media and new media nowadays more and more people know about their rights and fight for it.

3 INTERVIEWS WITH MEDICAL WORKERS

Depending upon the demographical structure of the medical workers group the average age of the participants is 33,8 and the oldest is 51, the youngest is 19. The percentage of the participants for each group is as follows.

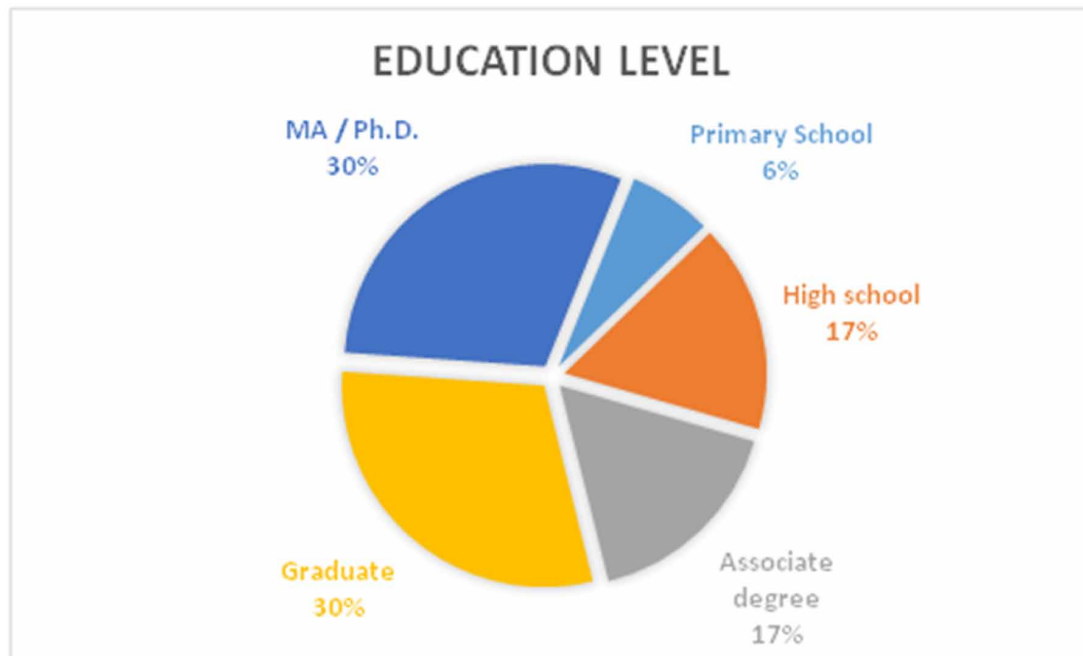
Table 10. The demographical structure of the medical workers



Source: Own processing

Regarding the gender, the demographics of the male and female balance shows something similar to the discipline. The males were 35% and the females were 65% of the sample group. Only 6% of them were primary school graduates and 17% of high school. 17% of them were having an associate degree and 30% of them were the university graduates. 30% of the sample group was having and MA or Ph.D in the field.

Table 11. The Education Level of the Medical Workers



Source: Own processing

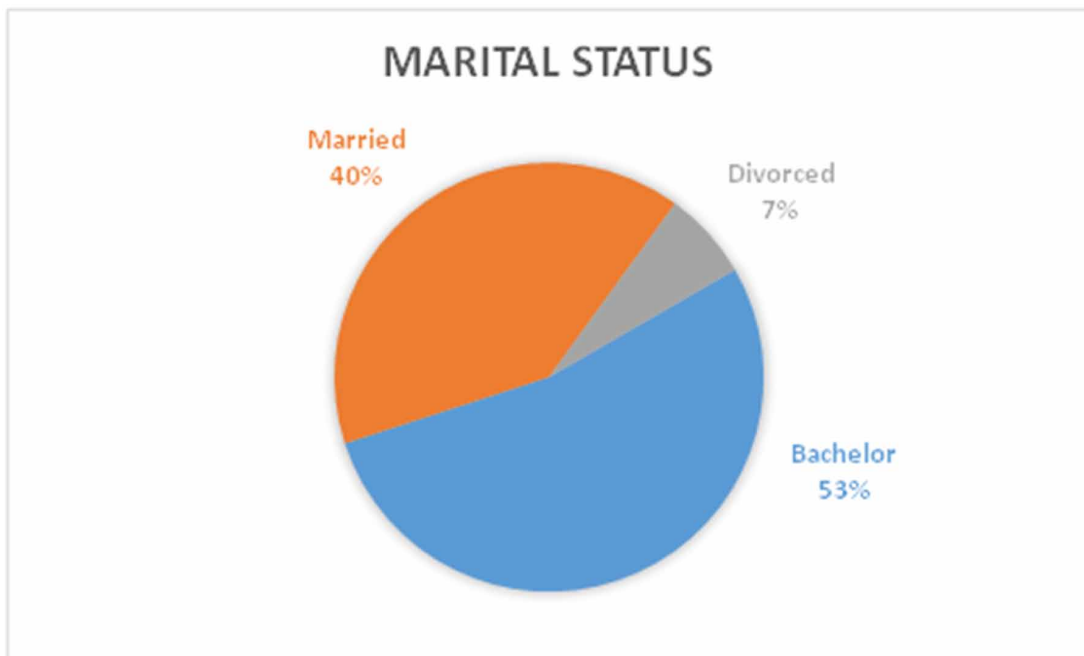
Marital status of the participants is important since being a woman is usually associated with the complex roles of being a wife, a mother, a daughter or having more feminine roles in the society. Regarding their marital status the 53% of the participants were bachelor and 40% of them were married. Only 7% of them were divorced.

All the participants of the questionnaire and interviews were working at the university hospital. The range of income was changing between the lowest 500 Euros and the highest to 830 Euros. In this respect, the lowest-paid group establishes the 27% of the participants and the second group is around 20% whereas the rate of the ones earning around 700-800 Euros reaches to 30%. Only 23% of the participants take place on the highest level of the scale.

Depending upon the position in the institution, 43% of the medical workers taking part in the interviews and answering the questionnaires were the regular workers. 37% of them were the contractual ones and 20% of them were the working there in an optional way that means having their in-service training or similar duties.

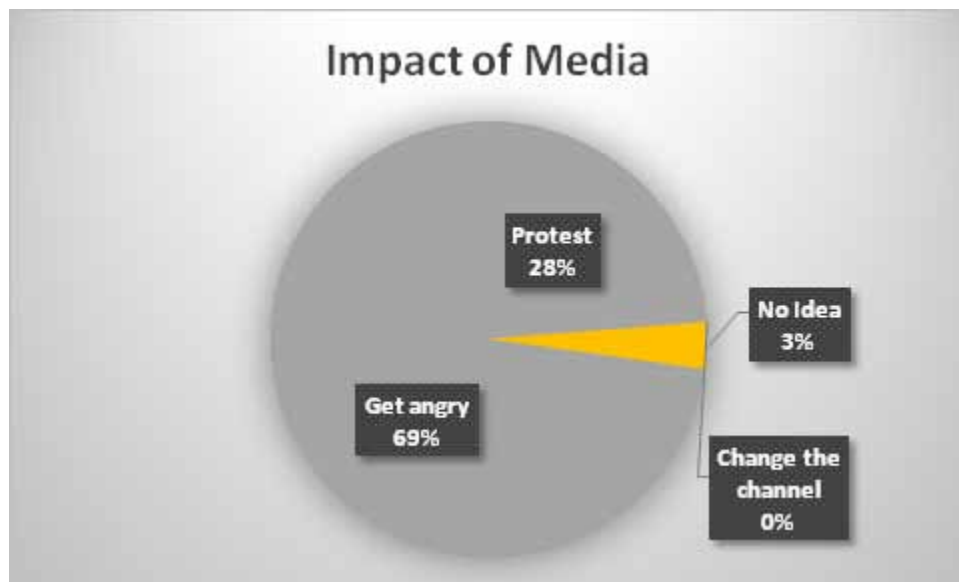
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Table 12. The Marital Status of the Medical Workers



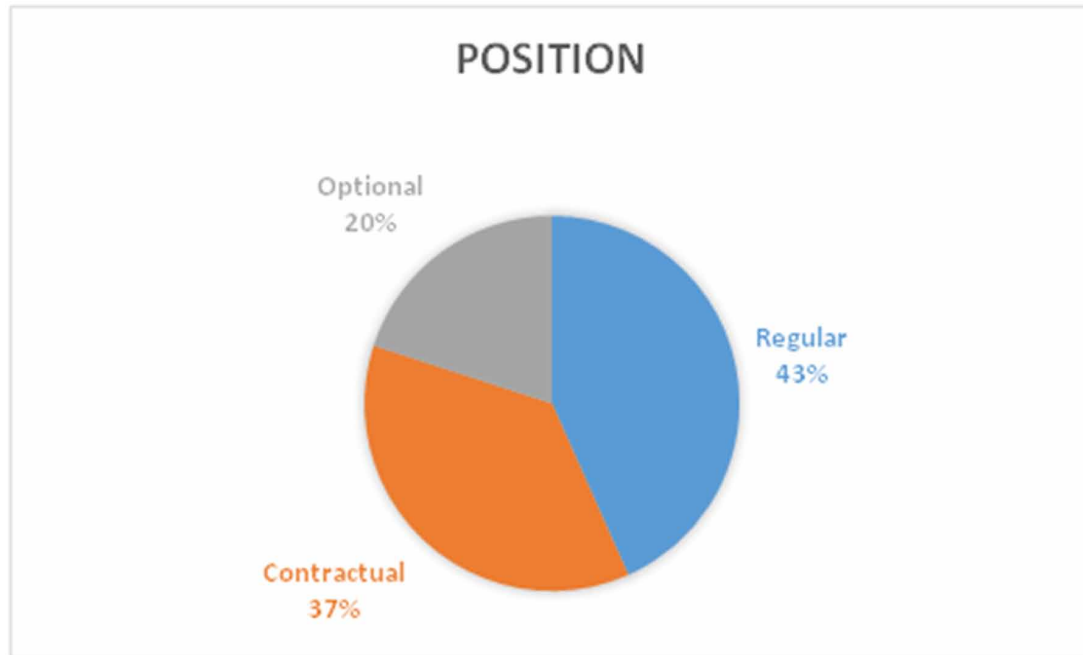
Source: Own processing

Table 13. The Economic Scale of the Medical Workers



Source: Own processing

Table 14. The Position of the Sample



Source: Own processing

The main groups of the interviewees were the nurses with 44% and doctors 23%. Auxiliary services cover 13% of the group whereas the officers and others cover 10% each.

Depending upon the unit of work, 66% of the sample group was working in surgery, 9% in radiology & laboratory, 6% in polyclinic and 35 in emergency unit. The rate of the ones working in the managerial office was 16%.

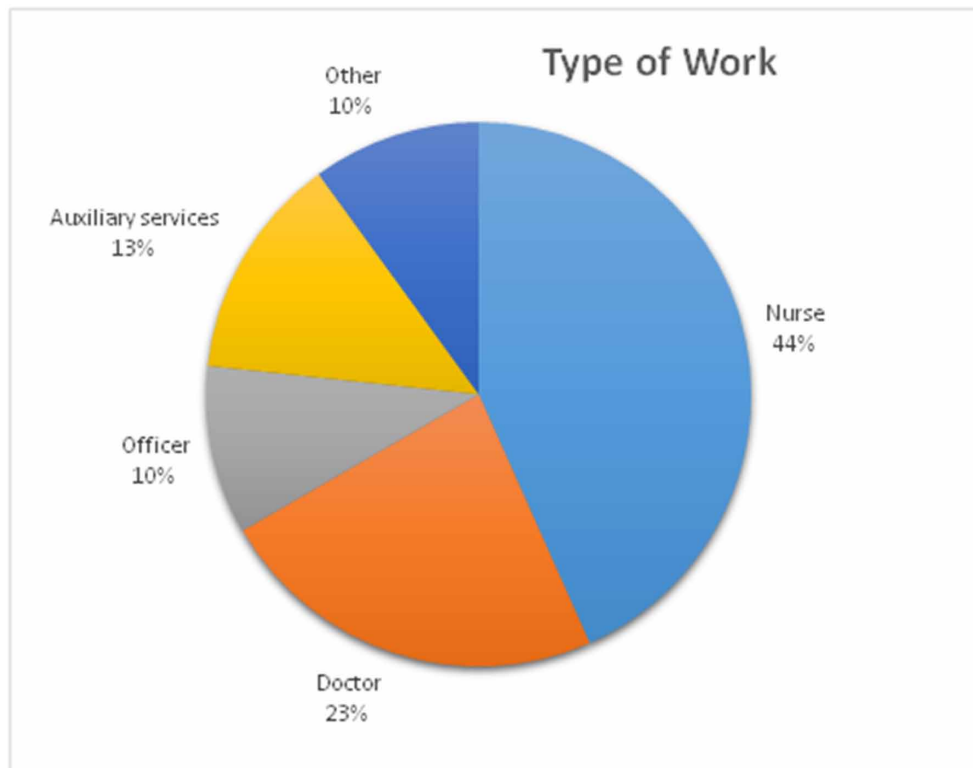
Answering the question on the importance of communication in their occupation, mostly, 50% of them agree with the crucial importance of it. However, there seems to be a large group of people, 43% of them, believing that just basic communication would be enough to accomplish the needs of the occupation. 7% of them are also hesitating to value the importance of efficient communication. That means, all these people faced some kind of problems that could not be solved through communication processes. They believe that efficient communication wouldn't be enough to solve the problems they face while the exercise of the profession.

When asked their opinion if being a male or female is a factor having a trouble during their professional life, 46% of the interviewed people stated that they completely agree whereas 27% of them do not agree and 20% were hesitant. These rates clearly state that gender is a factor in the medical workers' life.

The participants state that facing any problem in the field is somewhat related to being male or female and gender is an important factor. 53% of the participants agreed with the statement and 30% of them disagreed while 17% of them were hesitating.

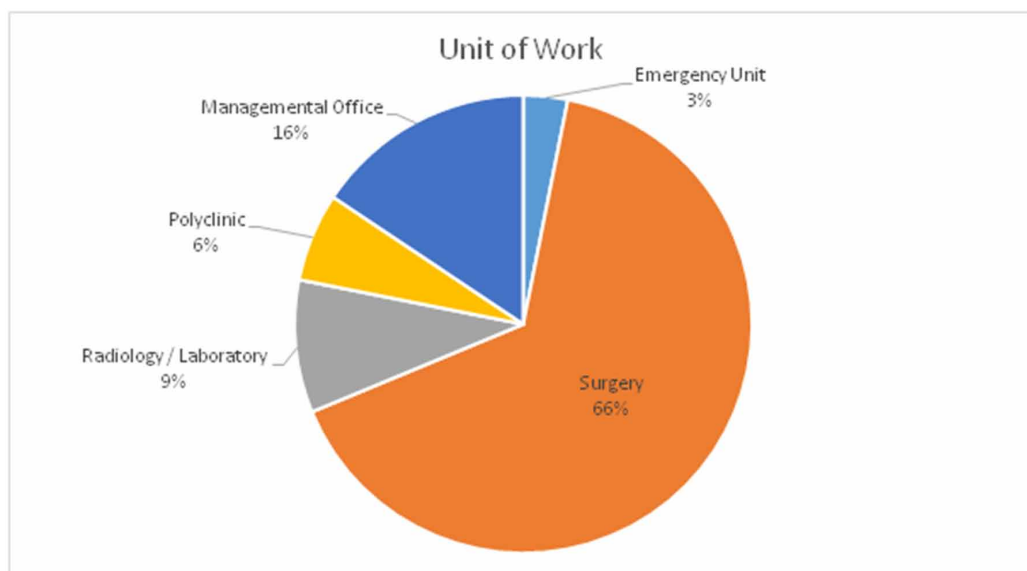
Case Study of Gender and Career Choices

Table 15. The Type of Work of the Sample



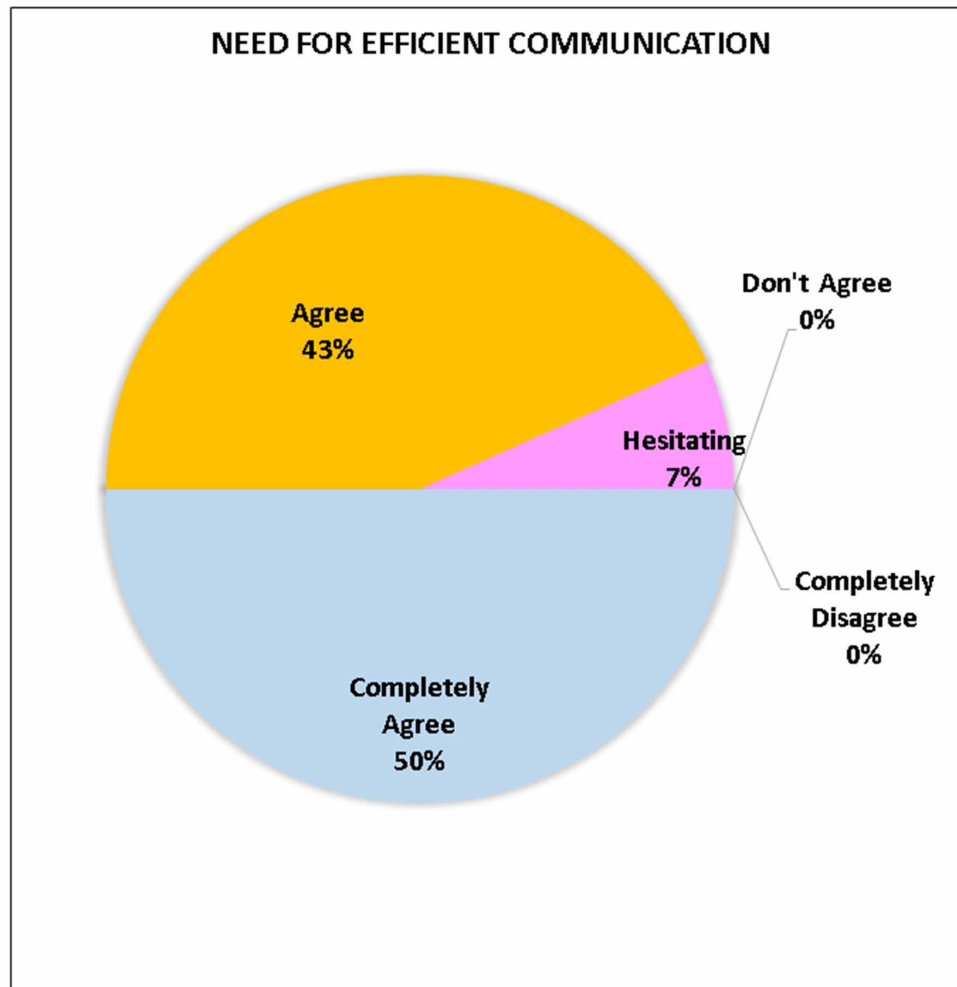
Source: Own processing

Table 16. The Unit of Work of the Sample



Source: Own processing

Table 17. The Need for Efficient Communication



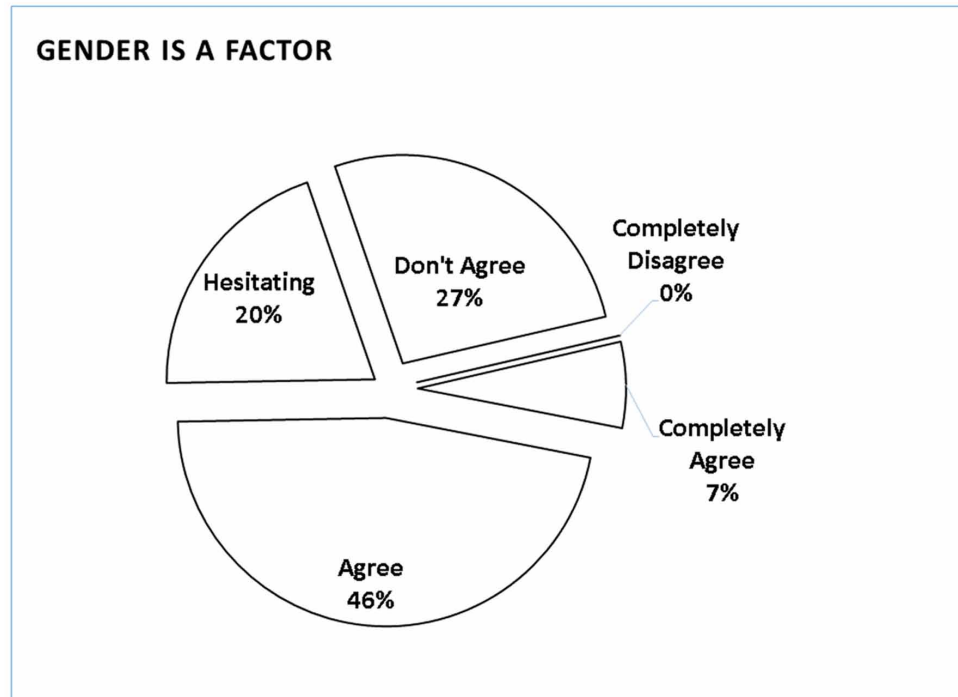
Source: Own processing

40% of the participants believe that being a male or female affects the relationship with the patients in a positive way. 17% of the interviewed people stated that it might have a negative impact on the patients whereas 23% of them stated their hesitations about the issue. 13% of the interviewed people stated that they had no idea due to the fact that they do not frequently come across with the patients.

It was interesting to see that 73% of the participants were following the media regarding the violence against the medical workers. 27% of them stated that they were following it partly.

Regarding the question how they are affected by the issue, 69% of the interviewed people stated that they feel angry and 28% stated that they would protest it. The ones having no idea have only 3%. Nobody would like to change the channel, which means a kind of spiral of silence or escapist type of behavior. This part of the questionnaire provided information in a clear way that the media image of the medical people is very important and the workers of the field give importance to violence attacks and react to it promptly.

Table 18. The Gender Factor in Professional Life



Source: Own processing

When asked if they are happy to be in the sector, 17% of them stated that they are completely agree and 63% of them agreed whereas 17% of them hesitated and only 3% of them disagreed with the statement.

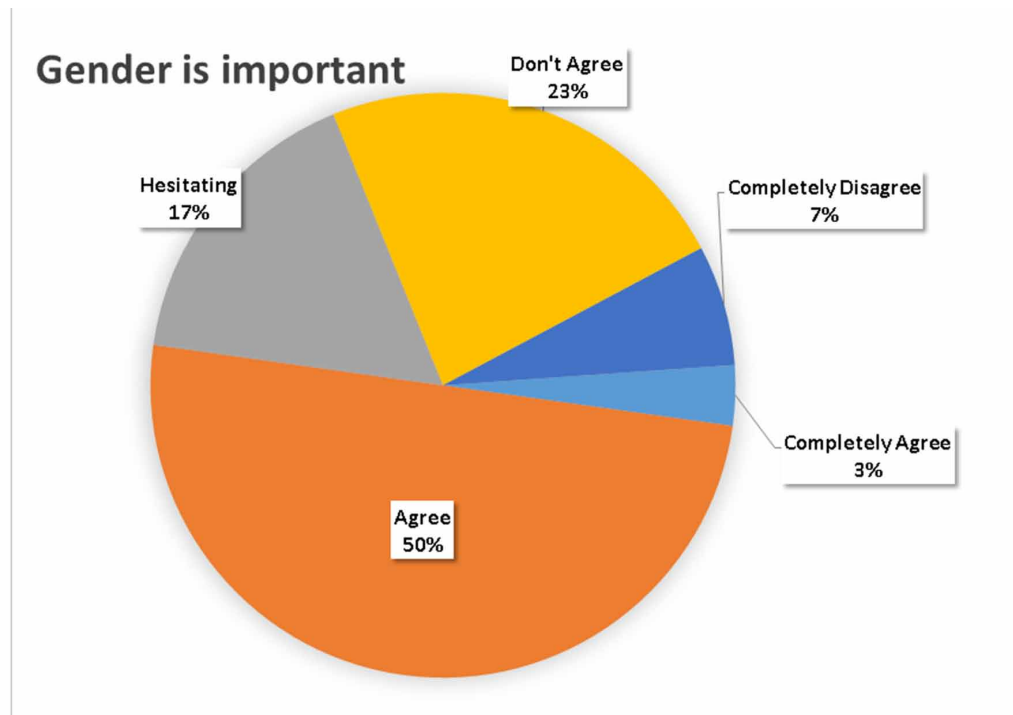
7% of the participants completely agree and 46% of them agree with the statement that upon finding a better chance for a better job they would be working in a different field rather than the medical field. While 37% of them are hesitating only 10% of them seem to be too much dedicated to their field. This reflection could also show us the impact of the burnout syndrome on the workers that they are almost ready to give up their career or work in the field. Also the happiness stated in the previous question seem to be a pseudo one regarding

The participants of the interview believe that being female in the field of medicine is a disadvantage to a great extent. The rates of the agreed ones reach up to 70% whereas only 10% of them disagree and 20% of them state their hesitations about the issue. However, it is certain that the workers believe that females have disadvantages in the field.

They even think that being a female in the field is much more difficult than being a male in the field. The percentage of the participants agreeing with the statement reach up to 44% whereas the ones disagreeing reach to 39% and hesitant are 17%.

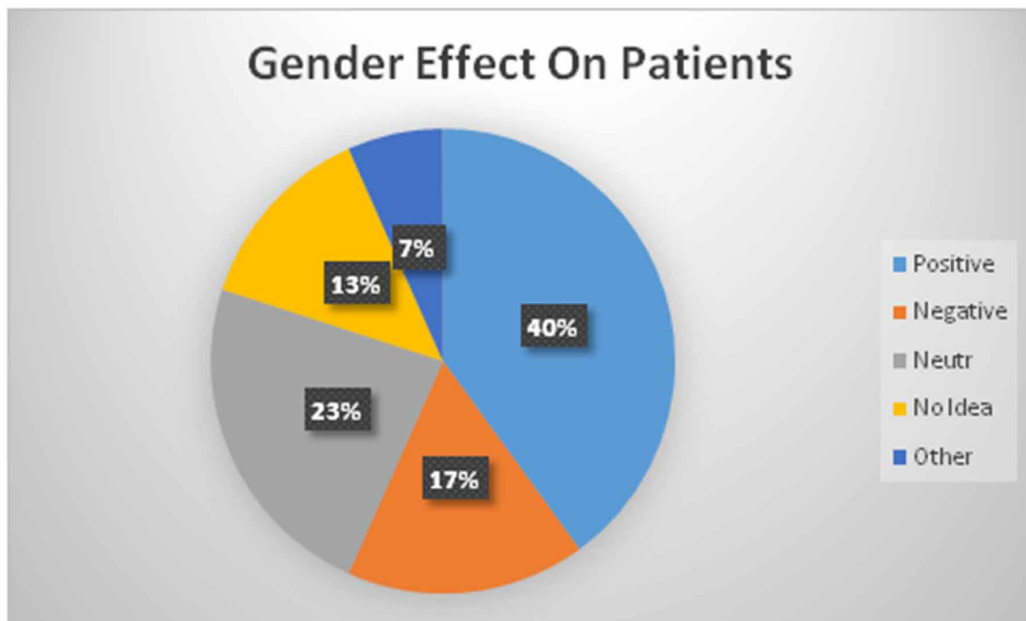
A well-known belief that the males are more advantageous in the field had a lot of supporters among the participants. The rate of agreed ones reached up to 37% whereas the disagreed had a little higher rate with 40%. 23% of the participants stated their hesitations about the issue. This question shows us that there is still a dilemma going on in the field whether the field is more appropriate for the males or females.

Table 19. The Importance of Gender



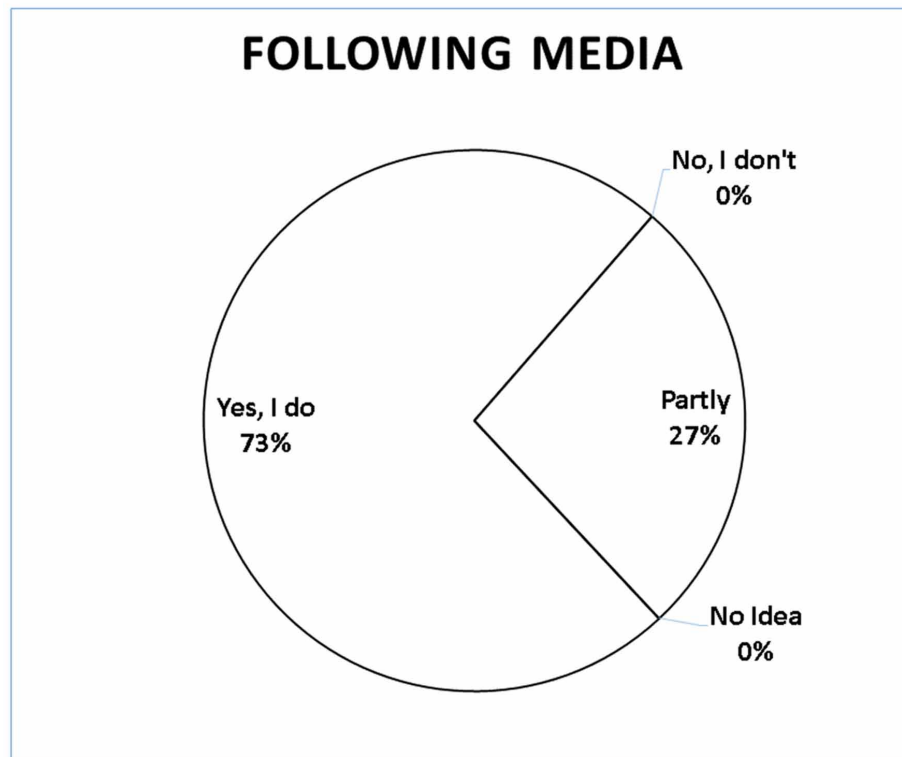
Source: Own processing

Table 20. The Gender Effect on Patients



Source: Own processing

Table 21. The Media Preference of the Sample



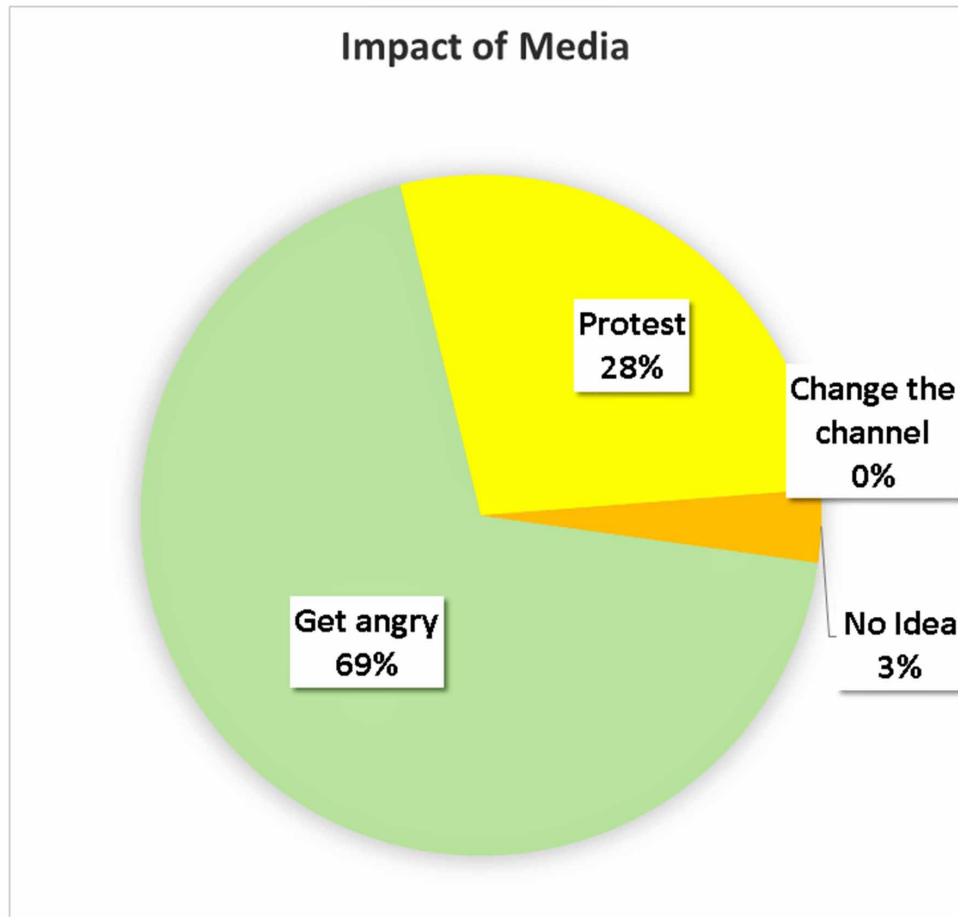
Source: Own processing

The interviews yielded many different perspectives clearly stating that medical field is just like any discipline requires more equality regarding gender issues. The participants expressed their sadness that they frequently come across with unethical and undesirable situations that might require somewhat more care and equality. However, they also believe that none of these could be solved easily. Partly, 77% of them believe that these problems require institutionalized solutions, yet, the rest do not think in a similar way.

They all believe that most of these problems could be solved through awareness rising. (30% Agree and 70% Completely Agree). Most of them believe that only the field workers could contribute to the solutions (89%) and it's their crucial responsibility to be a part of the solution rather than being a part of the problem. They agree that this is the responsibility of all in the field. Yet, there are some other solutions like educating the general public and patience.

Regarding the media images and violence news they feel a bit stressed because it is believed that this type of news do not help them but instead increase the rate of the violence. Attacking to the doctors or protesting the nurses won't be solving any of the problems of the field. Instead on the side of the field workers, this is considered as adding more fuel to the fire. In order to prevent occasional violence to doctors, nurses or other medical workers, the public and the patience should have some training to control their anger and other negative feelings. 69% of the participants agreed with the training of the patience and patience relatives to prevent the violence against medical field workers whereas 17% hesitating ones and 14% disagreeing ones do not believe the positive impact of education to prevent violence against medical field workers.

Table 22. The Impact of Media on the Participants



Source: Own processing

Especially the women facing the violence once do not think of continuing the job any more due to the peer pressure and media impact they either leave the job or take long leaves to overcome the trauma.

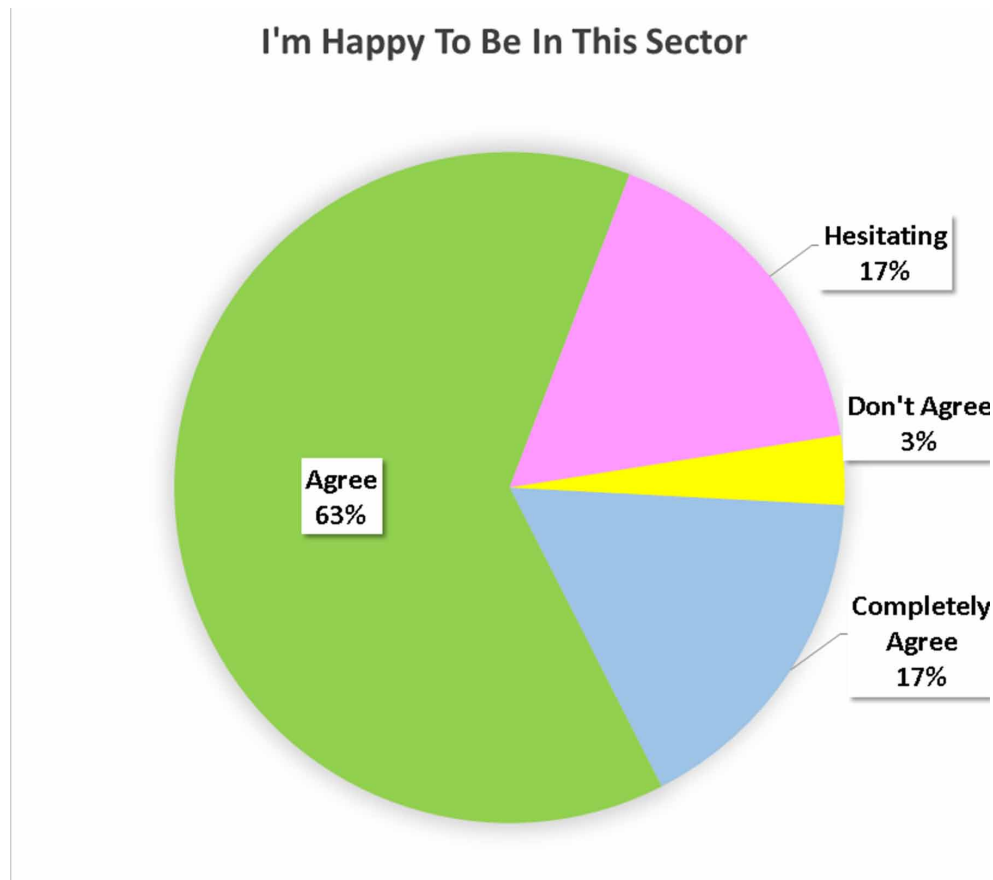
FUTURE RESEARCH DIRECTIONS

Regarding the research, it could be argued that the choosing a job is considered not only concentrating on the type of education or choice of occupation but the respectability and dignity of a future status. Most of the decisions made dwell upon the future value of the jobs and the families which plays an important role their children's projections. Sometimes the self oriented children might decide on their own ways, yet, this is somehow very limited. The criteria of the jobs were already decided by the society and long established values of the culture; and these are classified as to be appealing to males and females. Most of the literature concentrates on the happiness of the urban people, or develop statistical data regarding

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the character and job compatibility, etc. The upcoming decades would be bringing up many different positioning systems and probably the traditional values attributed to the jobs would be failing. People would be forced to be choosing a kind of specialty rather than a wide range of jobs requiring multiple duties and wide range of differentiations. Digital world would seem be forcing people to position themselves more on digital specializations, diagnostic processes as a part of a network. Thus, not only the individual decisions or wishes but also the group acceptance and harmony would also be considered. Digging into the problems does not only involve determining the problem or solving it but having enough precautions not to come across the problem. The system should be handled as to make it possible for everyone to be anything they want; and the target should be creating the future human respecting the self, the society, the values, the nature and the world we live in. s

Table 23. The Job Satisfaction of the Sample



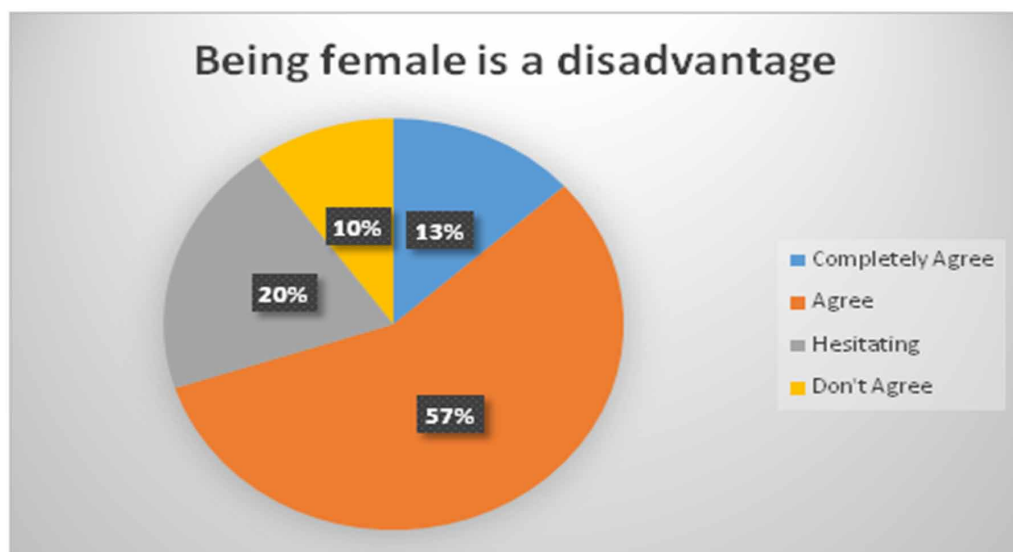
Source: Own processing

Table 24. The willingness of employees to change jobs



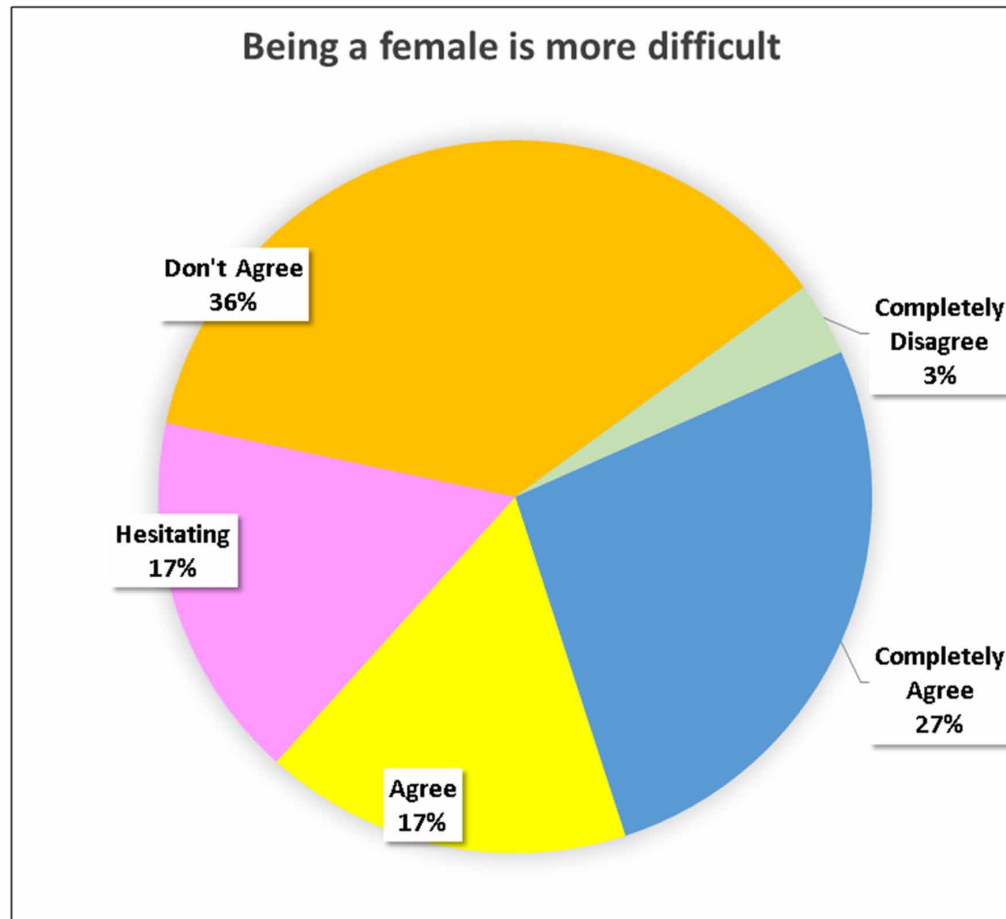
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Table 25. The Idea on the Disadvantage of the Gender



Source: Own processing

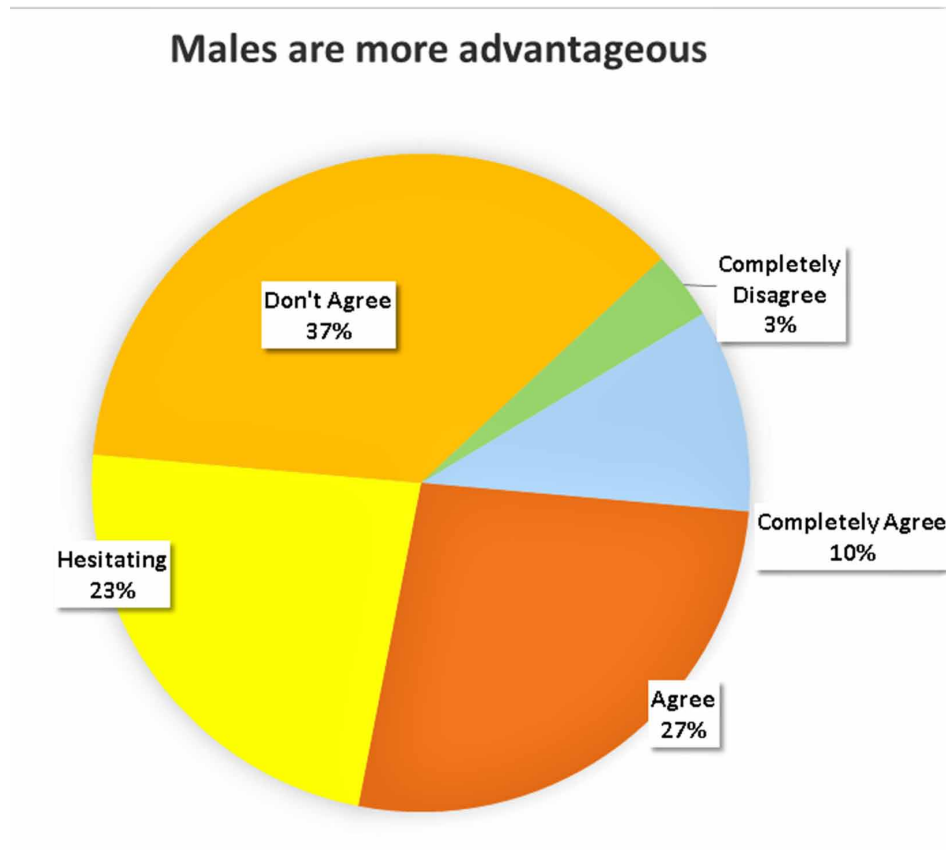
Table 26. The Difficulty of Being Female



Source: Own processing

CONCLUSION

This study puts its main concern on the relation between women and idealism specifically in the field of medicine. It supports the idea that women's idealism is not a result of any choice, but an obligation, created by the obstacles put by the society, culture, religion and partly the nature of the work. The burden which is put on women by birth requires them to act twice more than men since they are all having more responsibility both at home and at work. Unlike men, women cannot utter this sentence "I want to achieve this .../ plan this ...", etc. This is mainly because of the obstacles mentioned above. As a result of this obligation, a quest for a citizenship or kind of real equality in front of law and social scales as well as the use of rights which might provide better management roles are still expected in any field but specifically in the field of medicine.

Table 27. *The Advantage of Being Male*

Source: Own processing

There seems to be no inequality in the educational part yet in the implementation of the job opportunities and the application processes the females are put in a more disadvantaged position whereas the males are put on the escalators carrying them always to the upper positions even if they do not perform any better.

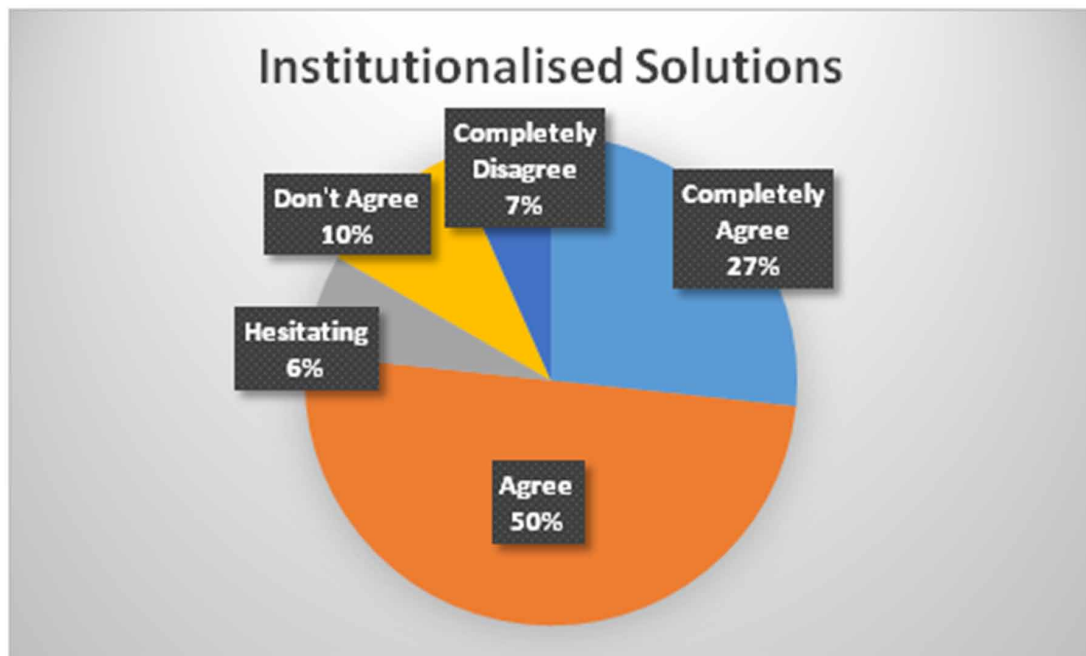
The solution to all problems seem to be stemming from the wrong images created by the media and the uneducated part of the society having false believes and still old traditional perspectives assuming the place of the women should be only their household among their siblings, husband and relatives.

The modern perspectives put the women into more demanding positions; yet, this caused more negative reaction providing better possibilities for females to gain power on their spouse as well as the community. Their managemental, economic and social empowerment is not something good for the rest of the society so, they implemented fears of losing their family or children or social status in case of any negative issue emerging in their working conditions. Thus, the females in the field are always under a certain fear and threat that something might have happened and they might lose everything they had up to the moment.

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

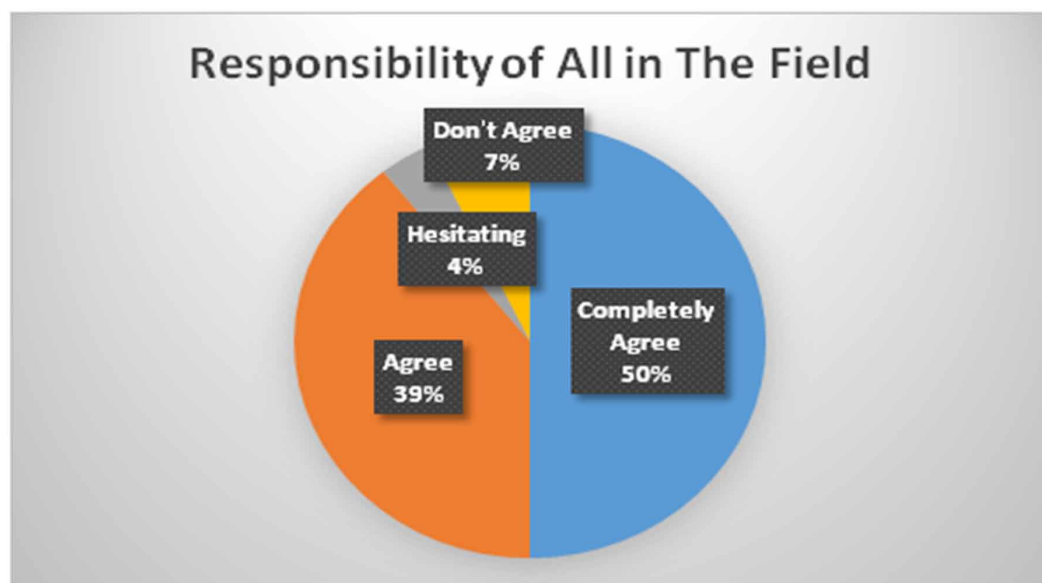
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Table 28. *The Institutionalised Solutions*



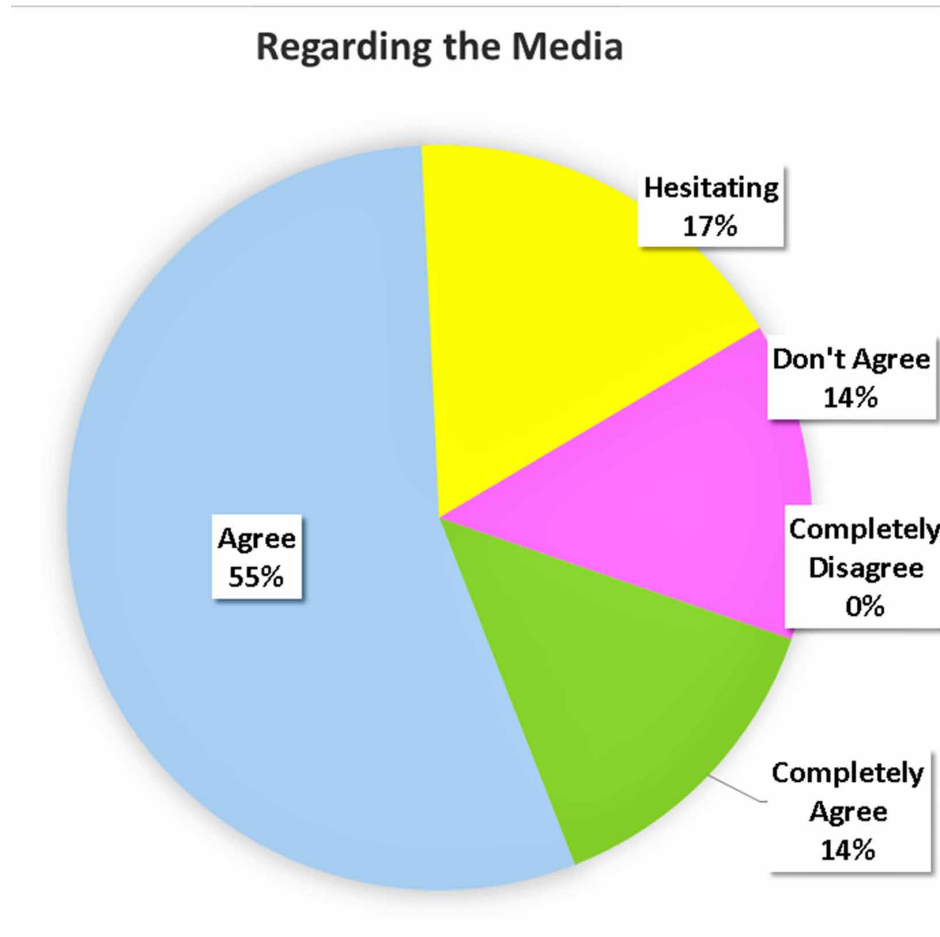
Source: Own processing

Table 29. *The Responsibility of All in The Field*



Source: Own processing

Table 30. Regarding the Media



Source: Own processing

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KEY TERMS AND DEFINITIONS

Decision Making: In psychology, decision-making (also spelled decision making and decision making) is regarded as the cognitive process resulting in the selection of a belief or a course of action among several possible alternative options, it could be either rational or irrational. Decision-making process is a reasoning process based on assumptions of values, preferences, and beliefs of the decision-maker.

Employment Discrimination: It is a form of discrimination based on race, gender, religion, national origin, physical or mental disability, age, sexual orientation, and gender identity by employers. Earnings differentials or occupational differentiation—where differences in pay come from differences in qualifications or responsibilities—should not be confused with employment discrimination. Discrimination can be intended and involve disparate treatment of a group or be unintended, yet create disparate impact for a group.

Equal Opportunity: It is a state of fairness in which individuals are treated similarly, unhampered by artificial barriers or prejudices or preferences, except when particular distinctions can be explicitly justified. It requires the equal accessibility and evaluation conditions within the given circumstances.

Gender Inequality: Gender inequality is the social process by which men and women are not treated as equals.

Job Satisfaction or Employee Satisfaction: It is a measure of workers' contentedness with their job, whether they like the job or individual aspects or facets of jobs, such as nature of work or supervision. Job satisfaction can be measured in cognitive (evaluative), affective (or emotional), and behavioral components. Researchers have also noted that job satisfaction measures vary in the extent to which they measure feelings about the job (affective job satisfaction) or cognitions about the job (cognitive job satisfaction)

Case Study of Gender and Career Choices

Job Skill: Certain jobs require a set of skills to be used in performing the job requirements. These domain-specific skills would be used only for a certain job and might take some time to be acquired. Skill usually requires certain environmental stimuli and situations to assess the level of skill being.

Problem Solving: It is an important skill to be considered in job satisfaction. It consists of using generic or ad hoc methods in an orderly manner to find solutions to problems. Some of the problem-solving techniques developed and used in philosophy, artificial intelligence, computer science, engineering, mathematics, or medicine are related to mental problem-solving techniques studied in psychology.

Chapter 19

The Relationship Between Organizational Culture and Organizational Commitment: A Research in Private Health Institutions

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ABSTRACT

Organizational culture fulfills the most important functions in order to reach organization goals. At the same time, the existence of the relationship between organizational culture and organizational commitment has been determined by many academic studies in the past. With this study, suggestions were presented to the organizers of the health sectors which should have strong organization structure. In the introduction part of the chapter, there is a brief description of what the purpose of working is, how it is to be done, and in which context it will be completed. Organizational culture in the first part and organizational commitment in the second part are discussed literally. Then the findings obtained based on the research data were included, and the study with the conclusion and suggestion was completed.

INTRODUCTION

Nowadays, organizations that want to cope with increasing competition with the globalization phenomenon nowadays have to focus on intellectual capital in order to be able to provide rapidly and continuously competitive advantage. At the time when the view that organizational values should be maximized when profit maximization alone is not enough, organizational behavior emerges as an important fact. The most important thing necessary for the maximization of value is not to neglect the accumulation of organiza-

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tions. To achieve superiority in recreation and to increase the strength of the organization depends on whether the organization of employees is self-employed and sacrifices for organization.

Organizational culture not only connects the employees to each other but the organizational elements of norms, values, rituals, myths, etc., which reveal the responsibilities of employees to the organization by acting as a glue as well (Köksal, 2007). When employees who adapt to organizational culture integrate with the organization, their level of organizational commitment increases, they make sacrifices to bring the level of competitiveness in the direction of common goals and come over the difficulties to an established organizational culture in times of crisis.

Today, studies on organizations are continuing increasingly. The studies on the organizations in which human beings exist are developed in parallel with the studies carried out in the field of psychology and sociology. It is seen that organizational silence, organizational justice, organizational commitment, organizational citizenship, organizational learning concepts are frequently the subject of research. Since culture is also a human characteristic, it is one of the factors affecting the management, growth and development of the organizations of the human community. Culture plays a key role in showing superiority to organizations' competitors. Organizational culture constitutes common values that enable each member of the organization to gain a place in the organization by giving a different identity and be accepted by the members of the organization. Organizational culture consists of many complementary and abstract elements. New entrants to organization continue to be employed in a healthy and productive manner as long as they find a place within the organizational culture. Those who cannot adapt to organizational culture increase the indicators of work turnover. However, the importance given to people is not only related to employees. All stakeholders interacting with the organization are influenced by this culture. Culture is emerging differently in every organization as organizational culture is composed of many elements of material and spiritual.

The subject of our study in this context; is to establish the effect of organizational culture on organizational commitment by determining what kind of the relationship is to be considered between the factors that bring organizational loyalty to organizational culture.

The main purpose of the research; is to show whether organizational culture is a predictor of organizational commitment is by putting forward the relationship between organizational culture and organizational commitment, which is one of the basic principles of organizational behavior in the health organizations. Organizational culture is a sense of values, beliefs, habits and norms that influence and direct the behavior of employees in an organization that is a common goal. Organizational culture is thought to be linked to organizational commitment. This study, which will be carried out in health organizations, will also take place in the literature as a current work in the sectoral sense. It will also be used by other organizations in the health sectors. We also believe that the health organizations will make necessary adjustments on the elements that will form organizational commitment and organizational culture by examining organizational culture and organizational commitment levels through the results of the work of the results of the personnel.

In the study; first, real knowledge about organizational culture and organizational commitment is discussed. Then, a questionnaire was applied to the Health Organization employees by using the basic scales about organizational commitment and organizational culture. After this, a questionnaire was made on the employees of the health organizations by making use of the basic scales on the field related to organizational commitment and organizational culture. Findings were obtained regarding the relationship between organizational culture, which is one of the elements of organizational identity of health

organizations employees, and organizational commitment, which expresses commitment to the organization. The research findings were analyzed using SPSS and Excell programs of online questionnaires.

Organizational Culture

Organizational culture; are a set of assumptions that have been proven by a particular group to have proved to be valid as it is in the context of internal adaptation or internal integration, and as such are taught as the right way to perceive, think and feel the new members' programs. For this reason, there are a number of assumptions that are taught to new members as the right way to perceive programs, think and feel (Schein, 2004: 11). The concept of organizational culture has emerged at the end of the 1970s and has become widespread in sociology and organizational management by entering the literature. Organizational culture is the correct perception, thinking, emotion, relations, values and fundamental assumptive losses that are invented, discovered or learned in the process of resolving problems of harmony with the environment and internal integration by the organization, which are considered because of their functionality and therefore to be taught to the group members (Doğan, 2007: 104).

According to Edgar Schein, organizational culture is the basic assumptions that a group has developed and became systematical to solve the problems that it has experienced during external adaptation and internal integration (Schein, 2004).

There are three basic reasons for the emergence and widespread use of the concept of organizational culture (Şişman, 1994: 24):

- The fact that the Japanese rise rapidly towards the end of the 1970s and that the industrial exploitation, together with the economic power, is handled by researchers,
- This economic progress has also led to regression of America and Europe. European and American researchers have had to investigate this issue.
- Provided the development of concepts related to organizational culture.
- In the researches carried out on the organizations, the tendency of the organizational life to gain weight on the unreasonable cultural and symbolic orientation and to emphasize the qualitative measures in the research has gained importance.

We can see that concepts such as organizational culture is at the forefront together with total quality management studies. The difficulties experienced during the implementation of the methods applied by the Japanese in other countries also began to be explained by cultural items.

Factors Effecting in the Formation of Organizational Culture

Organizations and other profit-oriented or non-profit organizations are established by entrepreneurs in order to achieve a certain purpose, aim and likelihood. A culture of organization is formed because entrepreneurs who establish the business have a certain cultural accumulation and this cultural accumulation is a model and it directs the organization. Culture that is influenced by the founders of this organization can be called culture.

The Impact of Internal Environment: Each organization has its own structure and subsystems. Internal factors affecting organizational culture; organization shape,

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- Organizational grade
- The organization's promotion and evaluation system
- Technological facilities
- Control systems

Internal environment and organizational culture are intertwined. For this reason, it should be evaluated together. In other words, the internal environment is the organization itself. It is the most influential factor in the formation of the culture.

Relationship between Community Culture and Environment: In the most general sense, enterprises are open system organizations. The organization has to be in communication and interaction with the internal and external environment in the course of life. This is the result of being an open system. External environmental factors affecting organizational culture: society culture, state structure, consumers, rival enterprises. Among these, the external environmental element, which is an important part of the formation of organizational culture of every quality enterprise, is social culture (Zeytinoglu, 2006).

The Importance and Functions of Organizational Culture: The intense competition in today's conditions is one of the developments that increase the importance of organization culture. Organizational culture is an important indicator in the formation of organizations' aims, strategies and policies. Organizational culture facilitates or makes it difficult to organize administrative strategies. Every organization has practices, symbols, symbols, traditions and legends that develop over time. Thus, there are behavioral parameters that define how employees should behave in organizations or organizations that have a strong organizational culture (Eren, 1997: 376).

In organizations where there is a powerful and strong organization culture, result-oriented is dominant. While the organization carries out its business more quickly and easily, the work done is understood and the emotional connection between the employee and the organization is established. Apart from these, strong organizational culture increases coherence in organizational behavior and creates a secret control mechanism within the organization (Akıncı, 1998: 51-53).

One of the most important tasks in increasing the organizational success of the managers is to orient the individual goals of the employees towards the same goal with the purposes of the organization. One of the most important things that ensure this is a strong organizational culture. Some of these functions can be listed as follows: Organizational culture has a role in determining the boundaries separating an organization from the other organization.

Organizational culture provides an identity to the members of the organization, enables individuals to connect a common value more than their individual interests, and provides an audit and control for the members as an element of the internal support (Başaran, 1982: 111, Özkalp & Kirel, 1998: 109, Dinçer & Fidan, 1996).

Organizational culture plays a key role in achieving competitive advantage of profit-oriented organizations. Because organizational culture has a great influence on the formation of organizations' goals, strategies and policies. At the same time, it is a facilitating / complicating tool for the implementation of the chosen strategy and the execution of policies. There are indications of how employees will work in organizations / organizations where organizational culture is strong and dominant. In an organization / organization where organization culture is weak, employees hesitate and lose time about how they should do their jobs. This is one of the important factors affecting the decline of productivity. Thus, weak cultures that do not have common values and behaviors in relation to organization that have strong

culture, lag behind their opponents with strong cultures because they cannot show behavioral fastness within organizational and environmental relations (Polat, 2003).

Organizational Commitment

Organizational commitment is one of the first goals in terms of organizations in recent years, considering that the organization is human-focused and that the organizational commitment of employees is high. Because, it is suggested that employees who are loyal to the organization are at the same time highly productive and act with responsibility. Employees with high organizational commitment avoid job hunting, job absenteeism, and other injurious situations. They hug their jobs with four hands and work in task consciousness. In addition, it is believed that employees who have high organizational commitment will benefit the organization to a large extent by decreasing the cost of organization.

When conceptually examined, it can be said that the community is a form expressed by emotions of social instinct that exists everywhere social feeling is formed. Commitment, a high-level feeling, expresses an obligation that must be demonstrated and fulfilled against a person, a thought, an institution, or something we see larger than ourselves (Balay, 2000: 14).

In the sense of organizational commitment, psychological commitment is expressed in terms of fulfilling the tasks and responsibilities of the employees with faith in organizational values and showing faithfulness in a correct manner. If the organization is briefly defined as human beings with a common purpose, this organization has a long-lasting unity around its common goal in order to survive for a long time. Organizational commitment is one of the elements that remove the intent to leave the workplace. The extent to which employees are loyal to the organization is so strong in organization (Measurement Çetin, 2004: 90).

The issue of organizational commitment first appeared in 1956 by Whyte. Later researchers such as Porter, Steers, Allen, Meyer and Becker contributed to the development of this topic. According to organizational commitment supporters, human existence in all kinds of conditions can create an, organizational commitment in changing business and environment conditions. Today, however, business processes are so complicated and job security is so high that the speed of developing and changing technology, along with stress, makes the business life become increasingly indispensable. Organizational commitment needs to be achieved in order to overcome all these problems.

The effects of organizational commitment on workforce, turnover, leader-subordinate relations, business success and absenteeism have been put forward together with the studies on the important issues. For this reason, its importance is increasing recently by the organizations (İnce and Gül, 2005: 15). The relationship established between the organization and the employee enables the employees, who are the most important values of organization, to come together around a common purpose value and culture and provide the sense of belongingness (Çakır, 2001: 49).

Many researches in the field of literature refer to the importance of organizational commitment. It is seen that employees with high organizational commitment have a positive effect on organizational productivity and increase product quality (Çetin, 2004: 90). At the same time, innovations within the organization are easily accepted with the efforts of individuals with high organizational commitment.

RESEARCH ON ORGANIZATIONAL CULTURE AND ORGANIZATIONAL COMMITMENT IN HEALTH ORGANIZATIONS

When looking at the studies on organizational culture and organizational commitment, it is seen that there is a relationship between organizational commitment and organizational culture. The hypotheses and sub-hypotheses that constitute the purpose of the study are in line with the literature. The research will reveal the differences between the stages and differences in the educational background of gender. The organizational commitment levels of the employees who adapt to the organizational culture also increase and it has been revealed in previous studies that the work efficiency increases. With the study being carried out in health institutions, it is expected that the study will set a model for the work to be done on healthcare professionals and shed light on other studies.

Method, Data Collection and Hypothesis

Data were collected through a scale in this research conducted in health institutions. As a result of the literature review, a questionnaire including organizational culture of 19 items and organizational commitment variable of 17 items was created. In the first part of the questionnaire, questions about demographic variables were asked. In the second and third sections, organizational culture and organizational commitment questions are given, respectively. Organizational culture questions were prepared by examining the study Şişman used in 1994, Dokirlioğlu in 1995, Örucü and Çakır in 1999, and Tiryaki in 2004. With the questionnaire, it was aimed to determine the perceptions of healthcare professionals about organizational relationships (organizational perception levels and work environment). Organizational commitment scale developed by Meyer and Allen was used. Meyer and Allen identified six questions for each of the emotional, normative, and continuity commitment dimensions defined as dimensions of organizational commitment. The Turkish equivalents of the expressions in the study were also examined separately by linguists and their cultural validity was ensured. The questionnaire included in the survey includes 42 items. 6 items related to demographic characteristics; 36 items are arranged according to the method of Likert Scale of 5 according to the method of Totally Disagree, Disagree, No Opinion, Agree, and Totally Agree.

The survey was delivered to 1230 employees online. The questionnaires prepared as Google Form were sent to all employees, but 388 employees returned.

It is assumed that respondents correctly perceived the survey and responded without hesitation. Since the survey participants represent the majority of the healthcare organization staff, they are generalizable for this institution.

The hypotheses that there is a meaningful relationship between independent variables of gender, age, marital status, educational status, and income status, duration of institution and organizational culture and organizational commitment are discussed.

The hypotheses of the survey are:

Hypothesis 1: Ha: There is a positive and significant relationship between organizational culture and organizational commitment.

Hypothesis 2: Ha: There is a significant difference between demographic characteristics and organizational commitment.

FINDINGS AND COMMENTS

Reliability analysis is one of the analyzes that should be done in almost all studies conducted in with survey. The analysis that is commonly used, with different types of reliability analysis, is Cronbach's Alpha. Cronbach's Alpha analysis was used in this study to understand the relationship between organizational culture and organizational commitment through SPSS. The questions 21, 22, 24, 27, 28, 29 and 31 in the questionnaire were coded in reverse order to be able to use the data obtained from the survey questions more efficiently and to get more accurate results from the reliability analysis. When we look at the value of Cronbach's Alpha analysis, it is seen that 0.931. In reliability analysis, this figure is greater than 0.70, which is the reason for the reliability of the results. In this study, it can be said that the results are highly reliable compared to 0,931 higher than 0.70.

Findings Related to Demographic Variables

Gender, age, education status, marital status, and seniority information regarding the Health Organizations staff who participated in the survey are given below.

Table 1. Demographic Variables.

	Frequency	Ratio		Frequency	Ratio
Gender			Marital Status		
Female	65	16,67	Single	23	5,9
Male	323	83,33	Married	365	94,0
Total	388	100,00	Total	388	100,0
Age	0		Educational Status	0	0,0
20-30	169	43,63	High School	19	4,9
31-40	163	42,16	College	61	15,7
41-50	38	9,80	License	293	75,4
Over 51	17	4,41	Master	15	3,9
Total	388	100	Total	388	100,0
Titles	0		Seniority	0	0,0
Assistant Service Workers	84	21,57	Less than 1 year	38	9,8
Assistant Service Officers	30	7,84	Between 1-5 Years	110	28,4
Expert's Assistant	46	11,76	Between 6-10 Years	72	18,6
Expert	61	15,69	More than 10 Years	167	43,1
Director's Assistant	63	16,18	Total	388	100,0
Director	86	22,06			
Manager	19	4,90			
Total	388	100			

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Table 2. Frequency Distribution Related to Organizational Culture Questions.

ORGANIZATIONAL CULTURE Totally Agree (5), Agree (4), Agree a little (3) Disagree(2), Totally Disagree (1).		5	4	3	2	1
1. The functioning and practices of the institution I work with are well known by everyone.	(n)	68	129	80	91	19
	(%)	17,65	33,33	20,59	23,53	4,9
2. The aims, rules and beliefs of the institution are adopted by all the employees in the institution where I work.	(n)	70	135	95	67	21
	(%)	18,14	34,8	24,51	17,16	5,39
3. There is a strong communication between the employees at the institution I work for.	(n)	61	139	82	91	15
	(%)	15,69	35,78	21,08	23,53	3,92
4. The memorandums, stories and events related to the institution's past in the institution where I work are known by the newly joined offices.	(n)	53	129	118	65	23
	(%)	13,73	33,33	30,39	16,67	5,88
5. Employees are encouraged to work in cooperation with each other in the institution where I work.	(n)	86	163	61	49	29
	(%)	22,06	42,16	15,69	12,75	7,35
6. Employees in the institution where I work are seen as family members.	(n)	68	156	114	32	17
	(%)	17,65	40,2	29,41	8,33	4,41
7. Employees are encouraged to work in the team spirit in the institution where I work.	(n)	61	150	95	72	10
	(%)	15,69	38,73	24,51	18,63	2,45
8. In my institution, the decision-making approach is based on workshops.	(n)	57	124	103	87	17
	(%)	14,71	31,86	26,47	22,55	4,41
9. The new approach and ideas, changes in the institution I work with are encouraged.	(n)	80	87	110	86	25
	(%)	20,59	22,55	28,43	22,06	6,37
10. The institution I work with is flexible enough to respond immediately to new conditions and situations.	(n)	44	99	120	87	38
	(%)	11,27	25,49	30,88	22,55	9,8
11. Employees are encouraged to show high performances in the institutions where I work.	(n)	61	152	87	65	23
	(%)	15,69	39,22	22,55	16,67	5,88
12. The institution in which I work provides opportunities for improvement and progress in the careers of the employees.	(n)	68	110	99	80	30
	(%)	17,65	28,43	25,49	20,59	7,84
12. The institution in which I work provides opportunities for improvement and progress in the careers of the employees.	(n)	65	194	87	30	11
	(%)	16,67	50	22,55	7,84	2,94
14. Initiatives are recognized for employees at moderate risk in the institutions where I work.	(n)	61	148	118	46	15
	(%)	15,69	38,24	30,39	11,76	3,92
15. In recruitment and promotion talent and skill are given more importance than personal relationship in the institution where I work,	(n)	68	91	84	57	87
	(%)	17,65	23,53	21,57	14,71	22,55
16. The institution I work with gives me the feeling of freedom to make decisions and move independently.	(n)	61	72	91	122	42
	(%)	15,69	18,63	23,53	31,37	10,78
17. I am working at the institution is tolerant of the fault is shown to the worker.	(n)	61	137	106	61	23
	(%)	15,69	35,29	27,45	15,69	5,88
18. Management is open to criticism in the institution I work in.	(n)	46	80	106	99	57
	(%)	11,76	20,59	27,45	25,49	14,71
19. I am happy to spend the rest of my work in this institution	(n)	53	122	156	27	30
	(%)	13,73	31,37	40,2	6,86	7,84

As shown in Table 2. Participations' responses to questionnaire constitute the basic data of this study. When we look at the results in turn, we get a sharp conclusion primarily about working in collaboration (expression 5). 65.7% of participants stated, the institution is encouraged to work in cooperation with each other. This indicates that participants have made it easier for each other to work together in a common field of work and make the working environment easier to live for them.

In another prominent statement, 61.2% of respondents indicated that they encouraged workers to work in a team spirit (expression 7) in the institution in which they worked. From here, it is possible to say that team spirit is an important part of organizational culture in institutions. However, 55.2% of the respondents also stated that Employees are encouraged to show high performances in the institutions where they work. This result points to an important situation for both the employees and the business itself, and emphasizes the importance of performance.

It is an important issue for employees to know where they work and what they do according to their position. For this reason, defining the roles and responsibilities of the organizations in order to enable them to know what to do is a matter that affects the organizational culture in terms of both the employer and the employee. In this study, 65.2% of participants indicated that roles and responsibilities were clearly defined (expression 13).

Analysis of Organizational Culture and Organizational Commitment According to Organizational Culture Factors.

Now, the relationship between organizational culture and organizational commitment will be evaluated in general and the main hypothesis (H) will be tested. Then the impact on the size of the factors that make organizational culture to the commitment to will be examined separately.

Now, the relationship between organizational culture and organizational commitment will be evaluated in general and the main hypothesis will be examined. Later, the effect of organizational cultural factors on commitment dimensions will be examined separately.

When the relationship between organizational culture and organizational commitment was examined, this finding was observed as $p = 0.00$ at the level of significance of 0.05. We found that the perception of organizational culture positively influenced organizational commitment. Similar results have been shown in other studies. Our work shows parallel the literature.

When questionnaire surveys we used to measure the relationship between organizational culture and organizational commitment were examined, a model was constructed based on the questions that had significant differences in the level of impact on 17 questions related to Organizational Culture and 19 questions related to Organizational Commitment and;

$$Y=f(c+w+pc+r+oa+t+oc+hrp+oj+os)$$

$$Y_{\text{(organizational commitment)}} = c_{\text{(constant)}} + w_{\text{(factors related to work)}} + pc_{\text{(psychological contract)}} + r_{\text{(factors related to role)}} + oa_{\text{(organizational awards)}} + t_{\text{(technology)}} + b_{\text{(organizational cohesion)}} + hrp_{\text{(human resources politics)}} + oj_{\text{(organizational justice)}} + os_{\text{(organizational support)}}.$$

The Relationship Between Organizational Culture and Organizational Commitment

Table 3 Frequency Distribution Related to Organizational Commitment Questions

Organizational Commitment						
20. I feel the problems of this institution as my own problems.	(n)	65	169	105	34	15
	(%)	16,67	43,63	26,96	8,82	3,92
21. I have a strong sense of belonging to this institution	(n)	44	65	87	118	74
	(%)	11,27	16,67	22,55	30,39	19,12
22. I have an emotional attachment to this institution.	(n)	32	65	97	125	68
	(%)	8,33	16,67	25	32,35	17,65
23. I feel like a “part of the family” in the institution	(n)	84	173	63	46	23
	(%)	21,57	44,61	16,18	11,76	5,88
24. This institution has a great personal meaning for me.	(n)	25	76	89	133	65
	(%)	6,37	19,61	23,04	34,31	16,67
25. Currently, to stay in this institution is a need for me as much as a will.	(n)	124	137	72	30	25
	(%)	31,86	35,29	18,63	7,84	6,37
26. Currently, it is very difficult for me even if I wanted to leave this organization	(n)	116	137	82	30	23
	(%)	29,9	35,29	21,08	7,84	5,88
27. If I decided to leave this institution at this time, my life would be greatly upset	(n)	65	143	84	55	42
	(%)	16,67	36,76	21,57	14,22	10,78
28. I feel that there are so few options right now that I cannot afford to leave this institution	(n)	53	129	118	65	23
	(%)	13,73	33,33	30,39	16,67	5,88
29. If I had not added so much to myself at this institution so far, I could have thought of working somewhere else	(n)	63	148	97	57	23
	(%)	16,18	38,24	25	14,71	5,88
30. One of the negative consequences of leaving this institution is that alternatives are rare	(n)	27	181	76	80	25
	(%)	6,86	46,57	19,61	20,59	6,37
31. I do not feel any responsibility to continue to work at this institution	(n)	23	74	141	135	15
	(%)	5,88	19,12	36,27	34,8	3,92
32. I do not think it would be right to leave this institution even if it is advantageous for me.	(n)	42	219	72	40	15
	(%)	10,78	56,37	18,63	10,29	3,92
33. I cannot leave this institution because I feel responsible for other employees.	(n)	40	99	125	91	32
	(%)	10,29	25,49	32,35	23,53	8,33
34. I owe a lot to this institution.	(n)	53	114	154	48	19
	(%)	13,73	29,41	39,71	12,25	4,9
35. Currently, I feel guilty if I leave this institution.	(n)	34	106	143	82	23
	(%)	8,82	27,45	36,76	21,08	5,88
36. This institution deserves my loyalty.	(n)	38	141	129	57	23
	(%)	9,8	36,27	33,33	14,71	5,88

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Table 4. Organizational Culture and Organizational Commitment Relationship Regression Table.

Model	R Square	Adjusted R square	Change Statistics				
			Adjusted R square change	F Change	Df1	df2	Significance F Change
1	.438	.388	.438	6,965	18	183	.000
Significance test: df=18, Mean =2,128, f=6,965 Significance =0,000							

Table 5. Effectiveness of Organizational Culture Factors on Organizational Commitment.

Model	Sum of Squares	Mean Square	F	Significance
Regression	36.207	4.123	17.664	.000(i)
Error	52.618	.118		
Total	88.825			

Effectiveness of Organizational Culture Factors on Organizational Commitment

This model was significant at $p < 0.05$ level. From this, it can be understood from the table “Impact of Organizational Culture Factors on Organizational Commitment” that the organizational culture factors that have a positive effect on the commitment are, organizational support perceived by individuals, factors related to work, psychological contract between organization and individual, organizational cohesion perception based on organizational unity and cooperation, factors related to organizational role of employees, organizational justice, perceived in the direction of equal opportunity for all of the management of the organization, organizational awards, management’s human resources policy and following technological developments. Therefore, since health organizations employees have a high level of organizational culture perception of these factors, their organizational commitment has also been positively influenced by these factors.

Analysis of Relationship between Demographic Variables and Organizational Commitment

In this section, considering that organizational culture factors as well as demographic variables of organizational employees affect organizational commitment, the effect of demographic variables such as education status, seniority on the organizational commitment is examined. An examination based on the title will be made in other sub-problems. The table 4.11 below compared the effect of the health organizations employees on the level of educational attainment and organizational commitment, and it was found significant at $p = 0.13$ at 5% confidence level. Educational status leads to a meaningful difference in organizational commitment levels.

Test of the Differences of the Educational Status and Organizational Commitment Means

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Table 6. Test of the Differences of Educational Status and Organizational Commitment Means.

Organizational Commitment Mean	Df	F	Significance
Between Groups	4	3.248	.013

The t test was applied to look at the effects of educational status on organizational commitment. As can be seen from Table 11, a significant difference was observed between the high school and college ($p = 0.001$), license ($p = 0.002$) and master ($p = 0.002$) graduates with 0.5% significance level according to the (Tamhane) T2 test.

Table 7. Test of the Differences of Educational Status and Organizational Commitment Means

Commitment Mean	(I) Education Status	(J) Education Status	Mean Differences (I-J)	Standard Error	Significance
Tamhane	High School	College	.3213	.12788	.001
		License	.4830(*)	.9348	.002
		Master	.5236(*)	.13736	.002

The average difference is significant at 5% level.

In terms of the general average of the loyalty of the health employees, the average of high school graduates is 3.86, while the college graduates are 3.16, license graduates 3.10 and master graduates are 3.01.

As we look at the relationship between educational attainment and organizational commitment, organizational commitment of increasingly educated staff is reduced. This is also an appropriate result in the literature. Organizational commitment is diminishing, as individuals with increased educational status due to the increase in alternative employment opportunities will also assess job opportunities outside the organization. Likewise, the high level of organizational commitment of high school graduates lies in the fact that staying in the current workplace will be good for their career. Because the education situation restricts alternative business opportunities.

Table 8. Comparison of General Commitment Mean by Educational Status of Health Employees.

Commitment Mean	N	Mean	Standard Deviation
High School	19	3.8663	.28757
College	61	3.1650	.44822
License	154	3.1033	.62198
Master	8	3.0128	.48996
Total	388	3.2869	.46193

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According to the results of the research, when Table 8 (comparison of general commitment mean by educational status of health employees) is examined, from employees of the health organizations participating in the survey, normative commitment levels of high school graduates 4,16 and emotional attachment levels (3.95) are at the highest level while normative commitment level of license is 3.73 and emotional attachment level of license (3.40) and master (3.32) graduates are both at lowest level. In terms of continuity commitment, the average of college graduates is 3.16, while the number of master graduates is 3.01. As a result of this analysis, it can be concluded that as the level of education increases, the degree of commitment decreases. Especially high school graduate employees have high normative devotional services who have been serving for many years and who think that they will continue to do so have a high level of organizational commitment, it is not inconvenient for these employees to think that they are internalizing the institution and that it is loyalty.

Table 9. Comparisons of Continuing, Normative, and Emotional Commitment Percentages According to Educational Status of Health Employees

Educational Status		N	Mean	Standard Deviations
Normative Commitment Mean	High School	19	4,16	0,43
	College	61	3,61	0,77
	License	293	3,73	0,91
	Master	15	3,39	0,65
	Total	388	3,72	0,69
Continuing Commitment Mean	High School	19	3,26	1,13
	College	61	3,17	0,97
	License	293	3,28	0,76
	Master	15	3,01	0,77
	Total	388	3,18	0,91
Emotional Commitment Mean	High School	19	3,95	0,46
	College	61	3,46	1,09
	License	293	3,41	1,07
	Master	15	3,02	1,07
	Total	388	3,46	0,92

When Table 11 examines average scores of marital status and commitment sub-factors of the health organizations employees participating in the survey, it will be observed that there is a significant difference between the general commitment averages, normative commitment averages, emotional commitment averages and marital status. When the data in Table 15 are taken into consideration, it is seen that the general commitment averages of the single health employees are 3.18 while the average loyalty of married health employees is 3.45. The most fundamental reason for this can be interpreted as that the feelings of belonging and responsibility of married employees are more developed and that the understanding of the established order is more effective. It is explained in the literature that married employees

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are more responsible and have a stable job opportunity to minimize childrearing and future concerns. These results are parallel to the literature. The fact that single employees are more likely to change jobs and have a more dynamic structure than married employees is also a result of other research results. Again, the marital status and organizational commitment averages difference test (T Test) were applied regarding whether the averages were meaningful. A statistically significant difference ($p < 0.05$) was found between the overall mean, normative commitment, and emotional attachment when married and unmarried respondents were examined in Table 16.

Table 10. Comparisons of Continuing, Normative, and Emotional Commitment Percentages According to Marital Status of Health Employees.

Marital Status		N	Mean	Standard Deviations
General Commitment Mean	Single	23	3,18	0,48
	Married	365	3,45	0,49
Normative Commitment Mean	Single	23	3,06	0,83
	Married	365	3,48	0,79
Continuing Commitment Mean	Single	23	3,18	0,68
	Married	365	3,23	0,72
Emotional Commitment Mean	Single	23	3,29	0,92
	Married	365	3,63	0,89

Table 11. The Difference Table of the Relationship Between Marital Status and Commitment Means of Health Employees.

Marital Status	Levene's Equality Test of Variances				
	F	Significance	T	Significance (2-tailed)	Mean Difference
General Commitment Mean	.230	.632	-3.02	.001	-.21
Normative Commitment Mean	.009	.924	-2.72	.004	-.30
Continuing Commitment Mean	.054	.816	-.36	.648	-.021
Emotional Commitment Mean	.285	.594	-2.38	.008	-.30

The level of seniority and organizational commitment was compared in Table 12, which was prepared by taking into consideration the durations of the employees of the health organizations participating in the survey. Seniority durations were analyzed in two categories: less than 6 years and more than 10 years. A significant difference was observed at $p > 0.05$ as a result of the constructed T test. When the seniority years are considered, it is observed that the level of emotional attachment, which means that employees stay in the organization, is higher than other levels of commitments that emotional attachment levels are not so effective.

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Table 12. Difference Table of Total Work Experience and Commitment Averages of Health Employees.

Total Work Experience	Levene's Equality Test of Variances				
	F	Significance	T	Significance (2-tailed)	Mean Difference
General Commitment Mean	.049	.825	-3.21	.001	-.24
Normative Commitment Mean	.006	.941	-2.81	.006	-.31
Continuing Commitment Mean	.000	.995	-2.22	.027	-.22
Emotional Commitment Mean	.170	.680	-1.24	.218	-.16

Table 13 Comparison of General Commitment, Normative, Continuing and Emotional Commitment Average by Total Work Experience.

Total Work Experience		N	Mean	Standard Deviations
General Commitment Mean	Less than 6 years	148	3.17	.48
	More than 10 years	277	3.39	.54
Normative Commitment Mean	Less than 6 years	148	3.19	.81
	More than 10 years	277	3.46	.71
Continuing Commitment Mean	Less than 6 years	148	3.16	.69
	More than 10 years	277	3.25	.74
Emotional Commitment Mean	Less than 6 years	148	3.23	.99
	More than 10 years	277	3.43	.92

As can be understood from Table 13, as the duration of the seniority increases, the commitment increases. Especially when normative commitment was considered, it was observed that the average of those who worked for 6 years or less was 3.12, those who worked 10 years and more was 3.46. As long as the seniority period that we can call the total work experience increases, it can be said that normative adherence arises because of the reason that it continues to stay in the organization and creates a feeling of loyalty.

A significant difference is observed between all levels of commitment according to Table 14, where the organizational commitment averages are examined.

Table 14. Difference Test of the Organizational Commitment Means with the Working Time.

Working Time in the Current Workplace	F	Significance
General Commitment Mean	1.290	.278
Normative Commitment Mean	.834	.476
Continuing Commitment Mean	6.356	.000
Emotional Commitment Mean	3.886	.010

Correlations between Organizational Culture and Organizational Commitment

There is a significant positive correlation between organizational culture and organizational commitment by 0.480. So, Hypothesis 1, H_0 is rejected. In this case, it is necessary to say that as organizational culture is adopted, organizational commitment occurs. In this case, conducting studies on the employees of the organization to work towards the adoption of organizational culture will bring organizational commitment with it.

Table 15. Relationship between Organizational Culture and Organizational Commitment – Correlations.

	Organizational Commitment	Organization Culture
Organizational Commitment	1	,480**
Organization Culture	,480**	1

Regarding the H2 hypothesis; It was found that organizational commitment differs according to demographic variables such as working time, work experience, marital status and educational status. In this case, the H2 hypothesis was accepted (see table 6- table 14).

CONCLUSION

We are at an age when globalization affects all institutions thanks to the rapid development of communication technology that has rapidly increased competition. In order to keep up with the developing competition environment, institutions have to use human resources in the most effective and efficient way as well as having a dynamic structure. Businesses, who want to keep their market share high, must hold high the motivation of their employees. Nowadays, intellectual capital is valued, businesses have to undergo a constant development of their employees to dominate the internal and external environment of the business. One of the easiest ways to achieve this is to create an organizational culture and adapt each participant to organizational culture to the individual involved. Organizational culture facilitates the dissemination of information within the organization. One of the most fundamental variables in determining the vision of organizations as success-oriented is human-being as the labor factor. The cultural heritage of the human being has come to be recognized by organizations, especially businesses that are profit-intensive organizations. Businesses / organizations that want to gain competitive advantage have started to develop strategies aimed primarily at achieving the organization's success with the efficiency of the employees who focus on human resources. Most of these strategies and success-oriented plans are aimed at long-term goals. In the realization of the long-term goals, the organizational commitment of employees in the organization is essential.

It is necessary to establish a cultural identity together with supportive elements consisting of plans, programs, policies, strategies, working principles, rules, roles and traditions and to adopt this to all its members / employees in order to ensure the continuity of the activities of the organizations and to achieve their goals in line with these objectives. When organizational culture is compiled by all members / employees, organizational identity is formed and organization differs from other organizations. The identity

created by organizational culture develops and strengthens the emotions of employees and contributes to organizational motivation. The success rate of an organization formed by people with strong organizational culture and committed levels is undoubtedly significantly higher than that of other organizations.

Nowadays, many businesses are facing dilemma in this respect because employees intend to leave their work due to not feel loyalty to the organization even though they invest in human resource. They also have to act in a multicultural structure so that businesses can compete in international markets with globalization. This is why it has recently started to work on organizational commitment and organizational culture. The Health Organizations, which is the subject of our study, is also the locomotive of the finance sector. It is among the target-oriented organizations, which are set up to fulfill certain objectives within determined legal frameworks and act in intense competition conditions. Since the Health Organizations operates in coordination with the international markets, relations with people from different cultures within the organization or between the stakeholders of the organization continue every year. In order for organizational culture to have multiculturalism, it is essential that the vision and goals of the organization are determined and directed in this direction. The health sectors is known as organizations with a clear and dynamic structure in every direction. The expectation that such changes will spread rapidly within the organization are included with the formation of organizational culture. In the health sectors, the management and working conditions are shaped by the unique working structure of its own structure. Despite the widespread use of computing technologies and facilitation of business and operations, the labor factor still retains its significant validity. The subject of this work is to analyze the relationship between organizational culture and organizational commitment in the health sectors from the building blocks of the finance sector. The effects of organizational culture factors on organizational commitment dimensions were analyzed.

With this study, organizational commitment and organizational culture levels of health employees participating in our research were measured and it was concluded that the organizational commitment of employees is high who adapt to organizational culture. Within the scope of the study, it is seen that organizational culture has an effect on the formation of organizational commitment in a meaningful and positive direction with a ratio of 0,480. It is understood that factors that affect organizational commitment positively, that is, factors that increase commitment are;

- organizational support
- factors related to work
- psychological contract
- organizational sense of cohesion
- factors related to the organizational role of the employee
- organizational justice
- organizational awards
- management's human resources policy
- following technological developments

Therefore, it can be stated that *health organizations* employees have a high level of organizational culture perception regarding these factors, and their organizational commitment is also positively influenced by these factors.

The Relationship Between Organizational Culture and Organizational Commitment

Our main hypothesis was accepted that there is a positive relationship between organizational culture and organizational commitment, according to the data obtained and interpreted of analysis findings. As a result of the influence of the employees' perceptions of organizational culture on the level of organizational commitment, it has come to the conclusion that organizations with a strong and stable organizational culture structure can positively influence the loyalty of their employees.

In organizations with strong organizational culture, it is accepted that the employees adopt the organizational culture. This will increase organizational success as productivity and job motivation increase. It is important to remove communication obstacles and concentrate teamwork among the employees to strengthen organizational culture. This attitude should first be applied by middle and lower level managers, and senior management should develop strategies by considering this in the dimension of organizational identity. It is important for employees to see themselves and the work they are doing important and to enjoy their work.

Hospitals, one of the main players of the health sector, feel the effects of liberal economic effects and globalization closely like other sectors and the necessary transformations are achieved in the sector dynamics. Due to the fact that the employees in the organizations where change is rapid are experiencing intense pressure and stress, keeping the organizational culture, reducing the intention to leave the work and reducing the speed of the labor turnover is an important factor. For this reason, organizational culture and therefore organizational commitment are important. With this study, the following suggestions are made to the **health organizations** and other organizations operating in the health sectors.

- To support business-focused activities and actions of new hires and the current employees is important to motivate them.
- The reward and punishment system should be made clear within the organization, and in order to be used as an effective motivational tool, job-oriented rewarding should be preferred rather than routine rewarding.
- The most important of the organizational motivational tools is the salaries and wages of the employees.
- Organizations with organizational justice dominate have a high level of organizational stay. For this reason, organizational justice should be emphasized in order not to leave the job and to decrease the turnover rate of personnel.
- Business processes should be planned by eliminating all suspicious processes. It should not be forgotten that the employees in the ambiguous environment will be uneasy.
- It should be noted that organizational commitment does not create organizational dependence. The desire of senior members of the organization to stay in the organization can sometimes leave the organization alone in a troubled process. Older age groups who are unable to adapt to organizational dynamics tend to be at work because of the lack of alternative job opportunities. For this reason, dynamism should be maintained by in-service trainings addressing all age groups.
- Ideas, suggestions and considerations should be taken into consideration. An active proposal form can be created interactively.
- Rational targets should be determined rather than hard-to-reach targets. Members of the organization should be prevented from making negative statements against the organization.
- The intra-organizational uncertainties should be removed.

Health organizations need to pay attention to human resources, which are human capital assets, in order to show successful management in today's intense competition environment and to increase their profitability. In order to be able to sustain the intellectual investment that has been made to the existence of human capital by increasing organizational commitment, it is necessary to move the employees to the top of strategic planning. The cultivated and developed human power with a happy and organizational identity is one of the ultimate goals of every organization. The importance of human capital is clear as a result of the dynamic structure of the health sectors, human capital is the key. It must therefore be regarded to be an effective high-level culture and organizational commitment.

FUTURE RESEARCH AND DIRECTIONS

In the past, a huge amount of research has been done on organizational culture and organizational commitment. However, it seems that there are still specific issues to be investigated. The relationship of organizational structures, organizational processes, leadership and management processes with organizational culture should be studied in detail. In addition, it is seen that the cultural factors that create organizational commitment are not sufficiently investigated in terms of social psychology and psychology. Organizational commitment should be reconsidered, especially in terms of basic issues of social sciences. The effect of the relationship between human psychology and culture on organizational commitment is a matter of curiosity. In the future, it is expected that interdisciplinary studies on these and similar issues will increase.

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KEY TERMS AND DEFINITIONS

Affective Commitment: Affective commitment where the employee has an emotional bond with the organizations. They 'want' to be there.

Commitment: The act of binding yourself (intellectually or emotionally) to a course of action, the official act of consigning a person to confinement (as in a prison or mental hospital). Making a commitment involves dedicating yourself to something, like a person or a cause. Before you make a commitment, think carefully. A commitment obligates you to do something.

Continuance Commitment: Continuance commitment refers to the situation where an individual feels that they will lose more by leaving than they will gain. In effect continuance commitment is a fear of loss if they left. The loss can be in any domain such as prestige, income, friendships, or social loss.

Culture: The customary beliefs, social forms, and material traits of a racial, religious, or social group. The characteristic features of everyday existence (such as diversions or a way of life) shared by people in a place or time.

Health Employees: Health outcomes may be health institutions involved in the delivery of health services.

The Relationship Between Organizational Culture and Organizational Commitment

Normative Commitment: This is where an individual feels they should stay for some reason. Usually this is because of a sense of obligation to the organization. This sense of obligation can stem from the moral (working for a charity that is doing important work), ethical, because the organizations spent time and money training you or paying college fees, etc.

Organization Culture: Organizational culture is the collection of values, expectations, and practices that guide and inform the actions of all team members.

Organizational Commitment: Employee's willingness to identify with the goals and values of the organization in which he or she works and to strive for organization.

Chapter 20

Compulsory Citizenship Behavior and Perceived Stress Level in the Pandemic Process: A Research on Healthcare Professionals

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ABSTRACT

Turkey has been fighting against Coronavirus since March of 2020. During this period, healthcare workers who have been at high risk of becoming infected and transmitting the virus to their relatives were prohibited from resignation and going abroad. In the context of these prohibitions, this study aims to reveal how the stress levels and compulsory citizenship behaviors of healthcare workers were affected during the early stages of pandemic. According to the results of the study, middle-level stress, low-medium compulsory citizenship behavior, and high dissatisfaction with the income level and working conditions have been identified among healthcare workers. In addition to this, intention to quit or stay in job has not been changed during the first three months of the pandemic.

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INTRODUCTION

In Turkey, thanks to effective measures taken against the Coronavirus, mortality rate was at low levels during early stage of pandemic. In the process which has been carried out according to the 2019 National Pandemic Plan, pandemic hospitals were determined in each region; possible or finalized cases were referred to these hospitals. Non-urgent surgical interventions were postponed in order to use the capacities of health institutions effectively to combat pandemics (Demirbilek vd, 2020). During the period when the virus was most intensely effective, a number of arrangements were made for healthcare workers. In March 2020, healthcare professionals working in the public and private sectors were banned from resigning for 3 months, and public health workers were banned from going abroad together with other public employees.

This research was conducted to evaluate the effects of regulations introduced during the pandemic process on the compulsory citizenship behaviors and stress levels of healthcare professionals. These examinations are an important first step in assessing the effects of stress and compulsory citizenship behavior on employees in health services provided during crisis periods and guiding future planning.

1. BACKGROUND

1.1. Stress

Stress is the mental reaction that occurs when an individual feels that she cannot cope with the demands or threats to her/his well-being. Every person can experience stress due to death, divorce, unemployment, marriage, chronic illness, and conflict in interpersonal relationships that may happen throughout their life. In terms of working life, stress can occur for many reasons such as unhappiness and dissatisfaction with work, long working time, responsibilities and heavy workload, working under dangerous conditions, discrimination or bullying, career uncertainty (Lazarus, 1996).

While short term stress increases productivity for the employee; long-term stress causes fatigue, weakness, unwillingness and negatively affects cooperative working skills. While stress levels of healthcare professionals are affected by their area of expertise, work environment, specialist personality traits, work-life balance, and interpersonal relationships outside the workplace, a high level of stress affects decision-making processes related to attention, cognitive functions and interventions. High levels of stress increase the tendency to resign in healthcare professionals. For example, in the study involving 674 healthcare workers in Hong Kong in 2012, it was determined that the increase in stress with the length of working hours, excessive workload and consequently decrease in job satisfaction caused high resignation (Chan, 2012). Studies to determine the factors that increase the stress levels of health workers also draw attention to certain points. Emergency services and emergency physicians working in Turkey with a lower level of education do not work, in the range of 20-30 years, 1-5 years seniority in the profession, they feel stress more intensely and single women health workers; It was determined that male employees over the age of 40, who have seniority of 11 years and over, and who have high education level, feel lower stress (Beşer ve Çevik, 2018). In a study conducted by 400 health workers in Brazil, Leonelli et al. (2017) stated that women, those who work with the same team for more than 1 year, and those who do not practice religious practices that may be effective in reducing the effects of stress, are at a higher risk of being affected by stress.

Studies conducted during the epidemic diseases experienced in the 2000s and which are effective on a global level show that the inherent stress of healthcare services has increased during crisis periods. For example, in the study conducted in Wuhan, where Covid-19 was first seen, it was determined that nurses, women and those working in close contact with the virus had high levels of stress, depression, anxiety, and insomnia (Lai vd, 2020). In the stress assessment dimension of the research, physicians formed the group with the lowest stress level and the highest job satisfaction; nurses were determined to have the highest stress level. Again, in a study conducted in Wuhan with 310 health workers in Wuhan (Du vd, 2020), it was determined that the perceived stress level in the medium-heavy level was quite high, such as 59%. When the personal characteristics that pose a risk of anxiety and depressive mood are examined, those who do not have family support, those who have low sleep quality, those who have a colleague or a relative are infected, those who feel that they are not psychologically ready, who have a high fear of infection, have sufficient knowledge about Covid-19 believing that they are not at higher risk. In the evaluation made on the basis of gender, it was determined that women healthcare workers carry a higher risk.

In epidemic periods, the main source of stress is the anxiety of being infected. For example, in a study carried out during the MERS-CoV epidemic process in 2012 in Saudi Arabia, it was determined that healthcare workers' concerns such as being infected and infecting the virus, and co-workers were intense stress (Hall vd, 2014). A research conducted in the SARS epidemic process in Canada indicates that healthcare professionals are under high stress at the level of 29-35%; showing that having nurses, women and children, and being in contact with SARS are variables that increase the stress level. In addition, the need to stay away from the crowds with stigma perceived in social life due to contact with the virus also increased the stress level (Lancee, Maunder ve Goldbloom, 2008).

In a study conducted in 2003, 50% of SARS cases were seen among healthcare professionals; In the measurements made one year later, while the stress levels of those in the low risk group decreased during the epidemic, the stress levels of those at high risk increased. This result has been linked to the disillusionment of the fears suppressed by those at high risk by the researchers over time and / or the inadequate appreciation of their contribution to the process (McAlonan, 2007).

In a study conducted in Canada, it was determined that 33% of health professionals who participated in the study had a panic attack during the SARS outbreak. This result is thought that healthcare professionals with a history of psychiatric illness may be more adversely affected during epidemic periods (Lancee vd, 2008).

In the study conducted with 549 healthcare workers in Beijing, the capital of China, where the SARS virus was effective, the risks of healthcare workers who were quarantined during the epidemic period, working in high-risk areas, or who had a SARS virus or a contact with a colleague had a post-traumatic stress disorder (PTSD) it is stated that it is 2-3 times more than those without contact with the virus. It is known that during the SARS period, healthcare workers were highly infected compared to the rest of the population and 20 out of every 100 healthcare workers who were in contact with the virus were infected. In this period, variables such as healthcare workers living in high social isolation status, being in quarantine as well as increasing work stress, and being infected with SARS to a relative or friends were found to be highly associated with PTSD. In the evaluations made after 3 years of the first measurements after SARS, it was observed that the employees who showed high PTSD in the first assessment, who lost a relative or friend due to SARS, and especially those who are single and low income, are still at a high level of PTSD (Wu vd, 2009).

1.2. Compulsory Citizenship Behavior (CCB)

Compulsory citizenship behavior is a concept that has emerged in relation to organizational citizenship behavior (OCB) is described as the dark side of OCB. Therefore, organizational citizenship behavior will be emphasized first. Organizational Citizenship Behavior is defined as behaviors that are not included in the contract between the employee and the organization, but benefit the organization, which in some sense add value to the organization and in return, the employee does not earn any income, income or reward (Organ vd, 2006). OCB includes behaviors such as helping other employees, defending the organization, working for more and longer than stated in the employment contract, beyond the specified standards and job descriptions, by making voluntary effort and extra role behavior (Bateman ve Organ, 1983).

In their study conducted in 2014, Altuntaş and Baykal stated that nurses frequently exhibit the behaviors that fall within the scope of the OCB in order to carry out their health services effectively; They determined that job satisfaction and organizational commitment that revealed the behavior of the OCB prevented resignation. In the light of this information, it can be claimed that OCB reinforces commitment to work for healthcare professionals. However, OCB can also cause problems related to the weakening of the balance between workload and work stress and work-life due to the increase in duties and responsibilities in the workplace (Bolino vd., 2013). In terms of physicians and nurses serving the general society, this effect is often confused with organizational behaviors and duties and responsibilities in the profession definition; the boundaries of which of the displayed behaviors are within the scope of professional responsibility and which of them are voluntary and unrequited behavior become obscure (Kaya, 2013).

The “citizenship pressure” develops at the point where the volunteer basis of the OCB is lost, the behaviors expected to be displayed by the management and the employee is forced to exhibit the OCB reveals the Compulsory Citizenship Behavior (CCB). Compulsory citizenship behavior includes duties and studies that are not defined in the employment contract between the employee and the organization, similar to OCB (Gadot, 2006).

It is possible to overlook the compulsory citizenship behavior in a sense ‘confusing’ with OCB (Yıldız, 2016). This uncertainty is not with the individual’s own inner motivation of the post-role behavior that gives rise to CCB; it is the result of emerging with the strain of managers, colleagues or organizational climate. The works, which show a positive relationship between despotic management and CCB, give an idea about the psychological effect of duties and responsibilities within the scope of CCB on the employee (Soran, Duymaz and Şeşen, 2017).

As a matter of fact, the nature and workload of CCB based on necessity, not volunteering, makes employees feel suppressed and exploited; negatively affects job satisfaction and job performances, and causes burnout, negligence, and eventually the intention to quit (Gadot, 2006; Topçu, Beğenirbaş ve Turgut: 2017). CCB also adversely affects organizational identity by increasing behaviors such as social loafing, leaving work, and conflict with colleagues. Therefore, it is clear that compulsory citizenship behavior causes negativities both in terms of employee performance and organizational efficiency.

It is stated that healthcare professionals have high levels of compulsory citizenship behaviors in order to protect the continuity of human life and social health (Seren ve Baydın, 2017). In the Bilen study (2018), nurses demonstrated high levels of CCB; determined that the level of CCB did not differ according to the level of education, age, position worked, unit worked, duration of employment in the institution, year of seniority and salary. In the study, it was determined that the level of CCB differs only by gender and male nurses have higher level of CCB than female nurses. Selçuk (2017) stated that the nurses’ level of CCB was high and the intention to quit was medium; determined that the level of

CCB those working in units such as emergency, intensive care and operating room is higher than those working in outpatient services and outpatient clinics.

2. RESEARCH

2.1. Purpose of the Research

The aim of this study, which is planned with the prediction that epidemic conditions will increase compulsory citizenship behaviors, is to determine the level of CCB and perceived stress of healthcare professionals who are active in Covid-19 outbreak. It is possible that the stress levels of healthcare professionals working in the pandemic process have increased due to reasons such as work intensity, private life regulations, and anxiety to protect health. The virus to be seen in Turkey, followed by the arrangements made for health care workers, in particular, emergency, intensive care, such as service in the administrative center of the current intensity, corporate executives and public pressure is considered to be an important point to examine whether the cause of the origin compulsory citizenship behavior.

CCB employee stress; stress increases the intention to quit (Kerse, Koçak ve Yücel, 2018). For this reason, the effects of PS and CCB variables on the thought of quitting will also be examined.

The study seeks answers to the following questions:

- 1- Do the variables such as socio-demographic characteristics, working time, and specialty of the health workers have an impact on the pandemic period CCB level?
- 2- Do the variables such as socio-demographic characteristics, working time, and specialty of health workers have an impact on PS level during the pandemic period?
- 3- Does compulsory citizenship behaviors and perceived stress have an impact on the idea of quitting?

2.2. Sample of the Research

The sample of the study consists of physicians, nurses and other healthcare professionals serving in health institutions and organizations. The sample was not limited to pandemic hospital employees in order to better understand the effects of outbreak-specific regulations on employees; those working in different types of healthcare institutions are included in the sample. Ultimately 383 healthcare workers from different cities of Turkey consist the sample of the research.

2.3. Research Data Collection Tool

The research data were obtained by the survey technique. The surveys were distributed online from May 1 to July 1, 2020. Sampling has been reached with the snowball sampling method. There are 5 options between “Never (0)” and “Very Frequently (4)” for each expression in a 5-point Likert type scale. 7 items with positive statements are scored in reverse. Compulsory Citizenship Behavior Scale (CCBS): It is a five-item, one-dimensional scale developed by Vigoda-Gadot (2006). All of the expressions in the scale are positive and there are no reverse expressions. The items are five-point likert and scored as “I disagree-1 point”, “Disagree-2 points”, “Neither agree nor disagree-3 points”, “Agree-4 points” and “I fully agree-5 points”. In the original study, the Cronbach Alpha internal consistency coefficient of

the scale was found to be 0.83 (Vigoda-Gadot, 2006). The total average score that can be obtained from the scale is minimum 1 and maximum 5. A high average score indicates that the compulsory citizenship level has increased (Seren ve Baydın, 2017).

2.4. Research Method and Variables

The research is a quantitative research in a correlational structure. The information obtained through the questionnaire was analyzed and interpreted relationally. The dependent variables of the research are perceived stress and compulsory citizenship behavior. Its independent variables are socio-demographic data such as the type of healthcare organization studied, the number and duration of the patient in the last three months, and gender, profession, specialty type, professional seniority.

2.5. Analysis of the Research

Survey data were analyzed using IBM SPSS 26.0 software package. 28-29-30-31-33-34-37 when entering data reverse scoring was done to the questions. The questions required reverse scoring for the scale.

When Table-1, which shows the frequency and percentage values regarding the demographic characteristics of the healthcare workers participating in the research, it is seen that more than half of the 383 participants (57.2%) are in the 20-29 age group. Again according to the same table, 75% of the participants are women (25% are men); 52% are also single.

Table 1. Findings Related to Demographic Characteristics of Healthcare Professionals Participating in the Research

Variable	Group	Frequency (n)	Percent (%)
Age	20-29	219	57,2
	30-39	84	21,9
	40-49	53	13,8
	50-59	19	5,0
	60 ve üstü	8	2,1
Gender	Woman	287	74,9
	Man	96	25,1
Marital Status	Single	199	52,0
	Married	184	48,0
Group Total		383	100,0

According to their professional characteristics, 26% of the participants are physicians, 48% are nurses and 25% are other healthcare professionals. When analyzed by health institution, 24% of the participants are in the training and research hospital, 15% in the public hospital, 33% in the private hospitals, 6% in the city hospital, 6% in the family health center, 5% in the university hospital and 10% work in other health institutions. The working time in the institution is 44% 0-2 years, 32% 3-6 years, 11% 7-10 years, 7% 11-15 years and 6% more than 15 years. Considering professional experience, 48% of the participants

are 0-5 years, 18% are 6-10 years, 12% are 11-15 years, 8% are 16-20 years, 8% are 21-25 years and 6% have more than 25 years of professional experience. In terms of average daily number of patients, 53% of the participants are between 0-20, 14% are between 21-40, 13% are between 41-60, 5% are between 61-80 and 16% are more than 80 seem to be concerned with the patient (Table 2).

Table 2. Findings Related to the Professional Features of Healthcare Professionals Participating in the Research

Variable	Group	Frequency (n)	Percent (%)
Profession	Specialist Physician	57	14,9
	Resident Physician	44	11,5
	Executive Nurse	11	2,9
	Nurse	174	45,4
	Others	97	25,3
Health Institution	Training and Research H.	93	24,3
	Public Hospital	58	15,1
	Private Hospital	129	33,7
	City Hospital	23	6,0
	Family Health Center	22	5,7
	University Hospital	20	5,2
	Others	38	9,9
Institutional Experience	0-2	169	44,1
	3-6	121	31,6
	7-10	42	11,0
	11-15	27	7,0
	More than 15 years	24	6,3
Professional Experience	0-5	184	48,0
	6-10	70	18,3
	11-15	47	12,3
	16-20	30	7,8
	21-25	29	7,6
	26 and over	23	6,0
Daily Average Number of Patients	0-20	203	53,0
	21-40	52	13,6
	41-60	49	12,8
	61-80	18	4,7
	80 and over	61	15,9
Group Total		383	100,0

When Table-3, which gives the frequency values of the healthcare workers participating in the study in pandemic hospitals and units related to the pandemic, is examined, it is seen that those working both in the pandemic hospital and the unit related to the pandemic constitute 37% of our total sample (142

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people). The number of participants working in the pandemic hospital and not working in the unit related to the pandemic is 125. Those who do not work in the pandemic hospital constitute 30% (116 people) of our sample.

Table 3. Findings Regarding the Working Status of Healthcare Professionals Participating in the Study in Pandemic Hospitals and Pandemic Related Units

<u>Working in Pandemic Hospital</u>		<u>Working at the Pandemic Unit</u>	<u>Working in a Unit Not Related to Pandemic</u>	Total
	<u>Yes</u>	142	125	267
<u>Working in Pandemic Hospital</u>	<u>No</u>	32	84	116
	Total	174	209	383

Considering Table-4, which shows the findings regarding the workloads and intentions of the health-care workers participating in the research, 14% were not satisfied, 41% were neither satisfied nor 45%, It is understood that he is satisfied. While 61% of the participants are not satisfied with the income level, 21% are satisfied. Considering satisfaction with the working conditions, 45% of the participants stated that they were not satisfied, 28% stated that they were neither satisfied nor satisfied, and 27% stated that they were satisfied. In the questions expressing the first three months of the pandemic process, the rate of those who said that the number of patients increased in the said process was 28%, the rate of those who said it decreased was 55% and the rate of those who said it did not change is 18%. Again, in the pandemic process, the rate of those who said that the question about the change of working time increased was 33%, the rate of those who said it decreased was 36%, and the rate of those who said it did not change was 31%. To the question about the intention to quit during the pandemic process, 17% of the participants stated that they intend to leave frequently, 39% stated that they thought to leave from time to time, and 44% stated that they never thought to leave. The proportion of respondents who said that the increase in intention to quit increased during the pandemic period was 31%, the rate of those who said it was decreased was 8% and the rate of those who said it did not change was 62%.

Cronbach's Alpha reliability coefficients of compulsory citizenship behavior and perceived stress scales used in the study were found to be 0.88 and 0.82, respectively (Table-5). The average of the answers given for the compulsory citizenship behavior is 2.15, while the average for the perceived stress level is 3.05. This indicates that the stress perceived among the participants in the pandemic process is higher than the mandatory citizenship behavior.

In Table-6, frequency values related to the status of being in charge of pandemic hospital and pandemic unit and health workers' CCB levels are given. According to the table, the CCB of the participants working both in the pandemic hospital and in a pandemic unit is at a low and medium level. However, regardless of working status in a pandemic hospital or a pandemic unit, it is seen that the participants have low to medium levels of CCB.

Table 4. Findings Regarding Work Densities and Intention to Leave the Healthcare Professionals Participating in the Research

Variable	Group	Frequency (n)	Percent (%)
Are you happy to work in this institution?	I'm not satisfied	54	14,1
	I'm satisfied or not	158	41,3
	I'm satisfied	171	44,6
Are you satisfied with your income level?	I'm not satisfied	232	60,6
	I'm satisfied or not	70	18,3
	I'm satisfied	81	21,1
Are you satisfied with the working conditions?	I'm not satisfied	172	44,9
	I'm satisfied or not	107	27,9
	I'm satisfied	104	27,2
How would you describe the change in your daily number of patients in the last 3 months?	Increased	106	27,7
	Decreased	209	54,6
	Not changed	68	17,8
How would you describe the change in your working time in the last 3 months?	Increased	127	33,2
	Decreased	137	35,8
	Not changed	119	31,1
How often did you consider leaving the institution you worked for in the past 3 months?	Often	66	17,2
	Time to time	148	38,6
	Never	169	44,1
How would you describe the change in your thought of leaving the institution you worked for in the past 3 months?	Increased	118	30,8
	Decreased	29	7,6
	Not changed	236	61,6
Total		383	100,0

Table 5. Findings Related to the Scales Used in the Research

Scale Factor	Compulsory Citizenship Behaviour (CCB)	Perceived Stress Level (PSL)
Item Number	5	14
Cronbach's Alpha	0,88	0,82
Minimum	1,00	1,07
Maximum	5,00	4,86
Mean	2,15	3,05
Standard Deviation	0,96	0,61
Skewness	0,68	0,05
Kurtosis	-0,31	0,79

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Table 6. Frequency values related to the status of being in charge of pandemic hospital and pandemic unit and the healthcare workers' CCB levels

Pandemi Hospital	In the Pandemic Unit	CCB (1=Low - 5= High)				Total
		1-1.9	2-2.9	3-3.9	4-5	
Yes	Yes	61	50	24	7	142
	No	57	40	24	7	125
No	Yes	14	12	6	0	32
	No	43	21	15	5	84

When Table-7, which gives frequency values related to perceived stress levels of healthcare workers and the status of duty at the pandemic hospital and pandemic unit, generally, it is seen that the perceived stresses (PS) of the majority of the participants are at medium-high levels.

Table 7. Frequency values regarding status of being in charge of pandemic hospital and pandemic unit and PS levels of healthcare professionals

Pandemi Hospital	In the Pandemic Unit	Perceived Stress (PS) (1=Low - 5= High)				Total
		1-1.9	2-2.9	3-3.9	4-5	
Yes	Yes	8	52	68	14	142
	No	4	40	70	11	125
No	Yes	0	16	15	1	32
	No	4	29	47	4	84

The hypotheses tested respectively in the study are as follows;

- H1:** There is a significant difference in perceived stress level by gender.
- H2:** There is a significant difference in the level of compulsory citizenship behavior by gender.
- H3:** There is a significant difference in perceived stress level according to marital status.
- H4:** There is a significant difference in the level of compulsory citizenship behavior compared to marital status.
- H5:** There is a significant difference in perceived stress and compulsory citizenship behavior levels in pandemic hospital according to working status.

- H6:** There is a significant difference in perceived stress and compulsory citizenship behavior levels according to the status of duty in the pandemic unit.
- H7:** There is a significant difference in perceived stress and compulsory citizenship behavior levels by age group.
- H8:** There is a significant difference in perceived stress level by task type.
- H9:** There is a significant difference in mandatory citizenship behavior level by type of duty.
- H10:** There is a significant difference in perceived stress and compulsory citizenship behavior levels according to the health institution studied, total working time and average number of patients.
- H11:** The interaction of occupation and total working time has a significant impact on compulsory citizenship behavior and perceived stress.
- H12:** There is a significant difference in the level of compulsory citizenship behavior according to the change in the number of patients in the last 3 months and the working time in the last 3 months.
- H13:** There is a significant difference in the perceived stress level according to the change in the number of patients in the last 3 months and the working time in the last 3 months.
- H14:** The perceived stress level (PSL) and compulsory citizenship behavior have a significant effect on thinking about leaving work and the change in this thought in the last 3 months.

Table 8. Independent two sample t test results regarding CCB and PSL by group variables

	Compulsory Citizenship Behaviour				Perceived Stress			
	<i>Sig.*</i>	<i>t</i>	<i>sd.</i>	<i>Sig.**</i>	<i>Sig.*</i>	<i>t</i>	<i>sd.</i>	<i>Sig.**</i>
Gender	0,487	0,686	381	0,493	0,355	2,681	381	0,008
Marital Status	0,374	0,661	381	0,509	0,783	1,991	381	0,047
Pandemi Hospital	0,446	0,823	381	0,411	0,008	1,005	268,07	0,316
Pandemic Unit	0,735	0,240	381	0,810	0,764	0,018	381	0,985

**Levene's Test for Equality of Variances, ** (2-tailed)*

When two independent sample t-test results (CCB and PSL) of healthcare workers differ according to group variables (Table-8), Levene's test p values for variance equation are higher than $\alpha = 0.05$ in all groups (except for pandemic hospital only for PSL) appears to be. This shows that assumption of variance equation is provided in the groups. For PSL, the t-test results of the group variable related to working in a pandemic hospital are the results obtained when the variances are not equal. According to the results of two independent sample t tests, it was determined that the compulsory citizenship behavior at the level of 0.05 significance did not differ significantly ($p > 0.05$) in terms of gender, marital status, working status in the pandemic hospital and unit. A similar result emerges when the perceived stress level is tested according to the situation of working in a pandemic hospital and being in charge of a pandemic unit. In other words, being in charge of a pandemic hospital and a pandemic unit does not differ significantly on PSL. However, there is a significant difference ($p < 0.05$) in PSL according to gender and marital status.

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Table 9. Average of CCB and PSL by group variables (Mean)

		Compulsory Citizenship Behaviour (CCB)	Perceived Stress Level (PSL)
Gender	Woman	2,1652	3,0991
	Man	2,0875	2,9077
Marital Status	Single	2,1769	3,1106
	Married	2,1120	2,9868
Pandemi Hospital	Yes	2,1723	3,0701
	No	2,0845	3,0074
Pandemic Unit	Yes	2,1586	3,0517
	No	2,1349	3,0506

When Table-9 is examined, the PSLs of women are higher than men; it is seen that singles also have higher PSL than married people. According to independent sample t test results, H1 and H3 hypotheses were confirmed, and H2, H4, H5 and H6 hypotheses were not confirmed.

One-way ANOVA test was performed on whether there is a significant difference in CCB and PSL by age group. Levene's test p value, which measures variance equation, was determined as $p = 0.012 < 0.05$ for CCB and $p = 0.163 > 0.05$ for PSL. For CCB, the assumption of variance is not valid. For this reason, Games-Howell test was used for PSL to measure mean differences between groups. Tukey test was used because the assumption of variance equality is valid for PSL. According to the test results (Table-10), there is a significant difference between the age group of 60 and above and the age group of 20-29 and 30-39 for CCB. For PSL, a significant difference was found between the 20-29 age group and the 40-49 age group. In this case, H7 from the hypotheses of the study was confirmed.

One-way ANOVA test has been conducted on whether there is a significant difference in CCB and PSL by type of profession. Levene's test p value, which measures variance equation, was determined as $p = 0,950 > 0,05$ for CCB and $p = 0,881 > 0,05$ for PSL. In this case, the assumption of equality of variances applies. In other words, occupational differences are not effective on CCB. Since the equality assumption of variances is valid, Tukey test was used to measure the mean differences between groups for PSL. According to the test results (Table-11), a significant difference was found between the physician, nurse and other group for PSL. According to the results, physicians' PSLs are lower than nurses and other groups. Among the three groups in question, it was determined that the highest PSL was in the nurses. According to the results obtained, the H8 hypothesis was confirmed and the H9 hypothesis was not confirmed.

When Table-12 showing the results of one-way ANOVA test related to CCB and PSL according to the health institution studied, total working time and average number of patients, Sig. It is seen that (p) values are greater than $\alpha = 0.05$ significance level. This shows that the health institution studied, the duration of professional experience or the average number of patients per day does not have a significant effect on CCB and PSL. Thus, the H10 hypothesis tested in the study is rejected.

Compulsory Citizenship Behavior and Perceived Stress Level in the Pandemic Process

Table 10. One-way ANOVA test results regarding CCB and PSL by age group

		<u>Compulsory Citizenship Behaviour</u>		<u>Perceived Stress</u>	
		<u>Mean Difference</u>	<u>Sig.</u>	<u>Mean Difference</u>	<u>Sig.</u>
Age		-	0,013*	-	0,006*
20-29	30-39	-0,10675	0,920	0,00754	1,000
	40-49	0,22860	0,409	0,28768	0,016*
	50-59	0,39087	0,270	0,29428	0,247
	60 and over	0,84087	0,013*	0,31919	0,580
30-39	20-29	0,10675	0,920	-0,00754	1,000
	40-49	0,33535	0,214	0,28015	0,063
	50-59	0,49762	0,146	0,28674	0,332
	60 and over	0,94762	0,005*	0,31165	0,628
40-49	20-29	-0,22860	0,409	-0,28768	0,016*
	30-39	-0,33535	0,214	-0,28015	0,063
	50-59	0,16226	0,937	0,00660	1,000
	60 and over	0,61226	0,086	0,03150	1,000
50-59	20-29	-0,39087	0,270	-0,29428	0,247
	30-39	-0,49762	0,146	-0,28674	0,332
	40-49	-0,16226	0,937	-0,00660	1,000
	60 and over	0,45000	0,424	0,02491	1,000
60 and over	20-29	-0,84087	0,013*	-0,31919	0,580
	30-39	-0,94762	0,005*	-0,31165	0,628
	40-49	-0,61226	0,086	-0,03150	1,000
	50-59	-0,45000	0,424	-0,02491	1,000

*p value is significant for $\alpha=0,05$ significance level.

In order to test whether there is a significant effect on occupation, total working time and the number of patients on the environment together (interactively) CCB and perceived stress level, two-way ANOVA test was performed. According to the results of the analysis (Table-13), only the interaction of occupation and total working time has a significant effect on both PSL and CCB. However, the interaction of the profession, total working time and the number of patients to the environment also has a significant effect on CCB. In this case, the H11 hypothesis is confirmed.

Compulsory Citizenship Behavior and Perceived Stress Level in the Pandemic Process

Table 11. One-way ANOVA test results regarding PSL by profession type

		Perceived Stress Level	
Profession		Mean Difference	Sig.
Physician	Nurse	-0,23426	0,005*
	Others	-0,20735	0,042*
	Physician	0,23426	0,005*
Nurse	Others	0,02691	0,933
	Physician	0,20735	0,042*
Others	Nurse	-0,02691	0,933
	Physician	0,20735	0,042*

*p value is significant for $\alpha=0,05$ significance level.

Table 12. One-way ANOVA test results related to CCB and PSL by health institution studied, total working time and average number of patients

	CCB			PSL		
	Levene's Test (sig.)	F	Sig.	Levene's Test (sig.)	F	Sig.
Health Institution	0,751	1,028	0,407	0,432	1,193	0,309
Professional Experience	0,114	2,236	0,50	0,259	2,236	0,50
Average Number of Patients	0,067	1,899	0,110	0,220	0,893	0,468

When Figure-1, which shows CCB averages according to the interaction of occupation and total working time, is examined, it is seen that the group with the highest CCB average is in the physicians who have 6-10 years of working time, and the second highest value is in nurses with 26 years of experience. CCB increases due to the low professional experience in physicians. Nurses are more likely to have 6-10, 11-15 and 16-20 years of experience compared to other years.

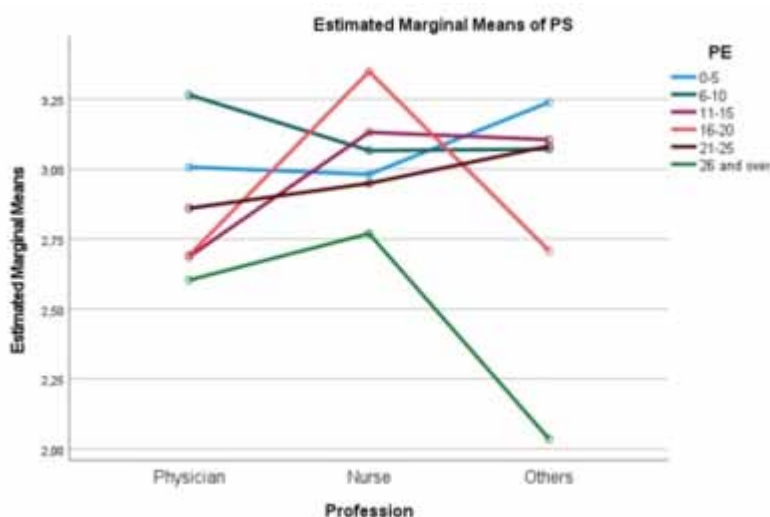
When looking at Figure-2, which shows PSL averages according to the interaction of occupation and total working time, it is seen that the group with the highest PSL average is nurses with a working period of 16-20 years.

Table 13. Bilateral ANOVA test results related to CCB and PSL by profession, total working time and number of patients to the environment

	CCB		PSL	
	<i>F</i>	<i>Sig.</i>	<i>F</i>	<i>Sig.</i>
Corrected Model	1,751	0,000*	1,410	0,022*
Intercept	499,286	0,000*	2178,240	0,000*
Profession	1,511	0,199	2,217	0,067
Professional Experience (PE)	1,413	0,219	1,752	0,123
Average Number of Patients (ANP)	2,399	0,050	1,705	0,149
Profession*PE	1,958	0,016*	1,915	0,019*
Profession*ANP	1,384	0,159	1,065	0,389
PE*ANP	1,465	0,096	1,423	0,114
Profession*PE*ANP	1,699	0,046*	1,217	0,253

*p value is significant for $\alpha=0,05$ significance level.

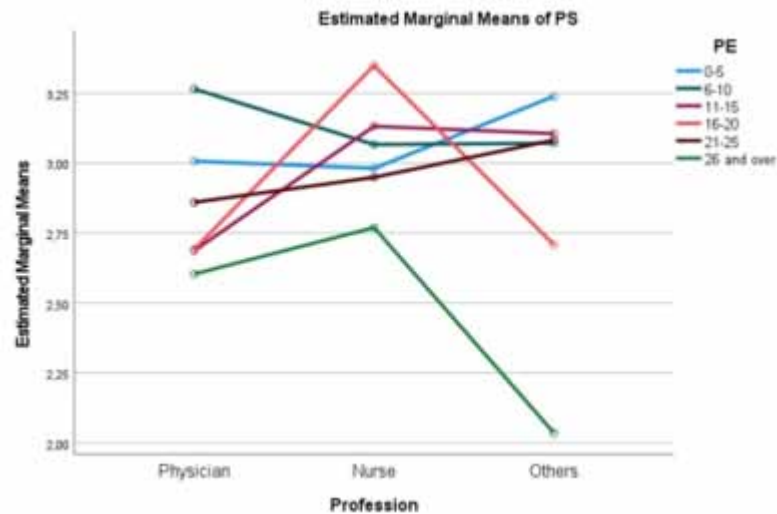
Figure 1. CCB averages according to the interaction of occupation and total working time



A bidirectional MANOVA test was performed to measure whether the change in the number of patients in the last 3 months and the change in working time in the last 3 months had a significant effect on CCB and PSL. The covariance equation test p value (sig.) Of the relevant variables is 0,231 and the homogeneity test p value (sig.) Is 0,191 for CCB; 0.088 was found for PSL. The p values greater than $\alpha = 0.05$ indicates that the assumption that the correlation between the variables is equal and the variances are homogeneous across the groups is valid. The bidirectional MANOVA test results are shown in Table-14.

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Figure 2. Average of PSL according to the interaction of occupation and total working time



In the last 3 months is higher than the significance level of 0.05 ($0.112 > 0.05$); p values of other variables in the model are small. In this case, it was concluded that there was no significant difference in at least one of the CCB and PSL values between the groups of changes in the number of patients in the last 3 months. In other words, the increase, decrease or change in the number of patients in the last 3 months does not differ on CCB and / or PSL. However, there is a significant difference between the groups of changes in working time in the last 3 months for CCB and PSL.

Table 14. MANOVA test results regarding the effect of change in the number of patients and working time on CCB and PSL in the last 3 months

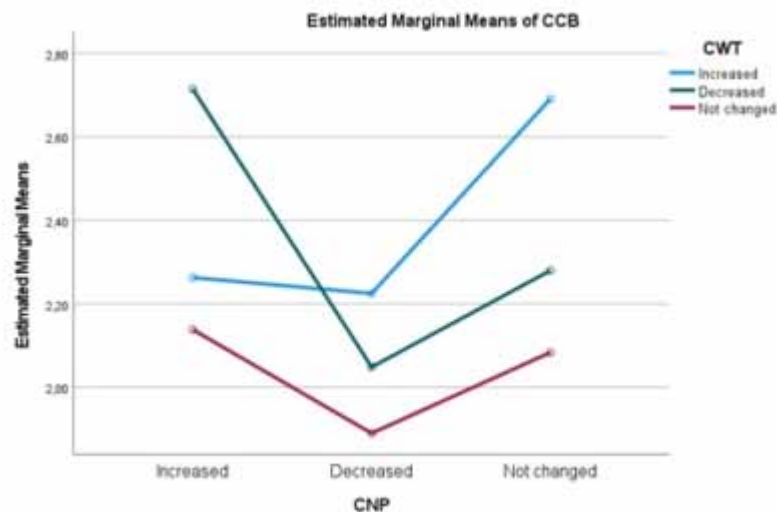
Effect		Value	F	Sig.
Intercept	Pillai's Trace	0,937	2779,146	0,000
	Wilks' Lambda	0,063	2779,146	0,000
	Lambda			
Change in the number of patients in the last 3 months (CNP)	Pillai's Trace	0,019	1,831	0,121
	Wilks' Lambda	0,981	1,833	0,121
	Lambda			
Change in working time in the last 3 months (CWT)	Pillai's Trace	0,029	2,710	0,029
	Wilks' Lambda	0,972	2,713	0,029
	Lambda			
CNP*CWT	Pillai's Trace	0,046	2,186	0,027
	Wilks' Lambda	0,955	2,188	0,026
	Lambda			

Table 15. Findings regarding the effects of the interaction of variation in number of patients and duration of study over the past 3 months on CCB and PSL

	Dependent Variables	F	Sig.
Corrected Model	CCB	2,160	0,030*
	PS	3,223	0,001*
Intercept	CCB	1163,595	0,000*
	PS	5543,585	0,000*
Change in the number of patients in the last 3 months (CNP)	CCB	3,369	0,035*
	PS	1,111	0,330
Change in working time in the last 3 months (CWT)	CCB	3,922	0,021*
	PS	3,085	0,047*
CNP * CWT	CCB	1,066	0,373
	PS	3,425	0,009*

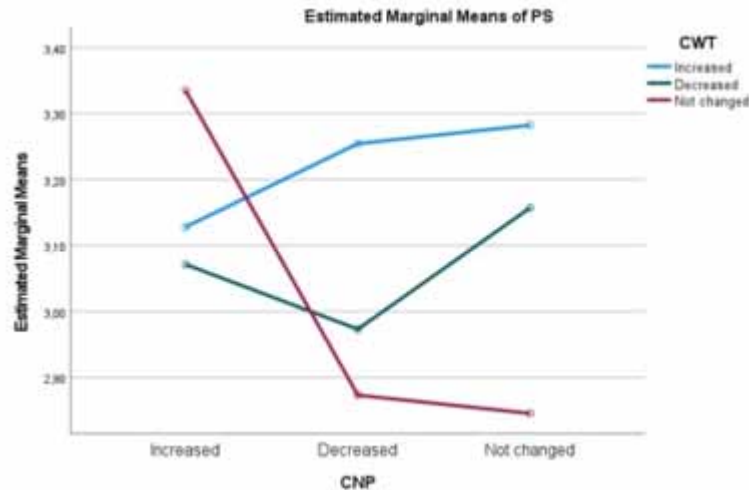
When we look at Table-15, which shows whether the changes in the number of patients and the duration of the study have an effect on CCB and PSL values, it is seen that the change in the number of patients has an impact on the CCB ($p = 0.035 < 0.05$). It was concluded that the change in working time had a significant effect on both CCB and PSL. It was found that the interaction between the number of patients and the duration of the study showed a significant difference only on PSL ($p = 0.009 < 0.05$). According to the results, H12 hypothesis was confirmed and H13 hypothesis was rejected.

Figure 3. Average CCB values according to the change in the number of patients and working time in the last 3 months



Compulsory Citizenship Behavior and Perceived Stress Level in the Pandemic Process

Figure 4. Average PSL values according to the change in the number of patients and working time in the last 3 months



When the Figure-3, which shows the average CCB values according to the change in the number of patients and the duration of the study in the last 3 months, it is seen that the CCB level of those who stated that both the number of patients and the duration of the study increased in the last 3 months. In addition, it is understood that those who state that the number of patients are decreasing have less CCB averages than those who say “increased” or “unchanged”.

When the average PSL values (Figure-4) are examined according to the change in the number of patients and the duration of the study in the last 3 months, it is seen that the average of the PSL has the highest value with an average of 3.35 in the last 3 months. Those who stated that the working time increased but the number of patients did not change has the second highest average.

Table 16. MANOVA test results regarding the effect of CCB and PSL on the intention to quit and intention to quit in the last 3 months

Effect		Value	F	Sig.
Intercept	Pillai's Trace	0,930	1077,498	0,000
	Wilks' Lambda	0,070	1077,498	0,000
PS	Pillai's Trace	0,550	1,354	0,029
	Wilks' Lambda	0,509	1,421	0,014
CCB	Pillai's Trace	0,426	2,333	0,000
	Wilks' Lambda	0,607	2,430	0,000
PS*CCB	Pillai's Trace	1,093	1,291	0,012
	Wilks' Lambda	0,204	1,295	0,011

In order to measure whether CCB and PSL have a significant effect on the intention to quit and the intention to quit in the last 3 months, a two-way MANOVA test was performed. The covariance equality test p value of the relevant variables (sig.) Is greater than $\alpha = 0.05$ ($p = 0.926 > \alpha = 0.05$) shows that the correlation between the variables is equal across the groups. The homogeneity test p values were less than $\alpha = 0.05$ ($p = 0.00$ for both variables). In this case, the assumption that variances are homogeneous is invalid. The bidirectional MANOVA test results are shown in Table-16.

When Table-16 is examined, it can be seen that both PSL and CCB and the interaction of these two have p values less than 0.05 significance level ($p < 0.05$). It was concluded that there is a significant difference in at least one of the changes in intention to quit and intention to quit in the last 3 months of CCB and PSL values. In other words, the differences in CCB and PSL differ on the intention to quit during the pandemic process.

When we look at Table-17, which shows whether the changes in CCB and PSL values have an effect on the intention to quit from the job during the pandemic process and the change in this intention, it is seen that the p values of all variables are less than $\alpha = 0.05$ significance level. This result shows that the interaction of CCB, PSL and the two (CCB * PSL) has a significant effect on the intention to quit and the intention to quit. According to the results obtained, our H14 hypothesis was confirmed. When the ratio of independent variables (PSL, CCB and PSL * CCB) to explain dependent variables (Partial Eta Squared) is analyzed, 34% of the level of explanation of PSL intention to leave work and the change in intention to leave work; It is seen that the rate of disclosing intention to leave the job is 30%, and the rate of disclosing the change in the intention to leave work is 23%. The rate of explaining the interaction of independent variables (PSL* CCB) intention to quit and the change in intention to quit is 57%.

Table 17. Findings regarding the effects of the interaction of CCB and PSL on the intention to quit and change in intention to quit in the last 3 months

	<u>Dependent Variables</u>	<u>F</u>	<u>Sig.</u>	<u>Partial Eta Squared</u>
Corrected Model	<u>Intention to Quit</u>	2,048	0,000	0,731
	<u>Change in Intention to Quit</u>	1,885	0,000	0,715
Intercept	<u>Intention to Quit</u>	1832,666	0,000	0,918
	<u>Change in Intention to Quit</u>	1187,343	0,000	0,879
PSL	<u>Intention to Quit</u>	1,863	0,002	0,343
	<u>Change in Intention to Quit</u>	1,882	0,002	0,345
CCB	<u>Intention to Quit</u>	3,767	0,000	0,304
	<u>Change in Intention to Quit</u>	2,548	0,001	0,228
PS*CCB	<u>Intention to Quit</u>	1,392	0,019	0,565
	<u>Change in Intention to Quit</u>	1,443	0,011	0,574

FUTURE RESEARCH DIRECTIONS

Although this study has been made to understand the compulsory citizenship behaviour and perceived stress among health care workers during the pandemic, it only consist the very first stages of the process. Accordingly there is still a paucity of information about in the time to come. The impact of extra working hours, stress and compulsory behaviours during crises has not widely been studied on; hence more studies are needed that will examine the effects of factors on healthcare workers.

CONCLUSION

This research was conducted to reveal the effects of the regulations introduced during the pandemic process on the compulsory citizenship behaviors and stress levels of healthcare professionals. 383 people participated in the study, 26% of the participants were physicians, 48% were nurses and 25% were other healthcare professionals. When we evaluate the participant according to the level of experience, it is remarkable that the seniority is between 0-10 years. The highest dissatisfaction about professional life is heard about wages and working conditions. While 61% of the participants were not satisfied with the income level, 17% of the participants stated that they intend to leave frequently during the pandemic process and 39% stated that they think to leave from time to time. Most of the healthcare workers emphasized that if they intend to leave, they are satisfied with their institutions, but their wages are not satisfactory.

When the special conditions of the pandemic period were examined, it was determined that there was a decrease in the number of patients per day and that the positive or negative thoughts regarding quitting jobs did not differ significantly from previous periods. In the questions expressing the first three months of the pandemic process, the rate of those who said that the number of patients increased in the said process was 28%, the rate of those who said it decreased was 55% and the rate of those who said it did not change is 18%. While working in a pandemic hospital or unit does not have a significant impact on the level of stress, low-to-moderate level CCB in people working in all types of healthcare institutions; medium-high level PS was determined. During the pandemic period, the PSL was higher than the CCB level; CCB level is higher in physicians, PSL is higher in nurses. While the group with the highest CCB average is the physicians with 6-10 years of working time, the second highest value is seen in nurses with 26 years and above experience.

It was determined that the number of patients who increased the number of patients between March-July 2020 was higher than the decreasing number of physicians. This result suggests that the pandemic process increases the level of CCB. Two factors that increase the level of PS among healthcare professionals are determined as gender and marital status. This result shows that being single by gender and being single by marital status are determined as factors that increase stress level in healthcare workers.

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KEY TERMS AND DEFINITIONS

Citizenship Pressure: A point where the volunteer basis of the Occupational Citizenship Behaviour is lost and the behaviors expected to be displayed by the management and the employee is forced to exhibit the OCB reveals the Compulsory Citizenship Behavior.

Healthcare Worker: A healthcare worker is one who delivers care and services to the sick people either directly as doctors and nurses or indirectly as helpers, laboratory technician.

Organizational Citizenship Behavior: Behaviors that are not included in the contract between the employee and the organization: but benefit the organization, which in some sense add value to the organization and in return, the employee does not earn any income, income or reward.

Pandemic: A worldwide spread of a new disease.

Pandemic Influenza National Preparedness Plan: The plan which prepared in 2006 as a part of the preparation for influenza pandemic in Turkey. Secure the continuity of public services during pandemic and to reduce the number of patients, hospitalization, and deaths due to the disease are main aims of the plan. Plan also aims to prevent economic and social damage caused by any ongoing pandemic.

Perceived Stress: The thoughts or feelings that a person has about how much stress him/her are under at a given point in time or over a time period.

Stress: Stress is the mental reaction that occurs when an individual feels that she cannot cope with the demands or threats to her/his well-being.

Chapter 21

The Role of Advertisements in Promoting Healthcare Services and Their Effects on Corporate Image

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ABSTRACT

While some segments of society may want to be promoted and informed about products and services, some segments argue that most of the advertising activities can negatively affect human health due to poor control. Considering that the advertisements will mislead individuals and affect the health of the society in a positive way, the existence of advertising bans is considered an accurate decision to protect public health. Due to its advertising structure, it turns healthcare into a commercial commodity and sells healthcare. This situation disrupts the social structure of the health service and makes the service a subject of competition between institutions and individuals. It is seen that obstacles are put in this regard and serious sanctions are imposed. Health personnel also have important duties to prevent health from being a commercial good and to provide a respected health environment.

INTRODUCTION

Advertising is a branch that grows in terms of size and related expenses. In addition to this, in the market place, both the products for use introduced to the world, and in terms of services, the products and services which are similar to and can be replaced by each other are rapidly offered to consumers with all privileges through the businesses producing products and services of the same variety. For this reason, it is easy for these efforts targeting solely consumers to turn the marketing environment into a competition area (Odabaşı, 2006, p.93). The most important element which can be used by the producers and the intermediaries in this field in order to make the products or services they produce or offer to be heard,

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accepted and to differ from rivals is advertising, and the most important tool for this is advertisement. Therefore, the rapid development of advertising activities still continues.

Today, for businesses and buyers, advertising has become essential as like other elements of launch communications. As a result of continuously changing market conditions and increasing competition day by day, the success of numerous businesses producing similar products are directly proportional to skillful and reasonable use of elements of launch communications by such businesses. The most important of these elements is advertising, and in order to examine them in more detail, it is necessary to first explain the essence and content of advertisements (Tolungüç, 2000).

When we examine this situation from businesses side, due to the high number of identical products and services available in the markets, the contribution of advertising is great in terms of delivering products and services to buyers, convincing the buyer to like the product and service produced by the business, and keeping alive the requirement and demand for this product. Again, from businesses side, advertising is seen as a tool that supports good climate which directing them to use their capital for productive areas.

From the buyer side, advertising has the quality which enables the individual to select the most useful and suitable choice among the various products in the market that meets the needs of the individual, besides being structured to provide information on various products and services, to explain the buying conditions of such products and services as well as their use, and in today's conditions, to help the buyer to save time.

When it is taken into consideration that the distance between the producer and the buyer is increasing more and more, and therefore, the direct communication between the producer and the buyer has become impossible, it is also known how an important aspect is advertising, as a form of communication from producer to buyer for centuries, today from side of producers. Demand for products is under influence of various aspects. We can list these elements as the level and differences in the buyer's income, the prices, the existence and cost of other products replaceable by these products, the change in population, the geographical conditions, the demands, the religions and customs and the advertising. By this way, the importance of advertisements and advertising has been emphasized once more.

Healthcare institutions need to be successful not only medically but also commercially. This is because healthcare institutions are also considered as service establishments. Businesses have to ensure their revenues and continuity. In order to achieve these goals, healthcare institutions also need marketing. Not only private enterprises but also public enterprises also benefit from marketing (Tıǧlı, 2001). In our country, promotional tools for healthcare institutions have started to be known recently, and how to implement these tools is a new topic of discussion. However, there are restrictive and prohibitive provisions regarding the methods to be used in promotion of healthcare services. Advertising is the most important promotional tool specified in the statutes.

2. PROMOTIONAL ACTIVITIES IN HEALTHCARE SERVICES

A brand covers all terms, names, symbols or forms that introduce the goods of vendors or producers which distinguish them from any other vendor or producer of products. The brand shapes and affects the consumer and the decision of the consumer during purchasing process and ensures differentiation of tangible products from each other. In addition, brand is the main focus of advertising and marketing efforts (Güven, 1996). In the markets where competition is high and such competitive environment continues without a break, brand owners are constantly in search of being able to ensure their continuity,

and to stand out from the competition and to become different from their rivals. Differentiation efforts started with release of new products have evolved over time from total quality management practices to customer service process, customer relationship management and low-cost production. As a result of these developments, the value of brand management has been understood by the efforts carried out in order to ensure customer satisfaction (Gün, 1999).

In our globalizing world today, in which the growth rate of communication and technology is increasing and consumers are becoming more and more conscious, the consumer is exposed to a continuous data flood. Therefore, for companies willing to stand out from various alternatives and sell their products, branding will not be sufficient, and the branding process will need to be managed successfully as well (Mendi, 2015, pp.275-290). In this context, we can define all the efforts made for achieving the best position in the market by navigating on the right track as of the creation date of the brand and providing benefit to the person during life cycle of the brand in the market, as brand management. Brand management is a continuous process that starts with creation of the brand and continues until the end of life cycle of the brand. The strategies, efforts, and decisions made for mass deployment of the brand, achieving its highest value, obtaining high efficiency from the products associated with the brand and being remembered for long years comprise the content of brand management. With this synergy, advertising contributes to infuse into users what it should be through learning of the brand, giving information about it and accepting it psychologically, and remembering of the brand by attracting users to the sales points and by creating behavioral acceptance (Mahmutoğlu, 2000).

2.1. Advertising of Healthcare Services

When we examine this situation from businesses side, advertising contributes greatly to deliver the products and services to buyers, to convince the buyer to like the products and services produced by the business, and to keep alive the requirement and demand for this product since the number of identical products and services available in the markets is high. And again, from businesses side, advertising is seen as a tool that supports good climate and directing them to use their capital for productive areas. (Deniz 2003).

From buyers side, advertising is a tool which enables the individual to select the most useful and suitable choice among the various products in the market that meets the needs of the individual, besides being structured to provide information on various products and services, to explain the buying conditions of such products and services as well as their use, and to help the buyer to save time, today (Oğuz, 2004). Negative criticisms regarding advertisements about healthcare services can be listed as; advertising creates unnecessary costs, they enter lives of people without permission, they try to change behaviors by creating fear on many matters, and they force individuals to act against their own will (Tıǧlı, 2001).

2.2. Types of Advertising in Healthcare Services

Considering its general characteristics, the advertising is thought to have an effect on healthcare services to become cheap, high quality, fast and innovative.

Advertisements in the healthcare sector generally have three forms.

2.2.1. Corporate Advertising

Each institution is regulated by related traditions, customs and laws, in other words, by integrated rules. Institutionalized organizations consist of rules, traditions and customs that determine the way of preserving the order in society. Badges, members, structures, flags, tools and equipment make these rules visible with their representation and symbolization ability. Statutes, regulations and by-laws are the legally recognized and officially established institutionalization elements (Yolcu, 2001).

With globalization, institutions have been engaged in different pursuits to adapt to differentiating and developing market conditions. Besides interested with increasing sales of their services and products, the institutions also have felt the requirement of attaching importance to their corporate image. In order to stay ahead of their competitors, to stand out from them, to create a good corporate image, to gain reputation, the institutions use corporate advertising through various media tools. The worldwide use of corporate advertising is increasing, and in Turkey, they are also used by many institutions (Şengün, 2016, pp.38-42). If corporate advertising is defined in broad sense; it can be defined as a special type of advertising used by a business for making their establishment or financial interests heard (Tolungüç, 1999). Ülger defines corporate advertising as; “These are the advertisements prepared in order to create a positive image of the business instead of advertising the products or services of that business. In corporate advertising, the products or services of the business are not mentioned.” (Tolungüç, 2000).

According to Peltekoğlu; corporate advertising is an important public relations activity contributing to the image and reputation of institutions, distinguish them from their competitors, and contributes their recognition (RTÜK, 2019).

The corporate advertising definition of Oyman and Odabaşı; institutional advertising is carried out to establish positive behaviors towards an institution, to establish a reputation, to build loyalty and to create a positive image (Tıǧlı, 2001).

Corporate advertisements, as a communication tool used by the public relations field, present the institution to the public, and they are used by many institutions to describe the goals, demands and expectations of the institution. Institutions tell us about their financial competence, the changes made in their logo and symbol, mergers and their attitude against the events t applying different types of advertisements. Because of these aspects, corporate advertisements are important and necessary in terms of corporate communication (Oğuz 2004). Corporate advertisements consist of tools that are used in public relations activities aiming to develop and create corporate image. These advertisements are for arranging the relations of healthcare institutions/ corporations with the public and to increase their knowledge about the institution. Institutional advertisements are carried out to attract the attention of “customers”/ patients to the institution and to have a positive impact on their behavior towards the institution, as well as undertaking the mission of protecting the institution in situations that constitute negative public opinion (Akıncı, 1998).

2.2.2. Covert/ Hidden Advertising

Covert/ hidden advertisements state that the offered healthcare service can be provided with higher quality than the other institutions/ corporations. Such advertisements generally cause private institutions to be recognized more in the healthcare sector since public institutions/ corporations lack both in terms of capacity and quality and the required service development support is not provided. In addition, the

“healthcare” being a commercial commodity provides competitive edge for these institutions (Akıncı, Nergis: 1998).

It is known that non-profit organizations do not use their financial resources unnecessarily for advertisements or similar efforts. In general, it is observed that public healthcare institutions/ corporations are contented with informative articles about preventive healthcare services or patient rights practices; such as “You can choose your Physician in our Hospital” or “You have the Right to choose your Physician Freely” or “X Hospital started ISO 9001 2000 Quality Studies, Congratulations”. Although it is not understood as an explicit advertisement, these are advertisements where the “customer” is directed towards to the said institution/ company or person (Tolungüç, 1999).

To talk about works of certain institutions/ corporations or their staff or to become a guest on TV shows/ programs, to get opinions of certain people about the subject, to give place to products of pharmaceutical companies in newspapers in order to provide focus on a medicine through a disease are some examples for covert advertising. Again, advertising by becoming a sponsor can also be included in this category (Kale, 2004).

2.2.3. Deceptive/ Misleading Advertising

As stated in the doctrine, although the terms “deceptive advertisements” and “misleading advertisements” have the same meaning; this concept is called as “misleading advertisements” in Continental Europe, and in our language (Turkish), instead of “misleading advertisements”, the concept of “deceptive advertisements”, as used in the USA, is used (Arkan, 2001, pp. 21-23).

The definition of Deceptive Advertisements specified in the international regulations is explained within the scope of doctrine (Güven, 1996). In this definition, the most fundamental features of deceptive advertisements are listed. Advertisements that are misleading or which may mislead people as a natural consequence, and advertisements which abuse inexperience and lack of knowledge of people, even if they are not directed to consumers or they could not reach the consumers (the statement “including presentation”), are defined as “deceptive advertisements” (Inal, 2000).

The concept of “deception” needs to be interpreted in a broad sense, and if it is reviewed only by taking into account only some specific aspects, there is a possibility to get wrong results (Arkan, pp. 3-12).

As an example, in the opinion given in dn 140; it was also necessary to examine whether the advertisements including the statement Milli Boya (National Paint) have a deceptive element due to the fact that the wall paints in question were produced under a license of a foreign country. In the said advertisement where the said firm was sponsoring the Turkish National Football Team during the Football World Championship in South Korea and Japan, the statement “Milli Boya -Filli Boya (National Paint-Filli Paint)” was included in a way supporting the National Football Team (Geysi, 2019).

Against these advertisements, the rival business having the DYO brand filed a lawsuit to prevent unfair competition and for determination of the said advertisement was deceptive. Regarding the said advertisement examined by Teoman, use of “national” statement for a production made with the license of a company in a foreign country was not seen as deceptive, and in line with Göle, it was stated that the products produced under a same type of license should be considered as national. In addition, it was stated that use of the term “National” in the advertisement mentioned could not be misleading for the consumers or exploiting them due to their lack of experience or knowledge (Aytemur, 2004). Misleading by the deceptive/ misleading advertising can be arisen through emphasis of a necessary point as a critical matter although the information given is a true fact. In addition, one of the emphasized meanings may

be misleading (such as a title) or insufficient explanations in the advertisement may result in failure to fulfill demands of the consumer who has expectations. And, the comparisons made with the services offered by other institutions/ corporations and use of statements “best” and “most effective” are stated as deceptive advertising (Emin, 2003, pp. 13-55).

However, by considering the fact that patients can be easily abused as the human health is concerned, the advertisements for the healthcare sector should be created more sensitively and they should not be free completely (Çaplı, 2002).

2.3. Effects of Advertising of Healthcare Services on Consumers

The consumer is the most difficult element to understand in the marketing field. One of the reasons for this is that it is very difficult to measure and evaluate the consumer behaviors and insufficient number of measurement methods. The second reason is that human behavior constantly varies depending on internal and external factors. Even if these differences evolve slowly, it still becomes difficult to understand the human behavior. In order to overcome these difficulties, advertisers benefit from scientific disciplines such as anthropology, sociology, psychiatry and psychology (Çetinkaya, 1993). Beliefs, attitudes and needs have great impact on the consumer behavior.

Attitude is the individual's positive or negative reaction towards an object or anything. Attitudes of individuals directly affect the purchasing mechanisms of individuals (Gün, 1999). The exposure of consumers in general to advertisements shows the power of advertisements to affect the society. The impact of advertisements on consumers can be extremely positive if the functions of persuasion, giving information, adding value and reminding, which are the fundamental functions of advertising, are presented to the target audience together with contemporary responsibility understanding (Gün, 1999).

Advertisements enable consumers to make a choice. They can see information about many different products all together, and this provides ease of comparison. Loss of time is quite high for a review to be made for a product wanted to acquire, (Göle, 1983). As a result, many products need to be analyzed and compared. By the help of advertisements, this is prevented and time is saved. In addition, promotion of the new product put on the market is provided and the method of use of these products is taught easily (Güven, 1996).

Individuals exposed to advertising messages are informed even if they do not buy the product, and they become aware of novelties. Getting informed by the advertisements is an important situation for the consumer and the society. Consumers are the most important controllers of the economy, and therefore they are required to get this information. Informed consumers protect their economic interests through their mindful shopping (Akıncı, 1998).

3. PROMOTIONAL ACTIVITIES FOR PRODUCTS AND SERVICES IN HEALTHCARE SECTOR

3.1. Promotional Activities aiming the Public

According to Article 7 of the Regulation on Promotional Activities of Medicinal Products for Human Use; in terms of their composition or purpose, the products that are permitted/ licensed by the Ministry of Health that can be used with advice and information of a pharmacist can be promoted to the public,

in cases where there is no need for a diagnosis, prescription or follow-up after treatment by a doctor or dentist (article 7/1). However, it is forbidden to publicize the prescription products and products containing psychotropic and narcotic substances which are within the scope of the United Nations Single Convention on Narcotic Medicines of 1961 and the United Nations Convention on Psychotropic Substances of 1971 (article 7/2). This prohibition is not valid for products used in vaccination campaigns approved by the Ministry of Health (article 7/3) (Turgut at. all, 2018, pp.185-205).

Products that are used in tuberculosis, sexually transmitted diseases, critical infectious diseases, tumor and other cancer-related diseases, diabetes, chronic insomnia and other metabolic diseases cannot be promoted to the public (article 7/4). It is not possible to publicize the medical products which have been reimbursed (article 7/5). In Article 22 of the Law on the Establishment of Radio and Television Enterprises and Their Broadcasting Services numbered 3984; the promotion of medicinal products for human use which are sold by prescription cannot be made through radios and televisions (article 7/6). No medicinal product can be distributed directly to the society for promotional purposes (article 7/7) (Deniz, 2003).

In Article 8 of the Regulation having the title “General Principles of Public Promotion”; during promotion of all kinds of medicinal products to society; it is clearly stated that the message is a promotional message and it is clearly stated that the promoted product is a medicinal product for human use (Temel, Akıncı, 2016, pp.27-37). Promotional tools should include the name of the promoted medicinal product for human use, generic name in case of having more than one active ingredient, information required for the correct use of the medicinal product, remarkable legible warnings to enable reading of the information on the package insert or on the outer packaging, whichever the case may be. However, the information on the package inserts is not given in a way that a general consumer can perceive and understand (Karakoç, 2019).

Lots of Latin expressions prevent the relevant legal regulations from reaching their purpose. For this reason, it will be a convenient step to make translation of medical concepts on inserts into Turkish as soon as possible. In the public promotion of medicinal products for human use (Gümüšoğlu at all. 2007, p.11):

- a) To give the impression that a medical consultation or surgical operation is unfavorable, especially by making a diagnosis or recommending treatment through a letter,
- b) To claim that the results of the product when used are guaranteed, it has no side effects or it has better or equivalent benefits than any other treatment or medicinal product,
- c) To imply that the individual will be recovered by using the product,
- d) To state that the health of the individual will be adversely affected when not using the product,
- e) To carry out activities for only children,
- f) The recommendation made by famous people, even if these are scientists, healthcare professionals or people included in these categories, who may encourage the consumption of medicinal products due to their reputation, or to refer to such recommendation,
- g) To imply that the medicinal product is a cosmetic, food or other consumer product,
- h) To imply that the medicinal product is effective and safe due to being natural,
- i) To cause an incorrect diagnosis by the user, by defining or presenting a case study in detail,
- j) To claim of recovery suggested through inappropriate and misleading expressions that cause panic,
- k) To illustrate the changes formed by the disease or wound on the human body, or the effect of the medicinal product on the human body or in some parts of the body through misleading or panicking expressions or pictures,

- l) To mention that a license is provided for a medical product,
- m) To make a misleading statement by using the pharmacological effect of medicines in terms of effectiveness,
- n) By not considering the total cost of the treatment for a certain indication or the treatment cost in a monthly, daily or other time interval as in the treatment of chronic diseases, to make a deceptive/ misleading price or cost comparison over cost of a single pharmaceutical form or the cost of a single package for different medicines or pharmaceutical equivalent preparations of the same medicine,
- o) To make definitive conclusions with a scientifically inadequate study that is not based on a sufficient sample size and a detailed examination are forbidden.

3.2. Promotional Activities Aiming the Healthcare Personnel

Since prescription medicine advertisements are not allowed and over-the-counter (non-prescription) medicine advertisements are restricted with newspapers and prospectuses, the promotion aiming healthcare professionals, namely physicians, dentists and pharmacists becomes more important. In promotion of medicinal products for human use to healthcare employees (article 9) (Sezgin, 2003):

- a) Necessary information in line with current, short product information,
- b) The date this information was created and last updated,
- c) The presentation class of the medicinal product are given.

The Ministry of Health may require such type of promotions to include the sales prices of the product or its different forms, packages and doses, besides the reimbursement conditions of social security institutions (Fogarty, Catts Forlin, 2000, p.2).

Only the following information about the product, without any claims, are given on the printed promotional products:

- a) Trade name of the medicine,
- b) INN or approved generic names of active ingredients or substances,
- c) The address and name of the importer, producer or license holder, from which more information can be obtained, whenever necessary.

The principles and fundamentals of promotions aiming the healthcare professionals are listed below (article 10):

- All information to be used in promoting a product to healthcare professionals must be provable, accurate and at sufficient level to enable healthcare professionals to develop their own opinions on the therapeutic value of this product.
- For using in the documentation presented, quotations, tables and other visual elements from medical journals or other scientific activities can be used in accordance with their original and by clearly indicating the sources. During promotion of the products to healthcare professionals, no cash or in-kind benefit can be offered or mentioned.
- In promotional activities, hospitality should always be at a reasonable level and secondary to the final purpose of the meeting and should not include people other than healthcare professionals.

- Healthcare professionals cannot be promoted or provided with any service through games of chance.
- Healthcare workers cannot request or accept any incentives, contrary to the above mentioned (Karayalçın, 2019).

Except for those that are distributed only to healthcare professionals, no promotion can be made through magazines, newspapers and similar printed media. An announcement made upon permission of the Ministry of Health which states that the product has been placed on the market is not within the scope of this provision. License holders carry out the necessary procedures to ensure the correction of promotional news published in the printed media regarding their products that are banned from being promoted to the public, and notify the same to the Ministry of Health. (Arkan, 2003, pp. 3-12).

3.3. Promotion through Scientific Publication, Training, Congress etc.

Educational and scientific studies such as seminars, congresses and symposiums organized for the purpose of conveying medical information about medicines are included within the scope of medicine promotion, and by these features, they serve as an advertising tool (Tengilimoğlu at. All, pp. 76-96). Educational and scientific studies cannot be used except to transfer found medical information or to transfer information. License holders may organize beneficial seminars, congresses, symposiums, educational and scientific meetings for conveying and discussing the information, or they may make financial/ scientific contributions to such studies (article 11/1,2).

License holders cannot make financial contributions to the participation of individuals other than those who attend the meetings for educational purposes (Arkan, 2001, pp. 21-23).

The admission/ hosting activities to be held for those who attend the meetings cannot be in a nature to throw the purpose of the meeting out of focus (article 11/3)

This type of meetings is organized at an appropriate level and location and has an appropriate format. Symposiums, congresses, seminars and such studies to be organized or contributed throughout the year are scheduled according to an annual program by the license holders in the previous year; possible changes in the program are notified to the Ministry of Health prior to the meeting (Arkan, 2003, pp. 3-12).

People other than healthcare professionals are not allowed to invite to the meetings. Lists of those attending these meetings and a copy of the information and documents given to attendees are kept for submission upon request of the Ministry of Health (article 11/4)

3.4. Promotion through Promotional Gifts

Free samples; these are free product samples for promotion purpose that are provided to healthcare employees and which are smaller than the smallest size, quantity and shape of the product on the market (Tokatlı, 2017 pp. 34-57).

In accordance with the Regulation on Promotional Activities of Medicinal Products for Human Use, free samples are provided only to physicians, dentists and pharmacists under the conditions listed below (article 12).

- a) License holding corporations establish an adequate records control system regarding the import, production and distribution of samples, and determine the responsible people for this, in order to be notified and documented to the Ministry of Health authorities if requested,
- b) All samples are presented in less than the smallest presentation quantity on the market. However, reduction is not sought in samples of products that cannot be reduced due to their pharmaceutical form.
- c) There is a statement on its packaging as “it is a free promotional sample – not for sale”.
- d) The promotional sample is presented with the summary of Short Product Information.

The medical sales representative completely and accurately conveys the information used in promotion to healthcare workers through promotional materials (Akıncı, 2004, pp. 131-136).

The medical sales representative conveys the type of use of the medicinal product that he promoted, together with the information especially about the adverse effects reported to them by the people that they visited, to the scientific service (article13) (Oruç, 2018).

FUTURE RESEARCH AND DIRECTIONS

International promotion is to be prepared for the introduction of innovations in health care. The expert team of the health institution, the chat site, technological developments, bed service capacity, physical conditions should be conveyed accurately and in abundance. It is necessary to ensure the creation of an environment in which the correct communication between the patient and the doctor will be established and to prevent the health service, which is a social service, from entering the free trade market. For this, it is necessary to work together to strengthen the control mechanism, which is very lacking from the upper level of limitations, and effective solutions must be produced. Preventing health from being a commercial product and supervising the promotion violators for the promotion of a respectable and dignified health environment. Continuing the research with a broader scope and including different countries and the analysis studies to be conducted will contribute to the service promotion activities.

CONCLUSIONS AND RECOMMENDATIONS

The benefits of advertising to consumers and companies are realized only if advertisements and promotions are made for giving information and introduction purposes. Advertising activities that prioritize competition and aim to increase profits will destroy the promotion and its rules ethically first of all. It is necessary to prevent advertisements that are made unlawfully to deceive and mislead the consumers, and to establish a control mechanism; in our country, the authorized institutions in this regard are the Advertising Board and RTÜK (the Supreme Board of Radio and Television). By certain prohibitions and restrictions, the protection of consumers both legally and ethically is aimed in promotional and advertising activities in healthcare services. While freedom of the press is also valid for advertisements, the honesty in the service provided has an important place in this process.

It is not a questionable fact that honesty should be come in the forefront more than freedom of expression in healthcare which is a field not affecting one person, but the whole society. For this reason, it is necessary to eliminate the feature of healthcare services which is perceived as being a contest that should

be won by patients, and should be ensured to remain it as a social right. Since healthcare service is not trading or money-indexed, and to convert this service into a business causes important ethical problems, serious sanctions are imposed to prevent such problems. The purpose of restrictions on advertising in the healthcare sector is to protect the human healthcare and human rights within this framework, and to prevent people from being harmed through actions originated from competition, profit and similar purposes.

Promotions in the field of healthcare have to comply with the legislation and they should not be misleading or deceptive advertising. Some promotions which are informative for the public are allowed under certain frameworks and works to inform the public are made under the name of public service announcement. Although there are many thoughts and comments, it is obvious that the bans against the promotion and advertising in healthcare services affect the consumers, institutions and companies negatively. Advertisements significantly affect the purchasing decisions of consumers. However, by these restrictions, the right of consumers to obtain information, to choose while purchasing, to access healthcare services, and the existing rights of institutions and companies to compete are not restricted. In this case, the opportunity for companies to improve themselves, to increase the service quality of their organizations, and for consumers to benefit from advanced technologies and privileges, decreases. Another important point here is the promotional activities of medicinal products for human use. Although it is beneficial to expand the boundaries of advertising in healthcare services, since advertising of medicines, medicinal products and materials for human use will cause confusion and wrong choice by the consumer, the supervision and restrictions continue in this field. In this context, it is necessary to avoid making campaign products for the sale of healthcare services, to avoid practices that may cause diseases, to transfer the information to the right person and to the right place, to contribute to create an environment where the right communication between the patient and the physician will be established, and to prevent the healthcare service, which is a social service, from entering the free trade market. To this end, it is necessary to work jointly to strengthen the supervision mechanism, which seems to have deficiencies, instead of the level of restrictions determined, and to develop effective solutions is required. In order to prevent the healthcare from becoming a commercial product and to ensure a reputable and honorable healthcare environment, it should be the duty of not only the professional association, but also all healthcare personnel to control those who violate the rules for promotional activities.

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KEY TERMS AND DEFINITIONS

Health, Advertising, Product: Informing about medical services, informing about new technological developments. In the health sector, public information is provided in terms of service quality and features of service to health, which are not presented as advertised.

Service Promotion Activities: Ensuring the dignity and preferences of the organization; Carrying out informative promotional activities about treatment, technological innovations, and service quality.

Chapter 22

Designing COVID-19 Campaigns to Achieve Individual Compliance: Examples From Austria, the U.S., and Australia

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ABSTRACT

The literature describes a pandemic as a unique form of health crisis that requires intensive communicative efforts. The primary aim of this study is to investigate how COVID-19 health communication campaigns are designed on three continents to get individuals to comply with the proposed actions and measures. Results indicate that the prevalence of emotional messages correspond with previous research findings, which demonstrated that similarity with a testimonial and narratives can be useful tools to increase message effectiveness. Hence, government officials are advised to invest in message presentation.

INTRODUCTION

The term pandemic refers to a novel, virulent, and easily transmissible strain, to which the human population is not immune (Reynolds & Quinn, 2008). As such, it alludes to “a special kind of crisis, since it is a collective responsibility, requiring a rapid deployment of adapted communication techniques” (Saliou, 1994: 515). Talking about COVID19, a pandemic presents a specific health crisis. Previous research has determined that communication during a health crisis is paramount (Reynolds, 2007; WHO, 2008). Saliou (1994) and Menon (2008) stress the relevance of continuously disseminating information on how the public can become actively engaged and help mitigate the crisis (Saliou, 1994; Menon, 2008). Scholars agree that health messages are an important instrument to create awareness for the health threat (Tinker et al., 2001; Covello, 2003). In times of uncertainty and upheaval, messages should be both instructing

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and adjusting, the prior informing the public of which precautionary measures to take to prevent physical harm, while the latter offers individuals guidance on how to cope with the psychological threats brought about by the crisis (Coombs, 2007; Wallis & Nerlich, 2005).

In crisis situations, health messages for which the government is the identified source rank high in relevance and credibility (Li et al., 2016; Shuaib et al., 2014; Wabba, 2014) as individuals believe that the government has the power to control the crisis (Goodwin & Sun, 2014), resulting in high compliance rates (Menon, 2008; Paton, 2008; Tay et al., 2008). The primary aim of this study is to investigate how COVID-19 health campaigns are designed on three continents to get individuals to comply with the proposed actions and measures. To this end, we analyze which (1) message appeal, (2) message format, (3) evidence type and (4) narrative type are utilized to provide the population with targeted and timely information; in a second step, the individual features are critically reflected against decreasing health literacy rates, which also have to be considered in the message design process (Paakkari & Orkan, 2020).

COMMUNICATION DURING CRISIS

Pandemics qualify as a form of crisis (Saliou, 1994), attesting to situations in which individuals lack experience and, therefore, actively seek guidance (Gray et al., 2012). Crisis communication then helps sensitize people for the risks associated with the crisis and encourages them to adopt preventive measures by changing their behaviors accordingly (Coombs, 2007). In an attempt to reduce the negative consequences and risks associated with the crisis, it is essential to gain the cooperation of all stakeholders involved (Blendon et al., 2008; Holmes, 2008), first and foremost the general public (Rasmussen et al., 2008). The public needs to be mobilized as a partner in the crisis; for this reason, crisis communication should appeal to individuals' capacities to take preventive action (Rasmussen et al., 2008; Blendon et al., 2008). Experts have determined that proving the public with information and instruction – and thus engaging in a process of constant communication – is seen as paramount (Wallis & Nerlich, 2005). Just like in other crisis situations, COVID-19 requires “well-coordinated health communications” to assist individuals in managing their daily lives under uncertain circumstances (Reynolds & Quinn, 2008). Instructing information predominantly concerned three areas: information on the pandemic, the public's primary needs, and precautionary measures (Kim & Fisher Liu, 2012). Furthermore, preventive information and reactive information need to be differentiated (Saliou, 1994). Preventive information is meant to sensitize public opinion with regard to the crisis, whereas reactive information is meant to not only inform the affected population, but also defuse a potential panic and prevent rumors from spreading (Saliou, 1994). Timely and transparent information is further seen as a must, allowing the public to derive at realistic assessments of the threat posed by the crisis (Fischhoff, 2005; Tinker et al., 2001; Covello, 2003).

Media messages are turned to as sources for instruction and orientation (Brug et al., 2004; Paek et al., 2008). The credibility and trust of such messages is even increased, if the government is the identified source (Li et al., 2016; Gaglia et al., 2008). This is the case, since the government has been found to play an essential role in managing any health crisis (Shuaib et al., 2014; Wabba, 2014). Numerous studies have dealt with how the general public responds to a government's overall risk communication strategy, for instance during the avian influenza (Li et al., 2016), SARS (Lee, 2009), or Ebola (Nelson & Namtira, 2017). Findings derived from these studies support the assumption that if communication on

behalf of the government is seen as favorable and credible, compliance with the recommended measures can be increased (Menon, 2008; Paton, 2008; Tay et al., 2010).

HEALTH COMMUNICATION AND CAMPAIGNS IN CRISIS SITUATIONS

The role of public health risk communication in the event of crisis must not be underestimated (Holmes, 2008; Vaughan & Tinker, 2009), since “[c]ommunication often plays a vital role in determining how people perceive health issues” (Wright et al., 2008: 115; see also Welch Cline, 2003; Lupton, 1994). Based on Liu and Horsely (2007) and Buus and Olsen (2006), Lee (2009) identified a total of 8 factors that governments have to bear in mind when engaging in crisis communication, amongst them the public’s interpretation of the government’s concern for the health issue. Messages disseminated on behalf of the government must not only provide the latest risk information and, thus, build trust, but also instruct individuals on how to behave, further assuring them of their ability to engage in self-protective behavior (Vaughan & Tinker, 2009). Governments are advised to communicate openly and in an empathetic manner, motivating individuals to take preventive action (Novac, 2001; Seeger et al., 2003; Wray & Jupka, 2004). For this reason, information should be presented “straight-up, to the point” (Gray et al., 2012: 10).

Albeit four main themes are commonly addressed during the crisis – i.e. personal and community risk, community building, responsibility and information sources (Gray et al., 2012) – in most instances, messages center on risk reduction strategies (Coombs, 2007), which provide information on the dangers associated with the crisis as well as the benefits associated with abiding crisis mitigation strategies (Reynolds et al., 2002; Reynolds & Seeger, 2005). There is agreement that effective risk communication is crucial in case of health emergencies (Reynolds, 2007; WHO, 2008), leading governments to heavily invest in health campaigns to raise public awareness for an existing health threat. Health campaigns can be defined as “a systematic effort to change health behaviors (or attitudes and beliefs about health and/or social and environmental conditions that mediate health behaviors) within a target population of people who are at risk for a health problem or problems” (Wright et al., 2008: 233). If the government is the identified sponsor, these messages are commonly referred to as Public Service Announcements (PSAs, Murry et al., 1996) which are utilized to create awareness for desirable causes and intend to evoke behavioral changes in individuals (Garbett, 1981). Likewise, PSAs are employed during pandemics and epidemics.

In general, health campaigns “utilize three basic communication processes to move the target audience toward the desired response: awareness, instruction, and persuasion” (Salmon & Atkin, 2003: 455). Awareness messages educate people about what to do and identify who should adopt a defined behavior. Instruction messages afford recipients with instructional information (“how-to-do-it”; Salmon & Atkin, 2003), while persuasive messages offer reasons as to why message recipients should consider taking up an advocated action (Salmon & Atkin, 2003). In the case of pandemics, health campaigns are meant to raise awareness and instruct individuals to utilize self-protective measures by appealing to their self-efficacy (Gray et al., 2012; Vaughan & Tinker, 2009).

Particularly during health emergencies, information on which preventive measures should be taken is most valuable (Wray et al., 2008). Only if the public is familiar with the most important measures, the spread of the health threat can be controlled (Van Bavel et al., 2020). Since measures often concern “disruptive actions” (Vaughan & Tinker, 2009: S2), messages must be carefully crafted to counteract negative emotions and controversial arguments (Holmes, 2008; Rasmussen et al., 2008). The proposed

actions, for instance, concern nonpharmaceutical interventions (NPIs), which are strategic measures implemented on part of the government to resolve the crisis (Reynolds & Quinn, 2008). According to the CDC (2020), NPIs can help control the pandemic and are, thus, also commonly referred to as “community mitigation strategies” (CDC, 2020). For instance, health messages spread during the H1N1 influenza emphasized the necessity to take up hygiene measures, such as “hand washing, sanitizer use, covering of coughs and sneezes, and staying at home” (Gray et al., 2012: 5). Similar message content was also employed as part of the COVID-19 risk communication and emphasized “the rationale and importance of adherence to public health measures that some people may consider intrusive (e.g., quarantine)” (US Department of Health and Human Services, 2008).

DESIGNING CAMPAIGNS WITH AN IMPACT: THE RELEVANCE OF HEALTH LITERACY

Campaigns promoting health interventions or NPIs rely on the media as a vehicle to reach diverse publics, much more so in crisis situations (Nelson, 2011). While the media are utilized for a variety of reasons in the health context (e.g., see Moorhead et al., 2013; Hendriks et al., 2014; Meppelink et al., 2015a, 2015b), limited research is available on how health messages are designed to create awareness amongst the population during health risk situations (Nelson & Namtira, 2017).

Health messages must be sensitive to the individual problems and hardships encountered in consequence of the respective health crisis (Vaughan & Tinker, 2009). Serving as important sources of information regarding risk perception and health behaviors, messages need to match the audience’s literacy levels (Smith, 2006), given the fact that numerous studies have confirmed that individual’s health literacy is rather limited (Sonderheimer, 2019; Hickey et al., 2018; Paakkari & Okan, 2020). In general, health literacy is conceptualized as “people’s ability to process and understand health information” (Ratzan & Parker, 2000: vi), further encompassing individuals’ reading and writing skills, their ability to distinguish relevant from irrelevant information as well as their capability to critically analyze and reflect upon information (Nutbeam, 2000). Low health literacy can result in unintended health outcomes (Meppelink et al., 2015a), and can also affects individuals’ ability to comprehend health information (Sorensen et al., 2012). Message complexity has been found to influence health communication effectiveness, with messages low in complexity increasing both individuals’ message processing and willingness to act on the recommendation presented therein (Meppelink et al., 2015a).

Individuals’ willingness to act upon the measures recommended by the government depends on their ability to make sense of the information they are presented with (Sorensen et al., 2012). Besides disseminating content through multiple platforms (Sjurts, 2011), which has been found to increase health communication efficiency and effectiveness (e.g., see Koinig & Diehl, 2020), messages have to be tailored to meet individual requirements and information needs (Rousseau et al., 2015; Cho, 2012; Yzer, 2012). For this reason, different (1) message appeals, (2) message formats, (3) evidence types and (4) narrative types should be utilized (Gray et al., 2012; Fischhoff, 2005).

Message Appeal

Message appeals are cues that are utilized in promotional messages that attract both recipients’ interest and attention, further steering their feelings towards the advertised service, action, or product (Kinnear

et al., 1995). Thereby, two forms of message appeals need to be distinguished: informative (textual) appeals and emotional (visual) appeals (Leonidou & Leonidou, 2009). Informative appeals are “defined as reason-why advertising in which product attribute information is presented, usually by a spokesperson, with no jingles, humor, animation, slice-of-life or other deviations from a pure factual sales pitch” (Aaker & Norris, 1982: 69). They are distinct from emotional appeals, which rely on affective, visual stimuli and are particularly suited to get individuals involved with the message (Rossiter & Bellman, 2005) as well as enhance message acceptance (Kroeber-Riel & Esch, 2015; Kang et al., 2020; Heath & Coombs, 2006). Likewise, a visual presentation has been found to facilitate learning, specifically if new information is presented (Mayer, 2002).

Message Format

Due to the factual – and scientific - character of health information, comprehension is often hampered, and the likelihood of recipients interacting with the message is decreased, especially if statistical information is presented (Rauschnabel et al., 2012). To increase the comprehension of information, health messages should use easy language and support arguments with illustrations and visuals to reduce message complexity (Wilson & Wolf, 2009; Houts et al., 2006). For instance, the use of pictures increases the likelihood of a message receiving fixation (Pieters & Wedel, 2004). If information is presented in dual-mode (e.g., video and voice-over; text and illustrations), low functional literacy – i.e. individual’s ability to read – can be overcome (Sorensen et al., 2012; Mazor et al., 2010). In this context, health campaigns have been found to benefit from videos (Tseng & Huang, 2016), which can present information in both textual and visual form. For instance, facts can be both presented in written and auditory form (voiceover) and might even be accompanied by illustrations or pictograms (e.g., Meppelink et al., 2015a, 2015b). Alternatively, storytelling can be used, whereby the video features a testimonial, who is chosen to tell his/her own, personal story that is directly related to the health-cause. Conditioned by both their visual and auditory form, videos have been found to be especially suited to facilitate information processing (Mayer & Moreno, 2002), given that both the eyes and ears are involved in information retrieval and processing (Meppelink et al., 2015b).

Evidence Type

When designing health campaigns, evidence can be presented in different forms: statistical evidence, narrative evidence or in hybrid form. “Quantitative or statistical evidence provides proof in the form of summary information across a larger number of cases” (Allen & Preiss, 1997, p. 126). In the health context, this form of information, for instance, could concern the number of deaths per year resulting from a disease or illness (Greene & Brinn, 2003, pp. 444-445). A narrative, on the other hand, is part of storytelling and is best defined as “a representation of connected events and characters that has an identifiable structure, is bounded in space and time, and contains implicit or explicit messages about the topic being addressed” (Kreuter et al., 2007, p. 222). This form of evidence presentation particularly caters to individuals with low health literacy levels, who find spoken information easier to process than written information (Höffler & Leutner, 2007). In recent years, however, rather than evaluating narrative and statistical messages according to their persuasiveness separately, a mix of both forms may also occur, which has become commonly known as a hybrid evidence type (Nan et al., 2015).

Narrative Type

If evidence takes the form of a narrative, it can be presented in two forms: a first-person narrative or a third-person narrative. A first-person narrative is used if a storyteller recounts events from his/her own, personal point of view, using I or we (Oxford Reference, 2020a). In case of a third-person narrative, the narrator informs about events that are unrelated to his/her person (Oxford Reference, 2020b). The effectiveness of first vs. third person narration has received academic attention in the health communication context. For instance, a study by Nan and colleagues (2015) was able to produce evidence that the use of first-person narratives led to greater perceived risk of getting HPV when compared to using third-person narratives. Similarly, Chen et al. (2017) found support for the effectiveness of first-person narratives, whereby higher levels of identification were found to foster self-referencing and, thus, had a higher persuasive impact. Identification was strongest for the first-person narrative, particularly if the narrator was a positive role model. In a previous study, Chen and colleagues (2015) showed that human approach language (e.g. a phrase like “I am approaching death”) was more persuasive when compared with the use of death approach language (e.g. “Death is approaching me”) in the context of colon cancer. However, this effect was only found to apply to the first-person narrative. Kim and Lee (2017) also stressed the importance of first-person narratives for smoking cessation.

METHOD

In order to reduce the number of COVID-infections and subsequent deaths, awareness for the threat posed by COVID-19 needs to be generated (awareness messages) and suitable measures to prevent the virus from spreading need to be identified (instruction messages). In the following, three campaigns from Austria, the U.S. and Australia are discussed in more detail regarding how national governments designed health communication campaigns in the context of COVID-19. This is essential, given that raising awareness for health topics and providing the public with instruction requires governments to take national characteristics into account (Mulholland, 2019).

For each country, one campaign who received extensive media coverage was chosen for analysis. Analysis followed a pre-developed scheme of analysis (see Figure 1). Moreover, it was important that the messages originated from official public (health) organizations that have a profound interest in health. In order to get access to campaign materials as well as background on the individual campaigns, organizational websites were consulted.

Figure 1. Scheme of Analysis (the authors)



CROSS-CULTURAL COMPARISON OF COVID-19 CAMPAIGNS

Austria

The Campaign

Together with the Austrian Red Cross, the Austrian government launched an information campaign titled *Schau auf mich, Schau auf dich* (engl. Care for you, care for me). The aim of this nation-wide health campaign is to raise awareness of the great risks posed by the coronavirus. This multi-channel campaign is not only broadcasted on TV and on the radio, but also in newspapers and across a variety of social media platforms, including Instagram and Facebook. The campaign's main objective is to encourage the general public and people over 65 years of age (as they constitute the largest group at risk) to change their everyday behaviors and reduce the number of social encounters. They should do so by staying home, keeping in touch with others solely through their mobile phones or email. This population segment is also called upon to enlist the help of others, e.g., by asking neighbors to run errands for them (Federal Ministry, 2020).

Campaign Theme and Execution

Overall, the campaign is very visually oriented and paints a highly idealistic picture. Across the numerous platforms utilized, the campaign posters and video clips show people in a casual, cozy look in light-flooded rooms. The women pictured are either doing schoolwork or yoga with their children. A

father is pictured working in the kitchen, where he is entertaining his son. The accompanying headlines encourage individuals to take up reading a book, listening to their favorite music, calling grandma and grandpa or working out at home. Similar messages – with a strong focus on “staying home” (and complying to calls for social distancing) – are also shared on social media (see Figure 2 below for examples).

Figure 2. Example of early campaign posters (retrieved from <https://www.facebook.com/sozialministerium/photos/>)



Figure 3. Example of later campaign posters (retrieved from <https://www.facebook.com/sozialministerium/photos/>)



While the initial campaign messages emphasize the need for social distancing, the message focus shifts once the economy is up and running again. From this point onwards, messages start to stress proper behavior in public, such as wearing nose-and-mouth protection or masks, maintaining a personal distance (1 m minimum) or taking other self-protective measures (see Figure 3).

Message Appeal

In terms of message appeal, the Austrian government utilizes both informative and emotional messages. In the initial crisis stage, the government's campaign is based on emotional message content, featuring individuals in different roles/occupations and of different age groups. The message that is put forward is, however, always the same: looking after oneself and one's loved ones entails social distancing and, thus, staying at home. After completing the first lockdown, messages start to center on preventive measures. Since prevention is usually based on instruction, an informative appeal is chosen. The second wave of campaign messages then highlights the need to socially distance, and utilize several hygiene measures, such as wearing mouth-and-nose protection, washing one's hands regularly, and airing rooms periodically.

Message Format

Regardless of which mode of presentation is chosen, health messages predominantly rely on a dual mode presentation. Except for posters, which utilize both strong and dominant visuals that are accompanied by short textual segments, the videos shared on social media use personal stories, in which visuals and textual elements complement each other to a more comprehensive whole. If information is presented in textual form, it is supported not only by pictograms but also by voice-over in order to aid comprehension. As such, messages are designed to counteract potential low-literacy rates amongst the target population (Meppelink et al., 2015a, 2015b; Paakkari & Orkan, 2020).

Evidence Type

Depending on the original health objective to be obtained, messages incorporate different forms of evidence. In the early stages of COVID-19, messages are meant to create awareness of the threat associated with the virus and the pandemic respectively. As such, health messages feature testimonials who are part of the general population. Through personal stories and narratives, identification with the affected population is created (Chen et al., 2017), while also appealing to individuals' self-efficacy to follow suit and adapt corresponding behaviors (Chen et al., 2017).

While the first part of campaign messages intends to achieve compliance with a very strict community mitigation strategy – that is, social distancing – the evidence type employed in follow-up messages is rather factual and informative, calling upon individuals to prioritize personal hygiene. Given the instructing nature of the information, simple words and illustrations are employed to visualize proper behavior. The dual-mode presentation is thereby meant to counteract low health literacy rates, as suggested by literature (Meppelink et al., 2015a).

Narrative Type

Personalizing stories has been found to be a successful technique in health communication (Ahn et al., 2014). As highlighted by previous research, it is particularly first-person narratives that can drive individuals to identify with the health-related risks (e.g., through self-referencing). First-person narrators further serve as a role model to adopt the illustrated behavior (Chen et al., 2017). This narrative strategy is also utilized by the Austrian government, which purposely decides to rely on personal narratives to illustrate the necessity of social distancing. For instance, an approximately 10-year old girl informs individuals to protect their grandparents; or a grandmother discusses how staying away from family members enables her to lead a long and healthy life. By featuring members of diverse population segments, similarity with the testimonial (narrator) is meant to invoke individuals to take up the recommended behaviors. A similar narrative is adopted when encouraging individuals to wear a mask in public.

Campaign Evaluation

The example of the Austrian health campaign illustrates that messages have to be adapted to the changing crisis situation (Reynolds et al., 2002; Reynolds & Seeger, 2005). In consequence, messages should be designed in such a way that the public is driven to adapt their health behaviors accordingly. While not leaving potentially (fatal) low health literacy levels out of sight (Meppelink et al., 2015a), the campaign employs a variety of message strategies: it relies on strong emotional messages featuring narratives of the Austrian population in the initial stages of the crisis to create awareness for the necessity of social distancing. In the second phase of the crisis, when the country's economic life is resumed, the campaign focus shifts and, by providing instructive information, messages are based on more general appeals. Message content is, first and foremost, concerned with calling upon individuals to keep their distance and utilize sanitizing measures.

The U.S.

The Campaign

With nation-wide calls to wear nose-and-mouth protection being absent in the U.S., New Yorker Governor Andrew M. Cuomo decided to collaborate with Ad Council, renowned producer Jane Rosenthal and director Kathryn Bigelow to produce the national education and awareness campaign titled "Mask Up America". He succeeds at enlisting several Hollywood actors to lend their voices to deliver powerful messages on how it takes a joint effort to combat the corona virus (NY State, 2020). In this context, the governor remarks: "We can only beat this virus if we are united as one, not divided by ideology or politics. In that spirit we worked with the best and most creative team to deliver this vital message in multiple ways and in different voices - I wear a mask to protect you and you wear a mask to protect me. It is simple as that. Mask Up America" (13 WHAM, 2020).

Campaign Theme and Execution

The campaign consists of a total of eight 30-second videos which are launched consecutively in July 2020 and broadcasted on national TV; additionally, they are disseminated on social media. A handful of additional videos follow and serve as an indicator that the campaign topics are as diverse as their titles:

- (1) You Have My Respect (narrated by Morgan Freeman)
- (2) Come On, America (narrated by Robert de Niro)
- (3) For the Love Of (narrated by Paul Rudd)
- (4) An Easy Lift (narrated by Jeffrey Wright)
- (5) It's Your Shift (narrated by Ellen Pompeo)
- (6) Mask Up, America (narrated by Billy Crystal)
- (7) Show some respect (narrated by Kaitlyn Dever)

Figure 4. Example of images utilized in #maskupamerica campaign (retrieved from <https://www.adweek.com/agencies/new-york-gov-andrew-cuomo-tells-america-to-mask-up-in-national-psa-campaign/>)



With most Americans being reluctant to wear masks (New York Times, 2020), the campaign can be read as a persuasive response to encourage individuals to take up wearing masks in public (VOA News, 2020).

Message Appeal

The messages themselves are packed emotionally, featuring Americans from diverse cultural backgrounds visually who have already taken up wearing a mask. The photographs or moving images are accompanied by narrations of various actors, prompting Americans to fulfil their civic duty by wearing mask and, thus, looking out for themselves and others:

- “When you wear a mask, you have my respect. Because your mask doesn’t protect you. It protects me” (Morgan Freeman)
- “The answer [to fighting the virus] weighs less than an ounce. It’s not a heavy lift” (Jeffrey Wright)
- “Wear a mask and let’s beat the virus” (Paul Rudd)

By emphasizing that collective action is required to overcome the national health threat and the comparatively small sacrifices wearing a mask entails, the campaign sets out to request the support of the general population in combating the virus. This support is also visualized by featuring two groups of Americans as the nation’s heroes: those who work in the health-care field, and those who fulfil their civic duty by wearing masks.

Message Format

Instead of only relying on visuals or video clips to carry the story, the campaign combines powerful images with strong and meaningful narratives. As part of this dual mode presentation, individuals of diverse cultural backgrounds and working in different professions are portrayed, while a famous narrator (in voiceover) encourages individuals to wear a mask, emphasizing that every individual gesture can play a part in overcoming COVID-19. While the role of narrator is reduced and he/she is not visually portrayed, they are nevertheless central to delivering a powerful message.

Evidence Type

As suggested by previous research, the reliance on narration can literally exert a stronger influence on individuals’ behavioral intentions than non-narratives (Zebregs et al., 2015). The U.S. campaign seems to attribute credibility to this claim, as strong voice-over narratives present the cornerstone of each 30-second clip. While all of them follow a different argumentation, the plot remains the same: America counts on individuals to accept responsibility for the virus. The potpourri of individuals wearing masks – that are expressive of both their heritage and individuality – underlines the inherent claim that it takes a joint effort to deal with the far-reaching effects of the pandemic, calling upon individuals to be New York Tough [and] Wear a Mask.

Narrative Type

Conditioned by the success of first-person narratives in health communication (Nan et al., 2015), and the possibility of narratives to elevate individuals’ perceived severity levels (Frank et al., 2015), the campaign deploys first-person narratives throughout the different promotional videos. In combination with clear appellations – prompting individuals to Be New York Tough – Mask Up America – individual

behavior is meant to be changed in order to assist the country in managing this far-reaching health crisis. The social desirability of wearing a mask is stressed, as is the nation's need for unity.

Campaign Evaluation

While narration is seen as an add on in the Austrian campaign, it presents the focal point of the U.S. American campaign. By enlisting stars to lend their voices to deliver powerful messages in a very empathetic manner, narration is meant to appeal to individuals, persuade them to see the broader picture. Narration itself is visually supported by the inclusion of the American population, who is asked to stand in unity to meet the enemy called COVID-19. Thereby, diversity – referring to all individuals irrespective of ethnicity, religion or sexual orientation – is seen as a strength, that can help the U.S. to cope with this severe health threat; however, success is only seen as feasible if everyone accepts their part in changing their health behaviors.

Australia

The Campaign

In Australia, the national COVID-19 campaign aims to reduce the risk of contracting the virus by helping the public to make informed decisions, further encouraging citizens to take up the health recommendations as promoted by the Australian government (Australian Government, 2020). The campaign consists of a variety of information sources, including posters, videos, and radio clips, all of which are meant to familiarize the general population with recommended and effective protective measures to mitigate the risks associated with COVID-19.

Campaign Theme and Execution

By utilizing the slogan Help Stop The Spread and Stay Healthy, this campaign's factual nature intends to provide the public with useful information on social distancing and hygiene measures in order to ensure its preparedness to deal with the crisis. Messages – regardless of them being disseminated on TV, the radio or in form of posters – are composed in a similar manner: textual information, illustrations/pictograms, and narration are used against a pastel color background to familiarize Australians with proper hygiene measures to guarantee the safety of all citizens (as highlighted by the capitalized word SAFE; Australian Government, 2020).

Message Appeal

Contrary to the Austrian and the U.S. American campaigns, the Australian government solely relies on informative messages in order to provide the affected population with proposed behavioral measures on how to behave amidst this health crisis. Instead of raising awareness for the threat posed by COVID-19, the government purposely chooses to supply citizens with instructive content. For this reason, recommendations of proper behavior are presented in a factual, straight-forward manner. This is in line with scholarly recommendations (Gray et al., 2012). The instructions are text-based and visualized in form of pictograms and sketches to familiarize the audience with what is expected of them. As such, message complexity is reduced and low-health literacy is accounted for (Meppelink et al., 2015a).

Figure 5. Example of posters utilized in the Australian COVID-19 campaign (retrieved from <https://www.health.gov.au/resources/collections/coronavirus-covid-19-campaign-resources>)



Message Format

While the collective responsibility and safety of Australian citizens is emphasized in this health campaign, community mitigation strategies are not only presented in textual form, but also exemplified by illustrations to aid comprehension. This dual mode presentation can be found in both posters and video clips, suggesting that instead of only offering information, visual aids are integrated to foster understanding.

Evidence Type

While COVID-19 campaigns in both Austria and the U.S. favor emotional narratives to deliver their messages, Australian health messages are predominantly based on information and instruction, with little room left to narration and storytelling. Instead, hard, scientific facts are used as reference points for the recommendations put forward by the Australian government, whose priority lies in guaranteeing the populations safety.

Narrative Type

The information contained in the individual videos is to be read as a recommendation, invoking individuals to follow suit. Phrases are kept rather general and message recipients are hardly directly addressed, the exception being appellations like Avoid physical greetings like handshakes or hugs, or Follow social distancing guidelines in shops and businesses (Australian Government – Resources, 2020). In line with the other two campaign examples, first-person narratives are used to underscore that it takes collective responsibility to manage the health crisis.

Campaign Evaluation

This campaign's design has drawn input from traditional health communication, which assumes that recommendations should not only be based on scientific facts (i.e. are evidence-based; Abraham & Kools, 2012; Brown et al., 2006) but also be presented in an informative manner. As such, it is distinct from the other two campaigns whose approach is more emotional. Message are, first and foremost, informative, but complement instructive information with illustrations in order to assist recipients in grasping the message's intended meaning. Hence, a dual mode presentation is chosen to reduce message complexity.

DISCUSSION OF RESULTS

If crisis strikes, it is the government that is required to act and reassure the public that the critical (health) situation can be managed. For this reason, government officials are called upon to act quickly and engage in increased communication (Shuaib et al. 2014; Wabba 2014). The COVID-19 pandemic presented such a crisis. Around the world, national governments are working on making the crisis manageable for the general population. In the process, they rely on health communication campaigns in order to provide the respective citizens with useful and enabling information that assists them in managing the crisis. In the following, the results of three national health campaigns are contrasted and critically reflected; the discussion will be concluded by some recommendations on how to design messages for future health crises.

Table 1. Governmental Strategies employed in national COVID-19 campaigns (own illustration)

		Austria	United States	Australia
Message Appeal	Informative	X		X
	Emotional	X	X	
Message Format	Single-Mode			
	Dual Model	X	X	X
Evidence Type	Statistical	X		X
	Narrative	X	X	
	Hybrid	X		
Narrative Type	First Person	X	X	X
	Third Person			

Message Appeal

In order to steer the audience's attention towards message content, different appeals can be utilized (Kinnear et al., 1995; Leonidou & Leonidou, 2009). While informative appeals are rather descriptive and factual, and useful in providing the public with instruction (Hamilton & Snyder, 2002), health messages have been found to increasingly emotionalize message content (Houts et al., 2006; Koinig & Diehl, 2020). Previous research has demonstrated that similarity with the testimonial featured in the emotional message can be a useful tool to increase message effectiveness (Ahn et al. 2014). Emotions also drive risk

perceptions more than factual information (Slovic et al., 2004; Loewenstein et al., 2001), which might explain why governments have also decided to employ emotional appeals in order to raise awareness for the risks associated with COVID-19. At the same time, negative effects associated with the use of informative appeals, e.g., individuals' likelihood to ignore information, can be mitigated (Rottenstreich & Hsee, 2001; Hsee & Rottenstreich, 2004).

Message Format

In order to increase message comprehensibility in crisis situations, experts recommend information to be presented in simple language and in a straight-forward-manner; at the same time, message complexity needs to be reduced (Lang 2000; Houts et al. 2006). If message content is too complex and does not allow for an emotional presentation, effectiveness can be enhanced by presenting information in dual form, i.e. by combining visual/auditory and textual elements (Meppelink et al. 2015a). The advantages of this dual mode of presentation – which is taken up by governments on all three continents – have been confirmed by previous studies: For instance, narration can increase a message's persuasive impact (Escalas, 2004), while also aiding respondents to identify with the story (Green & Brock, 2000). As such, a dual-mode presentation can help overcome respondents' potential resistance to message content (Dillard & Shen, 2005), while also favoring those with low health literacy rates – a problem, that still challenges health communication in the age of COVID-19 (Nguyen & Catalan-Matamoros, 2020; Paakkari & Okan, 2020).

Evidence Type

When appealing to audiences to consider specific health messages, either rational or affective processes can be induced (Roselli et al., 1995). Rational reactions originate in response to scientific (informative) content, while affective (emotional) content usually relies on stories told by testimonials or exemplars (Taylor & Thompson, 1982). Previous studies have suggested that the utilization of positive emotional appeal messages over negative emotional (fear) messages is proposed in crisis situations (Stolow et al., 2020). In order to increase identification and create familiarity with proper crisis (or health) behavior, communication should center on the affected population and featuring testimonials and their personal stories respectively (Kahan et al., 2012; Kreuter et al. 2007; Ratzan et al., 2020). Two out of three campaigns did follow this suggestion. This form of message presentation is advantageous to the purposes of health communication, given its potential to elicit behavioral change in individuals, and involve them with message content (Rossiter & Bellman, 2005). Messages should call upon individuals to employ self-protective behavior (Heymann, 2020).

Narrative Type

With storytelling (and as such, also narratives) enjoying popularity in marketing and advertising, the advantages of employing narratives to deliver health messages – also in times of crisis – has been discussed by several studies already. Thereby, particularly first-person narratives are utilized (3 out of 3 cases), whereby community members share their personal health (or crisis) experiences. The popularity of first-person narratives might be explained by previous research findings: When comparing statistical with narrative messages, Nan et al. (2015) provided evidence for the effectiveness of messages mixing both narrative and statistical information about HPV, as a hybrid message resulted in higher risk perceptions

about HPV. Zebregs et al. (2015) further revealed that narrative appeals exert a stronger influence on intentions than non-narratives. Also studies that solely focused on narrative messages provide promising results. A meta-analysis by Shen and colleagues (2015) found that narratives transferred via audio and video had a stronger impact on persuasion than narratives in print media. Based on a narrative film providing information on HPV and cervical cancer prevention, Frank et al. (2015) concluded that the more relevant the narrative was to participants the higher their perceived severity of HPV.

IMPLICATIONS

Communication has been found to be paramount to managing crisis situations, with the government playing a central role in not only assuring the public of the manageability of the crisis, but also in enlisting citizens to comply with the proposed crisis mitigation strategies. In order for individuals to follow the government's recommendations – and take up the proposed measures – health messages need to provide them with different kinds of information (instructing information, adjusting information, preventive information; Kim & Fisher Liu, 2012; Coombs, 2007; Saliou, 1997). Campaigns thereby must be strategically conceptualized, pursue a long-term orientation, focus on risk reduction strategies (Coombs, 2007), and emphasize health-related goals and actions (Rioplus, 2008). As such, they are crucial in shaping individual perceptions of the threat posed by COVID-19 (Wright et al., 2008).

The present contribution was able to highlight that while COVID-19 campaigns in Austria, the U.S., and Australia show some similarities, such as the use of emotional appeals, narratives, and dual modes of presentation, there are also some country-specific. Particularly the Australian campaign was distinct from the other two examples, solely relying on information and instruction. Overall, the predominance of emotional appeals and narratives confirms a trend that indicates a reliance on visuals and community ambassadors, whose messages are often accompanied by narration or voiceover, in order to appeal to individuals with low health literacy rates.

FUTURE RESEARCH DIRECTIONS AND CONCLUSION

There are several limitations to the study at hand. First, only a limited amount of campaigns was scrutinized in detail; likewise, the present discussion only focused on a selected amount of campaign material and does not present a complete discussion of all campaign materials. Second, due to the limited scope of the paper, the analysis focused on selected message aspects; however, it would be interesting to get further insights into the effectiveness of campaign messages from the recipients' perspective. It might also be fruitful to go beyond mass media communication effects, as interpersonal communication has been found to be essential to determine the extent to which individuals follow the recommendations presented as part of health campaign messages (Rogers, 1963). Third, the analysis was limited to three campaigns; hence, research should be extended to campaigns from other countries. Responses might also well vary regarding respondents' demographics, including sex, age and educational level.

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KEY TERMS AND DEFINITIONS

Cross-Cultural Comparison: Comparisons, whereby established practices, and behaviors from two or more countries are contrasted and reflected against the cultural particularities of the respective countries.

Health Communication: Health communication describes the practice of communicating and disseminating information on health topics to a widely dispersed mass audience (U.S. Department of Health and Human Services, 2014).

Message Appeal: All (informative or emotional) cues that are utilized in promotional messages to attract both consumers' interest and attention, further steering their feelings towards the advertised service or product (Kinnear et al., 1995).

ENDNOTES

- ¹ One explanation for this different focus might be that the campaign was launched at a later point of the crisis.
- ² Two more recent videos are excluded from the analysis since they do not fit with the overall campaign orientation.
- ³ It is important to note that depending on the original message purpose, message appeals might differ. While informative appeals are best suited for instruction, messages that intend to raise awareness might benefit from emotional appeals.
- ⁴ It is worth mentioning, that the Australian follow-up campaign video also featured testimonials.
- ⁵ This call for individual engagement was put forward by all campaign messages, regardless of the message appeal or evidence type employed.

Chapter 23

Opportunity or Togetherness?

Reception Analysis for Advertisements Published in COVID-19 Process – Turkcell Case

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ABSTRACT

Mass media are important mechanisms of influence that affect individuals' attitudes as well as their purchasing behavior. During COVID-19 pandemic process, many brands and service sectors on television, which is one of the important communication tools that people receive information and follow, have appeared on television screens with their advertising themes emphasizing that they are with the public during the "social isolation" period. In this study whether the advertisements broadcast during the COVID-19 process are found sincere by the audience and whether COVID-19 is considered as a commercial competition by the brands were evaluated with the reception analysis performed on Turkcell GSM operator sample. As a result of the study, although the participants thought that the brand turned the crisis into an opportunity, it was determined that the messages "togetherness," "longing of our loved ones," and "the need to wait patiently during this period" placed in the advertisement text were decoded by the audience by dominant reading.

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INTRODUCTION

From the moment the mass media entered our lives, it has been discussed how they affect our behavior and even our attitudes. These studies, which were initially sociologically based, later gave way to communication researches. While theories that the audience was passive were developed in mainstream media studies in the 1930s and 1940s, in the studies conducted in the following period it is seen that theories regarding the recipients' beginning to interpret the messages and discuss their meanings have been developed (Yaylagül, 2013: 46). It is seen that audience-oriented research in mass media began to be conducted after 1970s. What stands out in these researches is the ability to make sense of a message with expansions such as linguistics, semiotics, coding, decoding, reading. In these studies conducted after the 1970s, it is tried to explain how the audience reads and interprets a message. Here, it is revealed that the audience is not passive here and interprets the messages conveyed according to them (Tekinalp and Uzun, 2013: 120). Gürsoy Atar said that "it can be known what the audience watches, but there is no definite information on the television viewing practice of the audience and their interpretation of the messages they receive. The important point here is the television watching process of the audience" (Gürsoy Atar, 2017: 357).

Among Cultural Studies, Stuart Hall's "Encoding / Decoding" study is important. According to Hall, the audience is both the receiver and the source of the message, because production schemes –coding stage– corresponds to the images and professional codes of the television institution (Mattelart and Mattelart, 1998: 88). Morley and Brunson (2005: 129) explain the foundations of this approach as follows:

- 1) "The production of a meaningful message in the TV discourse is always problematic 'work'. The same event can be encoded in more than one way. The study here is, then, of how and why certain production practices and structures tend to produce certain messages, which embody their meanings in certain recurring forms.
- 2) The message in social communication is always complex in structure and form. It always contains more than one potential 'reading'. Messages propose and prefer certain readings over others, but they can never become wholly closed around one reading. They remain polysemic.
- 3) The activity of 'getting meaning' from the message is also a problematic practice, however transparent and 'natural' it."

Hall's analysis defines three types of explanation for the audience: dominant, opponent, and argumentative. The first is in line with hegemonic perspectives that seem to be the understanding of a natural, legitimate, inevitable social order and a professional universe. The second interprets the message according to a worldview that opposes another framework of relativity (eg, by turning the national interest into the class interest). The argumentative code, on the other hand, is a mixture of opposing logics, a mixture of opposition and harmony elements that partially adopt dominant meanings and values, but derive from a situation, for example, the group to which they belong (Mattelart and Mattelart, 1998: 88). "The context in which the audience turn on their television or take over a magazine — the social use of the media — limits their interpretation" (van Zoonen, 2014: 388).

"The interest in the 'active audience' raised by the Cultural Studies in the second half of the 1980s consolidated a very productive and enormously influential line of research, aimed at analyzing the reception and interpretative processes of television texts" (Lacalle, 2015: 237). "Cultural studies blend into reception analysis in several respects, as exemplified by recent works such as Ang (1985), Morley

(1986), or Radway (1984)” (Jensen and Rosengren, 2005: 57). Reception analysis within the cultural tradition is a research methodology developed to understand the symbolic consequences of the circulation of meaning through mass, broadcast media, especially television (Mathieu, 2015: 16). “According to this approach, which is a part of the British Cultural Studies tradition, it is the process of making sense of the cultural products offered by the media for the audience who want to use the media” (Yaylagül, 2013: 134). “Reception analysis to understand the process of making meaning (meaning making process) conducted by the audience when consuming an impressions, receptin analysis is used to view and understand the response, acceptance, attitude, and meaning that are produced or formed by a wider audience” (Pertwi et al, 2016). While producing experimental data about the target audience through in-depth interviews and observations in this methodology, in related studies, qualitative methods are normally used in comparative analysis of content data as well as target audience data (Jensen and Rosengren, 2005: 58). David Morley’s *Nationwide* study can be cited as an example of reception analysis studies. This study includes the findings of audience research where the same program is shown to a number of different audience groups (Morley & Brunsdon, 2005). Morley’s second reception work is *Family Television*. *Family Television* is a pilot research project conducted in 1985, funded by the Independent Broadcasting Authority, investigating the viewing of a small number of televisions by families from different social backgrounds (Morley, 1988). The method in these two studies was used in following field studies.

In this study, Turkcell’s 57-second advertisement with the #EvdeHayatVar tag was selected to determine how the audience received media texts. The reason for choosing this advertisement is that digitalization came to the fore with the social isolation experienced during the Covid-19 period, and the most important agenda after the pandemic was based on “digitalization”. People who did not leave their homes unless necessary, continued their communication with their relatives by making video calls over the internet, and GSM operators became even more important in this process. Because this study was also carried out during the social isolation period, the advertisement was watched with a researcher through video calls on the internet and 16 questions were asked to each participant with in-depth interview technique. The qualitative method was used in the study, and the number of interviews was limited based on the common view that conducting and resolving qualitative interviews would take a long time (Şeker, 2009: 111). The interviewees come from all ages, professions and income groups. The study was limited to those watching television during the quarantine process. In connection with the Covid-19 theme of the commercial, it was emphasized that people who are away from their loved ones, sad and lonely, can get away from these feelings and become “happy” and “pleasant” in their homes thanks to “Turkcell”. The advertisement featured images of pets and children as well as people, adults over 65 years of old dancing, children playing games with their family members. When the visual images evident in the advertisement are examined, the message that Turkcell establishes a connection between people is revealed during the period when people should stay at home, regardless of age, profession, socio-economic level. In this process, where separation is the guarantee of the future and the importance of digital communication is emphasized, Turkcell strengthened the message that this separation is temporary with Tarkan’s song named *İnci Tanem* in the background. Because commercials in the upper voice: “*Be patient Turkey, we will remain separate from our loved ones and the streets and avenues of our beautiful country for a while. But don’t worry, we will continue to work with all our energy so that this temporary separation will never break the bond of our nation.*” has put the message that becomes apparent in the visuals into words. While many sectors were experiencing difficulties in the process, the crisis turned into a kind of opportunity for the telecommunication industry and since Turkcell is also a company in this sector, it is important to determine how the codes in the advertisement are received by the audience.

FINDINGS AND INTERPRETATION

In this study, 9 people were interviewed to determine how the advertisements broadcasted during the Covid-19 pandemic had an effect on the perception of the audience. Turkcell's Covid-19 themed advertisement was watched by each participant. Since the research was carried out during the Covid-19 precautions, video calls were made on the internet, followed in sync with one researcher with the advertisement, and 16 questions were asked to the participants with in-depth interview technique. The study was limited to people watching television during the quarantine process. The first 5 questions were created to identify demographic information. Apart from that, the following 11 questions were asked to the participants:

1. What is your daily television watching time?
2. Do you watch TV advertisements?
3. Was there an increase in your TV watching time during the quarantine period?
4. Do you watch TV advertisements during the quarantine process?
5. Do you trust the advertisements posted during the quarantine period?
6. Which of the advertisements you watched in the Covid-19 pandemic do you remember?
7. Do you remember Turkcell's Covid-19 themed advertisement?
8. How do you feel when you watch this advertisement?
9. Do you think these advertisements are always with you as they say? Or do they turn the crisis into an opportunity?
10. Do you think the emotional support-themed advertisements develop a sense of cooperation in the audience?
11. Among the advertisements you watched during Covid-19, are there any advertisements that you like and find their message reliable? If yes, which one?

Demographic Features

As can be seen in Table 1, 4 of the participants are male and 5 of them are female, and all participants are married. 3 of the male participants are in the age group of 30 and one male participant is in the age group over 60. Similarly, 3 of the female participants are in the age group of 30, one female participant is in the age group of 40 and the other female participant is in the age group above 65. In addition, 2 of the male participants are primary school graduates and the other 2 participants are associate degree graduates. Of the participants, 2 male participants work in the public sector, 2 female participants in the private sector, 1 male participant is retired and 4 participants do not work.

Television Watching Time

While “stay at home” call was made from both traditional and social media channels, people went beyond their usual lifestyle. Mandatory and voluntary quarantines applied to reduce the impact and rate of spread of the epidemic within the scope of combating Covid-19 significantly increased the time spent at home all over the world. During this time, the rate of watching television increased significantly while individuals looked for something to spend time in indoor areas. In various studies and explanations on the subject, attention has been drawn to the increase in television watching rates. *

Table 1. Demographic Characteristics of the Participants

Participant	Gender	Age	Marital Status	Education Level	Profession
1	Male	36	Married	Associate degree	Public sector
2	Male	38	Married	Primary school	Not working
4	Male	62	Married	Primary school	Retired
5	Male	36	Married	Associate degree	Public sector
3	Female	33	Married	High school	Not working
6	Female	40	Married	Primary school	Not working
7	Female	67	Married	Primary school	Not working
8	Female	34	Married	Primary school	Private sector
9	Female	36	Married	Undergraduate	Private sector

While it was determined that female participants generally watched less television than males, 7 participants interviewed stated that there was an increase in watching TV durations, supporting the statements made during the pandemic. Table 2 shows in detail whether these durations and whether there is an increase in television watching time.

Table 2. Normal Daily Television Watching Durations and Television Watching Durations During Covid-19 Pandemic

Participant	Normal Daily Television Watching Durations	Increase in Television Watching Durations During Covid-19 Pandemic (Yes/No)
1	3-4 hours	Yes
2	4 hours	Yes
3	4 hours	Yes
4	3 hours	Yes
5	4 hours	No
6	1 hours	Yes
7	2 hours	Yes
8	4 hours	Yes
9	2-3 hours	No

Receiving Television Advertisements

Considering the increase in television watching time of individuals who started to spend almost all of their time at home since the beginning of Covid-19 pandemic, brands have also adopted a new advertising approach suitable for the period in which they live. Although the advertisements, which consist of content specific to the subject, tried to give the audience morale and motivation, they also took into consideration the concern of reminding their brands. It is of course important that the advertisements, which have an impact on the emotions with their narratives, pay attention to the current situation and

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give togetherness messages such as “we are with you”, “we are together”, “we are one of you” in such a period when the whole world is worried; however, it is important to determine how these messages of brands with profit margins are received by the audience. The study was limited to people watching television during the quarantine process. However, as seen in Table 3, all of the participants stated that they watched advertisements both during and before Covid-19 pandemic. Only P5 replied, “If I come across, I watch it.” This situation is reflected in the table as “sometimes”.

Table 3. Television Advertisement Watching Status of Participants

Participants	Watching Television Advertisement	Watching Television Advertisement During Quarantine
1	Yes	Yes
2	Yes	Yes
3	Yes	Yes
4	Yes	Yes
5	Yes	Sometimes
6	Yes	Yes
7	Yes	Yes
8	Yes	Yes
9	Yes	Yes

Stating that they watched the advertisements on TV, the participants were asked “Do you trust the advertisements you watched during Covid-19?”. P1 and P2 stated that they did not trust the advertisements the brands broadcasted on TV during the pandemic. P1 elaborated his insecurity saying “The brands are trying to take advantage of people’s emotions.” These two answers based on distrust point to dissent reading. Dissent reading identifies and rejects dominant codes (Hall, 2005). P3, P4, P5 and P8 made a deliberative reading by saying that they did not fully trust the advertisements they watched during this period. Because, while some codes are accepted in this type of reading, some codes are rejected (Hall, 2005). P6, P7 and P9 also made a dominant reading by explaining the message of trust given in the advertisement.

RECEPTION ANALYSIS OF TURKCELL #EVDEHAYATVAR ADVERTISEMENT

After asking questions to 9 participants who were interviewed individually with the in-depth interview technique, about their demographic characteristics and their television and advertisement watching levels, the participants were asked questions from the questionnaire about advertising. First, the participants were asked whether they had watched that advertisement before. Except for P3 and P6, all participants stated that they were familiar with advertising. By asking a question “What are the feelings the commercial film arouses in you?” to the participants, it was aimed to determine how the messages given in the advertisement were explained. P2, P3, P8 and P9 directly received the message given in the commercial

by making dominant reading. P1, on the other hand, made a dissenting reading and stated that they were trying to make money. P4, P5, P6 and P7 stated that the advertisement triggered the feeling of “longing”:

P1: “The feeling it evokes in me is that it is trying to earn more money, making fun of emotions.”

P2: “Feelings such as seeing the image, hearing the voice, even though we do not come side by side with relatives and family far away.”

P3: “We have to be patient.”

P4: “I miss my freedom as before the quarantine.”

P5: “How will we meet with our loved ones when we are far away from them in this period, the longing of my loved ones.”

K6: “The longing of loved ones.”

P7: “Longing.”

P8: “We cannot meet with each other due to social distance. We communicate on the phone, it’s good for the health of ourselves and our loved ones.”

P9: “We are lucky there are possibilities, we will be patient together.”

In the continuation of the meeting, the participants were asked whether the brand was sincere in the message “We are together” in the commercial film or whether it turned the current crisis into an opportunity. P6, P7 and P9 have done dominant reading and stated that the brand is sincere. Other participants, on the other hand, received the message given in the advertisement film in opposition and said that the brand “turned Covid-19 into an opportunity”. When looking at the audience comments under the YouTube page where the advertisement was published, it is seen that the advertisement published with the tag #EvdeHayatVar encodes the situation with emotional elements. [†] Based on this, the participants were asked whether Turkcell and similar advertisements conveyed the emotion in the content during this period. All participants predominantly analyzed the emotional messages in the advertisements on Covid-19. P1 emphasized nationalism by saying “I think it developed because such feelings of the Turkish nation are very high. P9, on the other hand, received these kinds of advertisements based on the “relaxation” factor and she summed up her feelings by saying “TV is a good communication tool, people cannot relax just by talking by each other.” Finally, by asking a question “Do you like the advertisements you watched during Covid-19 and find the message reliable?” was asked to the participants, it was tried to analyze whether the sense of insecurity of some participants in the advertisement was specific to the brand or against the general. P3 and P5 gave negative answers to the question; the brands that other participants found their advertisements to be reliable are as follows:

P1: Migros virtual market, “getir” advertisement

P2: Turkcell’s advertisement with the slogan “Call the old people, don’t let them be alone”

P4: E-bebek advertisement

P6: Akbank

P7: Akbank

P8: Vodafone holiday advertisement

P9: Halkbank and Kuveyt Türk

Considering that P1 and P2 stated in the first question that they do not trust the messages of the brands given in their advertisements during the pandemic, in fact, it is possible to say that they do not

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have certain opinions about insecurity. Again, in the same question, P4 and P8 had a deliberative attitude. In this context, it is observed that people's feelings of trust vary according to the brand and sector. Although P3 and P5 answered this question as "it varies from advertisement to advertisement", in the last question, they stated that they do not trust any brand's advertisement published during the pandemic.

FUTURE RESEARCH AND DIRECTIONS

In this study, the effect of a social message advertisement of a brand from the telecommunications industry, which was published during the Covid-19 pandemic, on the audience was examined using the reception analysis method. In future studies, advertisements with different brands from the same industry or with social message content can be analyzed comparatively.

CONCLUSION

During the global Covid-19 pandemic in the world, advertisements of sectors such as housing and automotive were not seen on television due to the fact that large consumption expenditures could not be made due to staying home. Instead of this, bank advertisements for the cash needs of people during the pandemic process, personal care products used by barbers and hairdressers which are closed and frequently used in daily life, and most importantly, the advertisements of hygiene products that people did not miss from their homes during the pandemic were among the predominant advertisements of televisions.

An important innovation brought by the Covid-19 era to the advertising industry is that the themes in the advertisements have changed. Advertisements in which people stand out instead of products took their places on television during this period.

The brands belonging to the aforementioned products made brand reminders with their advertisements with "human-themed" and "social support" messages and turned the crisis of the pandemic period into an opportunity.

One of the most important sectors that turned the crisis into an opportunity during the pandemic period is the telecommunication sector.

In this period, people had to use communication tools instead of face-to-face communication with family members, friends and other people while they were in quarantine at home.

At this point, Turkcell's advertisement with the theme of Covid-19, which is among the operators used extensively during the quarantine period, is important.

In order to interpret how the viewers of television commercials perceive Turkcell's social message advertisement, reception analysis method was used.

As a result of the analysis, although the interviewees stated that the brand turned the crisis into an opportunity, they internalized the messages that the advertisement wanted to give, the longing of our loved ones and the need to wait patiently during this period.

There was no correlation between the education level of the participants and their sense of trust in advertising.

As P9 had the highest level of education among the interviewees and perceived that she trusted in advertisements and the message that the Turkcell brand wanted to convey in the advertisement was perceived as the brand wanted the audience to perceive.

As a result, the emotion that Turkcell wanted to convey in its advertisement that put people in the center passed to the audience and in this context, it is possible to say that the advertisement has achieved the success it has aimed.

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KEY TERMS AND DEFINITIONS

Coding: Coding includes the applications and routines that meet the production conditions of a particular TV station (Zaid, 2014, p. 6).

Decoding: Decoding includes both the comprehension of a media text and the evaluation and interpretation of its meaning based on the relevant codes (Zaid, 2014, p. 6).

Reception Analysis: It is a research methodology developed to understand the symbolic consequences of the message's circulation through mass, broadcast media, and especially television (Mathieu, 2015, p. 16).

ENDNOTE

- ¹ This study was presented at the symposium titled "5th International EMI Entrepreneurship & Communication Social Sciences Congress" held on 29-30 June 2020 with the title of "Covid-19 Salgınında Televizyonda Yayınlanan Reklamların İzleyici Algısına Etkisi".

Chapter 24

Investigation of Social Media Sharing Attitudes and Practices of Individuals With Different Mental Structures in COVID-19 Outbreak Process

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ABSTRACT

This chapter explores the effects of the stress caused by the epidemic on the individuals of the society with the effects of decisions taken during the pandemic and social media on people with different mental structures. The perception of stress/discomfort and insufficient self-efficacy in individuals were measured using the electronic questionnaire technique, and the perceived stress scale (PSS) was used to ensure a clearer perception of items. An online survey was conducted between 25/06-15/07/2020 by reaching 167 people. Awareness of the COVID-19 outbreak, their thoughts on the process, and the effects of the news they encountered in the media during this process were measured using the PSS scale. According to the research findings, the knowledge and awareness level of the participants about the epidemic process and the virus was found to be very high; as the age level increased, the stress/discomfort level increased, and the insufficient self-efficacy level remained at a lower level; the insufficient self-efficacy level is higher in younger ages than in older ages.

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INTRODUCTION

Studies of the ongoing process intensively in the scientific field have gained momentum, many researches from every discipline have been and continue to be added to the literature. Epidemics have always been unknown, alarming and frightening to man, although human history has rarely experienced epidemic fear until today. A number of scientists, who can be described as a handful compared to the world population, controlled the epidemics with their individual effort and scientific efforts and finally ended them. Today, in the light of technological developments, the fight against epidemics also changes shape in social understanding and perspective. The power of the internet has given birth to new media and digital and social media have become a part of life. This technology, which enables mutual flow of information, has occasionally led to good and sometimes bad results in such extraordinary times. While it is not denied that it contributed greatly to social isolation during the epidemic period, it should not be forgotten that it allows uncontrolled and unconscious flow of information. Every development and innovation will have to face the same problem. Conscious or unconscious thinking and using technological possibilities for good purposes or for healthy results will have to contain this risk as an option left to people.

2. CONCEPTUAL FRAMEWORK

2.1. Digital Media

According to the Turkish Language Association (TDK), the media; communication medium is defined as communication tools (TDK, 2020) However, the concept of media is a very broad concept. It is necessary to think that everything in the world is a media. For example; sound consists of waves. Waves travel at different speeds and shapes in various media. The waves that come to our ears are transmitted to our brain as sound. Many substances on earth make sounds. Sound transmission is also included in the definition of media. According to TDK, digital is specified as digital display of data on a screen (TDK, 2020).

Rapid developments in communication technologies, new communication technologies, new media, social media, internet, social networks have added many new concepts to the literature. New media has emerged with the historical combination of computer and media technologies advancing from different branches. Lev Manovich traces the developments that prepared the emergence of new media back to the 1830s. This process started with the invention of Charles Babbage's "analytical machine" and Louis Daguerre's "dagerotype" and continued until the development of a modern digital computer in the middle of the 20th century (Baslar, 2013, s. 823). According to Giddens, advances in satellite technologies and developments in digital language, which is a computer language, are among the most important developments affecting the experience of the information age (Giddens, 2005, s. 462).

It will be possible to describe Digital Media as defining the mediums and environments that can deliver huge amounts of messages in time and space to the recipient masses located in very different places (Ispir, 2013, s. 17).

2.2. Social Media

According to Weinberg, social media is an application area that enables the sharing of information, different views / thoughts and experiences by public websites and quickly embeds the internet world in

our lives (Weinberg, 2009, s. 1). "Social Media is a commonly used term for online tools and websites that create mutual interaction by providing users with the opportunity to share information, thoughts, interests and knowledge" (Sayimer, 2008, s. 123) Also, social media; It is said that "it is the whole of the dialogues and shares people make with each other on the internet". Social media; technology blogs, social networks, business networks, forums, video hosting, photo sharing, product and service evaluation.

2.3. Effects of Using Digital Media

The issue that new media and environments, which are increasingly involved in daily life, have many positive or negative effects on all segments of society, especially children and youth, are on the agenda of political will, institutions and organizations that regulate new media environments and scientists from different disciplines. These effects arising from usage practices existing in the digital media environment can be positive and negative.

According to Dan Laughey, it is believed that the media has an impact on people's feelings and thoughts, although they are afraid to admit that they are affected by what they watch, hear or read (Laughey, 2010, s. 39). In the early stages of academic communication studies, the weight of impact research has drawn attention, so a lot of time and money have been spent on these researches. In these studies, the effect and the assumed change it creates are explained as follows: "Impact is defined as the observable and measurable change created by the elements in the communication process in the audience. Any change in each of these items will also make changes in effect" (Tekinalp & Uzun, 2004, s. 68; Cınar, Sengul, Capar, Cakmak, & Bilge, 2018).

According to Nazife Güngör, the impact studies conducted in the first period have been pleasing for the political and other relevant circles due to their results. Because, researches show that the effect of mass media is "strong". However, "in response to methodological and theoretical developments, studies in the following years show that the effects of mass media should not be exaggerated that much. It is concluded that the aforementioned vehicles do not have the power of a magic bullet, and that they do not immediately affect the vessels like syringes" (Gungor, 2011, s. 102-103).

Considering the history of communication studies, it is possible to say that the discussion of impact and harm through the media is new / repeated with every new technological development (Binark, 2013, s. 53). While the nature of the debate (a conservative and protective approach) and the main arguments defended (violence, moral degeneration, degeneration of the generations, protection of the family) are fixed, the tools and uses at the center of the changing debate are: "Television, later cinema, has It is at the top of the media hierarchy that is alleged to contain social and individual violence. Today, video games and the internet are also central to concerns over health, illiteracy and youth violence." (Maigret, 2011, s. 71).

One of the most discussed issues in the context of the problem of impact is the relationship between media and violence. The relationship between media and violence is also a problematic one. According to Maigret, the relationship between real and media violence is a very good example of the anxiety raised by the media. Maigret states that strong research demands on these issues come from family associations, state, justice and media control institutions, but no scientific result has been reached (Maigret, 2011, s. 74). In addition, it is not possible to concretize, quantify and reduce the relationship of media violence to real violence to a one-sided variable (Maigret, 2011, s. 75). According to Maigret, people cannot be stimulated through the media, but they can be stimulated, at which point components such as family, social relations and values also come into play (Maigret, 2011, s. 75). In such a case, it is not possible to

decompose the pure media effect and this will be even more difficult in the digital media environment. Because the influencing factors diversify and the communication process gets deeper.

Turkey, especially children and young people can say that the Internet and other new media in a kind of protection from various risks, which are produced in the moral panic (Binark, 2013, s. 54). In fact, like a moral panic it has spread especially after the start of the television special produced by television broadcasting in Turkey and need the written press as well as public actors (Binark, 2013, s. 54). Today, the medium of this moral panic has changed as new media environments. With the definition of Stanley Cohen, "moral panic" is "a situation, people and groups defined as a threat to social values and interests, and they are presented in a certain way and stereotyped by the mass media" (Cohen, 1980, s. 9).

As a result, Maigret's conclusion from Rowland, 1983, Barker and Petley, 1997 is important: "In short, it is necessary to reformulate the problem of effects not by questioning whether they exist, but by questioning why they are the subject of such a common belief. It can then be understood that the media is often cast as a scapegoat" (Maigret, 2011, s. 76-77).

2.4. Pandemic

Pandemic; It is the general name given to epidemic diseases that spread and show their effects in a wide area in more than one country or continent in the world. A pandemic definition is made for diseases that threaten many people simultaneously in the world and can easily be transmitted. Pandemic diseases are called rapidly spreading diseases that occur in many countries or regions around the world. The coronavirus, which has become a global epidemic, is infecting more and more people every day and unfortunately, its lethal effect continues. (WHO, 2020).

2.5. Covid 19

The 2019-nCoV virus, which caused the World Health Organization (WHO) to declare an international public health emergency with the rapid increase in the spread in countries, has been placed on the agenda of the world as of December 2019. The epidemic, which was later announced as Covid-19 with the official decision of WHO, was accepted as the Pandemic and this process is still continuing today. "Co" and "Vi" come from Corono Virus, "d" comes from the word "disease", which means disease in English, and 19 comes from the year 2019, when cases started to appear (Ak, 2020; Ak, 2020).

"WHO" defines corona viruses as a large family of viruses that cause disease in animals and humans. The corona virus is reported to cause respiratory infections in humans, ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) or pneumonia. (Sade, 2020).

Corona viruses take their name from the protein capsules that surround themselves and form a crown. Because of this feature, viruses are named "corona", which means crown in Latin. The new type of corona virus, which emerged in 2019 and caused Covid-19 disease, is the seventh type of corona viruses that act on humans and its scientific name is SARS-CoV-2. (Sade, 2020).

Covid, which started in December 2019 and was declared epidemic on March 12, surpassed the number of infected patients at the time of 19 studies (worldometers, 2020). As this continues to spread, experts are reporting new symptoms of Covid-19, reporting that not everything is clear yet about the disease.

In the SARS epidemic that emerged in 2003 and has similarities with Covid-19, 1 out of every 10 people infected with the disease died, in other words, the death rate reached 10 percent. The death rate among those caught with Covid-19 is considered much lower than SARS.

About 5 to 6 percent of people infected with the virus died, according to WHO. The mortality rate varies greatly from country to country. However, it is stated that Covid-19 spreads 6-7 times faster than SARS. In addition, corona virus is much more likely to develop serious illness in the elderly and people with other underlying health problems such as high blood pressure, heart problems and diabetes. (WHO, 2020).

As can be seen from “Table 1”, when we look at the development of the Covid-19 outbreak from the beginning, it is possible to see a rapid spread.

Table 1. The evolution of the COVID-19 outbreak from the beginning

CORONAVIRUS CASES
118,000
DEATHS
4291
RECOVERED
0

Latest Status of Coronavirus Cases on March 11, 2020 (worldometers, 2020)

CORONAVIRUS CASES
2,503,470
DEATHS
171,810
RECOVERED
659,583

Latest Status of Coronavirus Cases on 21 April 2020 (worldometers, 2020)

CORONAVIRUS CASES
6,484,005
DEATHS
383,105
RECOVERED
3,089,706

Latest Status of Coronavirus Cases on 01 June 2020 (worldometers, 2020)

2.6. Social Isolation

Social isolation, which is a concept that has been recalled with the Covid 19 pandemic, means self-isolation and the individual's partial or total distancing from the society. It can be summarized as not going to school, work, not being in public places, not organizing events such as festivals and concerts, closing public transportation vehicles, banks and businesses.

According to Samuel and his friends, social isolation can be explained by the feeling that the living person feels alone at the bottom of a well and that no one knows his pain, that no one cares, his voice will not be heard if he shouts and they are invisible in the world. (Samuel, Alkire, Hammock, Mills, & Zavaleta, 2014, s. 3). Biordi and Nicholson (2013) state that social isolation includes feelings such as

powerlessness, alienation, meaninglessness and self-alienation and is associated with loneliness. (Brown, Mackereth, & Learmonth, 2014, s. 72).

The concept of social isolation is mostly used in health sciences and educational sciences in the literature. The use of the concept in social sciences is very limited.

As an example of these studies; Rovai et al. Explain the complex structure between social support, weakness, and normlessness (Rovai, Baker, & Ponton, 2013), Reeder social isolation and illegal behavior (Reeder, 1969, s. 451-461); Laursen et al. Examined the relationship between social isolation and youth childhood problems (Rubin, Bukowski, & Laursen, 2007, s. 1395-1404). Bachrach discussed the relationship between childlessness and social isolation in the elderly (Bachrach, 1980, s. 627-637), Hawton et al. Investigated the effects of social isolation on health and its relationship with the healthy life of the elderly (Hawton, ve diğerleri, 2011), Cornwell and Waite He tried to solve the relationships between social disconnection, perceived isolation and health (Cornwell & Waite, 2009, s. 31-48).

While Karelina et al. Examined the relationship between social isolation and stroke disease (Karelina, ve diğerleri, 2009, s. 5895-5900); Cacioppo et al. (2010) investigated the relationship between perceived social isolation, loneliness, and depressive symptoms (Cacioppo, Hawkley, & Thisted, 2010). Geschwender is the subject of inconsistency, social isolation and personal unrest (Geschwender, 1968, s. 477-483); Elliot, on the other hand, examined the effects of social isolation, networks, and the environment on employees with low levels of education (Elliott, 1999, s. 199-216).

In the process where the global effects of the Covid 19 virus and its spread continue instantaneously, there are also measures that should be taken personally in addition to the measures taken by the governments in the countries. The most important of these are avoiding physical contact as much as possible, not staying in crowded places, and not leaving the house except when it is not necessary. Such social precautions are important in terms of preventing the spread of the virus, ensuring healthy treatments during the pandemic process and preventing the situation from worsening for people.

Although social and individual measures will contribute to the process, it is thought that they will have negative consequences for individuals physically and mentally. The negative consequences predicted by the experts that the feeling of loneliness and desolation that social isolation will bring will adversely affect mental health. Considering that the Covid 19 virus is directly related to the immune system, it is stated that the elderly population will be most affected by social isolation.

2.7. Stress

It is possible to define the stress, which occurs intensely during the pandemic process, as the mental tension that is constantly felt in the individual or the society. In general terms, the term stress, in its definition in psychology, means “distress” or “difficulty”. (Graham, 1999).

Schermeron (1989) defined stress as a state of tension experienced by the individual when faced with extraordinary demands, limitations or opportunities. In fact, stress is the “fight or flight” response mediated by the stress hormones in the body. (Selye, Stress Without Disstress, 1974). Stress in Stedman’s Medical Dictionary was defined as:

- The body’s reaction to harmful and various abnormal situations that disrupt the normal psychological balance of the body.
- The resistance of the body as a result of any external effect.
- It is the physical or psychological stimulation that is effective in the emergence of tension and imbalance in the individual (Valerie & Cary, 1990).

Blood sugar must be kept in a certain balance in the body. If the blood sugar is below or above the 80-110 limits, the body will try to maintain this balance by secreting insulin. This applies to the brain as well. When a factor disrupts the neuropsychological structure, the functioning of the system is balanced with various hormones. These secreted hormones are called stress hormones. The adrenal gland (Adrenal Cortex and Adrenal Medulla) secretes a series of hormones called Corticoids. Corticoid is known as the most important stress hormone. Aldosterone and Corticosterone are Mineral corticoids. Catecholamine triggers the secretion of adrenaline and noradrenaline. It is activated in urgent energy need. Adrenaline rises in distress, fear and depression, while Noradrenaline rises in anger, rage and aggression. (Gucluacan, 2006)

According Raymond, The higher the stress, the more adrenaline is produced. The excessive secretion of adrenaline acts as a brake on the secretion of stress hormones. It has the function of eliminating the risk of sudden death caused by excessive secretion of stress hormones. (Raymond, 2000)

Selye stated that stress occurs when individuals worry that they will not be able to cope with some situations. He states that stress is the body's reaction to a change that requires physical, mental and emotional adaptation (Selye, A syndrome produced by diverse noxious agents, 1936).

Generally, the symptoms of stress are as follows. (APA, 2000);

- Feeling guilty
- Sadness,
- Irritability,
- Change in sleep pattern,
- Change in appetite and weight,
- Lack of concentration when making decisions,
- Negative thoughts
- Attention deficit,
- Restlessness,
- Having conflicts with other employees,
- Poor Communication

The causes of stress and stress, which even affect the quality of life of employees, have become one of the highly researched topics today (Dyck, 2001). As stated, (Hon, Chan, & Lu, 2013), stress has been one of the most studied research topics due to its negative impact on the psychological health of employees and, consequently, on the service quality and organizational effectiveness of enterprises (Hon, Chan, & Lu, 2013). When we look at the studies, stress has significant damages both in individual and social dimensions. Considering the results of a study, it can be said that depression, stress and anxiety-related mood disorders are very important in terms of both health expenditures of countries and job inefficiency in enterprises.

2.8. Consciousness Concept

Consciousness, according to the Oxford dictionary, refers to a person's awareness or perception of something. According to the Cambridge dictionary, the state of understanding and realizing any situation is called consciousness.

The concept of consciousness is one of the most frequently used concepts in daily life. Although it is one of the basic concepts of psychology (and psychiatry), it is also an important concept for epistemology, a sub-branch of philosophy. In Latin, -con- means “together”, while -scio- means “to know” and as a result, the word “conscience” is formed which means “conscience”. At the same time, ‘conscious’ is used for consciousness and bears traces of the word conscience along with consciousness. (Dinc, 2020) Thomas Hobbes, one of the 17th century British classical politics philosophers, makes a definition of consciousness in his famous book *Leviathan*. According to Hobbes, if two or more people convey one and the same phenomenon to another in the same way, it is said that there is a state of consciousness. (Hobbes, 2016)

Coordination between body and mind is of great importance for humans in the 21st century. Man is neither composed solely of his body nor only his mental faculties, and the compatibility of these two human states with each other is necessary for a normal life. A coordinated intersection of knowledge and morality is a condition for a person to raise himself to a state of consciousness, to become a conscious subject, first by perceiving himself and then by understanding the social structure in which he lives.

3. METHOD

Survey technique prepared in electronic environment among field research methods was used. Berelson defined it as “a research technique that makes objective, systematic and quantitative definitions of the written / explicit content of communication” (Tavsancıl & Aslan, 2001, s. 17).

An online questionnaire was applied via Google form to examine the Social Media Sharing Practices of Individuals with Different Mental Structures in the Covid 19 Outbreak Process. 42 questions were asked in seven sections in the questionnaire, which was participated by one hundred and seventy-seven people, the first five questions were the demographic structure, six and seventh questions the level of internet use, the purpose of internet use from the eighth to the fifteenth question, the awareness level of the Covid 19 outbreak from the sixteenth to the nineteenth question. From the twentieth to the twenty-eighth questions, the health news perception, and from the twenty-ninth to the forty-second question were asked questions to determine the perception of stress and self-efficacy. Two different scales were used in the questionnaire. The first scale is Fadime Çınar et al. It is the Health News Perception Scale created by. From the questions of this scale, questions about the research were selected and partially used, and some questions were adapted to the research topic. The second scale is Prof. Dr. Mehmet Eskin et al. Perceived Stress Scale created by. The questions of this scale were arranged and used in accordance with the Covid 19 Outbreak.

4. DATA COLLECTION TOOLS

A questionnaire consisting of 7 parts in total was used to collect the data of this study. In the first part of the questionnaire, participants were informed that participation was prepared on a voluntary and confidential basis and that no data regarding their personal information and identities were collected. The sections included in the questionnaire are listed below.

In the literature study, it is seen that the “Perceived Stress Scale” is a valid and reliable Turkish stress measurement tool that can be used in scientific research and clinical applications. In the 42-item online

questionnaire, which was conducted with 167 people among participants of different demographic backgrounds, 5 sections were created except for the demographic items. It was thought that the effect of the perceived stress scale on individuals could be measured more homogeneously by asking the participants' changes in their internet use, their intended use, awareness of the Covid19 epidemic and their thoughts on the process, and the effects on the news they encountered in the media during this process. A total of 14 items measuring the perception of stress / discomfort and Insufficient Self-efficacy were evaluated in 2 forms with 14 and 10 items. The remaining 28 items were designed to support the PSS items and reach a refined result. In the fifth part, the health news perception scale was used, and it was included in the questionnaire for support in order to perceive and answer PSS items more clearly.

4.1. Demographic Data

In this part, the participants were asked questions to determine the age, gender, education level, income level and the occupation group they work in.

4.2. Internet Usage Level (KD)

In this section, the participants were asked to indicate how much their internet usage differed on the basis of day and hour in the period between pre-epidemic and epidemic period.

4.3. Internet Intended Use (KA)

8 questions were asked to the participants to determine the general purposes of the reasons for using the internet, and they were asked to score "1" as the lowest and "5" as the highest using a 5-point likert.

4.4. Covid19 Awareness Level Questions (FS)

In the fifth part, 4 questions were asked to the participants to determine their general awareness in the Covid 19 Outbreak. In the first question, information about the component of the Covid 19 virus and its effect on the disease were asked to answer "Yes" and "No". The second and fourth questions were asked to determine their thoughts against the general decisions taken for prevention during the epidemic process. Third question, they were asked to indicate from which channel they followed the news and developments during the epidemic process.

4.5. Health News Perception

It is a form consisting of 36 questions and 5 factors on the basis of the scale developed by F. Çınar et al. As a result of the correlation analysis performed during the scale development phase, 6 items with a value of less than $r = 0.30$ were removed from the scale, and the number of items in the scale was determined to be 30 (Cınar, Sengul, Capar, Cakmak, & Bilge, 2018).

Within the scope of this research, a total of 9 questions were selected from the factors 1, 3, 4, and 5 related to the research from the 30-item health news perception scale. The values for the sub-factor loadings and the explanation about the measurement areas of the factors are given in the "Table 2".

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Table 2. Health news scale sub-factor values and validity and reliability values of the scale's factor analysis

Item Number	Sub-Factor Distribution	Cronbach Alfa (α)
25	Factor 1: Commercial Concern and Advertising ($\alpha=0.75$)	0,835
26	Factor 1: Commercial Concern and Advertising ($\alpha=0.75$)	0,832
20	Factor 3: Behavior Change ($\alpha=0.65$)	0,840
28	Factor 3: Behavior Change ($\alpha=0.65$)	0,832
21	Factor 4: Abuse Health Behavior ($\alpha=0.71$)	0,833
22	Factor 4: Abuse Health Behavior ($\alpha=0.71$)	0,837
27	Factor 4: Abuse Health Behavior ($\alpha=0.71$)	0,836
23	Factor 5: Belief in Health News ($\alpha=0.79$)	0,837
24	Factor 5: Belief in Health News ($\alpha=0.79$)	0,836

4.6. Stress / Discomfort and Poor Self-Efficacy Perception

The Perceived Stress Scale (PSS) translated into Turkish by M. Eskin et al. Consists of 14 items, 2 factors and 3 forms. “Table 3” and “Table 4” shows the factor loads of the PSS-14 and PSS-10 forms.

Table 3. Factor structure of PSS-14

PSS-14	
Factor 1: Insufficient Self-Efficacy Perception	Factor Value
Hayatındaki önemli değişikliklerle etkili bir şekilde başa çıkamadığını hissetme	0.76
Her şeyin üstesinden gelemediğini hissetme	0.75
Gündelik zorlukları üstesinden başarıyla gelemediğini hissetme	0.71
Kişisel sorunları ele alma yeteneğine güven duymadığını hissetme	0.69
Zamanı nasıl kullanacağını kontrol edemediğini hissetme	0.63
Hayatın zorluklarını kontrol edemediğini hissetme	0.63
Yapılması gereken şeylerle başa çıkamadığını hissetme	0.44
Factor 2: Stress / Discomfort Perception	Factor Value
Hayatındaki önemli şeyleri kontrol edemediğini hissetme	0.74
Kendini sinirli ve stresli hissetme	0.73
Kontrolü dışında gelişen olaylar yüzünden öfkelenme	0.71
Beklenmedik bir şeylerin olması nedeniyle rahatsızlık duyma	0.69
Problemlerin üstesinden gelinmeyecek kadar biriktiğini hissetme	0.57
Her şeyin yolunda gitmediğini hissetme	0.56

Table 4. Factor structure of PSS-10

PSS-10	
Factor 1: Stress / Discomfort Perception	Factor Value
Hayatındaki önemli şeyleri kontrol edemediğini hissetme	0.76
Kendini sinirli ve stresli hissetme	0.74
Beklenmedik bir şeylerin olması nedeniyle rahatsızlık duyma	0.72
Kontrolü dışında gelişen olaylar yüzünden öfkelenme	0.70
Her şeyin yolunda gitmediğini hissetme	0.54
Problemlerin üstesinden gelinmeyecek kadar biriktiğini hissetme	0.53
Factor 2: Insufficient Self-Efficacy Perception	Factor Value
Her şeyin üstesinden gelemediğini hissetme	0.78
Kişisel sorunları ele alma yeteneğine güven duymadığını hissetme	0.76
Hayatın zorluklarını kontrol edemediğini hissetme	0.65
Yapılması gereken şeylerle başa çıkamadığını hissetme	0.59

5. ONLINE SURVEY RESULTS

According to the answers given to the demographic questions;

While the 46-55 age group took the first place with 30.3%, 36-45 age group was the second with 27%, and the 18-25 age group was the third with 22.5%. Female participants constituted the majority with 65.2%. In terms of education, the highest participation rate was master's graduates with 42.7%, while undergraduate graduates ranked second with 22.5%. According to the income distribution of the

participants, it was included in the first 20.2% with the participants who do not have regular income and have an income of 900 TL and above. According to the answers given to the occupation problem, the number of participants in the field of education, of which 23.6%, took the first place, while the participants with self-employment with 15.7% were placed in the second place.

According to the answers given to internet usage time questions;

The first of the two questions asked to the participants about the change of hourly and daily internet use was how much of a change in hours they detected in their internet usage during the day, while the between 1-3 hours change was in the first place with 32.6%, the participants that indicated an increase in usage for more than 5 hours ranked second with 23.6%. While the rate of change observed in a week increased by 1 day is 39.3%, the rate of those who experienced a change in usage for more than 5 days ranked second with 23.6%.

According to the answers given to the Internet usage purpose questions;

While 40.4% of the participants considered commenting on their friends' posts as the lowest option, 11.2% stated it as the highest option. While the rate of those who prefer the least use for chat purposes is stated as 14.6%, 20.2% of the participants stated that they use the internet for this purpose. While the rate of those who look at the photos of their friends and prefer to comment less is 29.2%, the rate of those who use it for this purpose is 14.6%. While the rate of those who preferred to share interesting / funny videos the least was 41.6%, the rate of those who preferred more remained at 10.1%. While the rate of those who do not prefer to share their favorite websites is 42.7, the percentage who chooses to share these websites with others is 12.4%. While the rate of the participants who stated that they use the Internet less for sending e-mails was 11.2, the rate of those who mostly used it for this purpose was 27%. The rate of those who rarely share their personal information and photos is 44.9%, while the rate of those who use it for this is 10.1%. While the rate of participants who use the Internet less for business / lesson purposes remains at the level of 15.7%, it is seen that the rate of participants who stated that they mostly use the Internet for this purpose is around 30.3%.

According to the answers given to the awareness questions regarding the Covid-19 Outbreak;

The rate of participants who stated that they were aware of the infections and diseases caused by the epidemic resulted in 95.5%. While 27% of the participants did not find the importance taken by the government sufficient, 32.6% stated that they followed the news about the Covid-19 outbreak on television. 49.4% of the participants stated that the curfews and age quarantine practices were correct, and 30.3% of the participants stated that they were absolutely correct.

According to the answers to the questions asked about the effects of health news during the Covid 19 Outbreak;

According to the rate of those who think that the news and programs related to the epidemic negatively affect them, the rate of those who say they agree is 29.2%, the rate of those who say they strongly agree is 21.3%, and the rate of those who are not affected is 27%. The rate of those who think that these programs are aimed at providing products and services rather than protecting health is 31.5%, while the rate of those who do not think is 32.6%. At the same time, the rate of those who thought that the programs abused their patients and their relatives was 28.1%, while the rate of those who think otherwise was 51.1%. The rate of participants who find the public service ads more convincing during this period is 50.5%, and the rate of those who think otherwise is 22.2%. The rate of those who think that health news and programs are prepared objectively and impartially as required by health reporting is 22.4%, while the rate of those who do not think is 47.8%. The rate of those who think that these programs have been prepared before is 32.3%, and the rate of those who think otherwise is 44.5%. The rate of partici-

pants who think that providing health news and programs by people who are not competent in the field of health cause unnecessary health services is 54.5%, while the rate of those who do not think so is 47.5%. In such programs, 35.5% of those who think that old age is associated with illnesses causes the elderly to receive health services, while the rate of those who do not think is 48.9%. While the rate of the participants who said that the health news programs make them feel sick is 21.1%, the rate of the participants who say that they do not make them feel sick is 70%.

According to the answers given to the questions about determining the perception of stress experienced during the Covid 19 Outbreak and determining competence / self-efficacy;

While the rate of those who are disturbed frequently due to unexpected things happening during the epidemic process is 32.6%, the rate of those who never felt discomfort is 23.6%. During this period, the rate of those who frequently felt that they could not control important things in their lives was 44.4%, while the rate of those who never felt it was 24.5%. The rate of those who felt angry and stressed during the epidemic process is 33.4%, the rate of those who did not feel this feeling is 20%. While the rate of participants who think they have achieved success against daily difficulties during the process is 68.9%, the rate of those who think they have never achieved success is 4.4%. While the rate of people who effectively coped with the important changes that have occurred is 64.4%, the rate of those who think they could hardly cope with the changes is 6.7%. The rate of people who trusted their ability to deal with their personal problems during the epidemic process was 68.9%, while the rate of people who did not trust their skills was 14.4%. The rate of people who think that everything is going well is 25.5%, and the rate of people who think that everything is not right is 23.4%. When asked whether they realize how often they cope with what you need to do during the Covid 19 outbreak process, the rate of those who realized that they could not cope was answered as 27.8%, and the rate of those who did not notice was 40%. In this process, the rate of participants who could frequently control the difficulties in their lives was 54.5%, while the rate of those who could never control was 8.9%. When the participants are asked how often they have overcome everything, the rate of those who think frequently is 58.9%, and the rate of those who think they can never overcome it is 15.5%. While the rate of participants who got angry due to the events that often occurred outside of their control during the epidemic process was 33.3%, the rate of the participants who said they were not angry was 24.5%. When the participants were asked how often they think about the things they have to achieve, 56.7% of the participants stated that they think frequently, while the rate of those who stated that they never thought was 7.8%. While the rate of participants who stated that they could control their time frequently during the process was 40%, the rate of participants who stated that they could not control was 25.5%. The participants were finally asked how often you felt that the problems were accumulating so much that you could not overcome the Covid 19 epidemic process, while the rate of people who thought they were frequently was 30.3%, while the rate of participants who thought there was never was 38.2%.

6. RESULTS

6.1. Normal Distribution Test

The analysis of the answers given by the participants to the PSS questions is shown in “Table 5”, and considering these results, it is possible to say that the data are normally distributed.

Table 5. PSS normality test values

Item	Mean	Median	Skewness	Kurtosis	Shapiro-Wilk Sig.
29	2.95	3.00	0.284	0.106	0.000
30	2.81	3.00	0.510	-0.287	0.000
31	2.87	3.00	-0.056	-0.166	0.000
32	3.90	4.00	-0.556	0.498	0.000
33	3.77	4.00	-0.590	0.785	0.000
34	3.80	4.00	-0.672	0.225	0.000
35	3.07	3.00	-0.328	0.262	0.000
36	3.23	3.00	-0.056	-0.379	0.000
37	3.63	4.00	-0.521	0.678	0.000
38	3.58	4.00	-0.744	0.584	0.000
39	2.88	3.00	-0.002	-0.051	0.000
40	2.36	2.00	0.417	0.248	0.000
41	3.33	3.00	-0.374	-0.351	0.000
42	3.21	3.00	-0.242	-0.665	0.000

-1.5> Normality<1.5

Analyzing the distributions of data through statistics such as arithmetic mean, mode, median, skewness and kurtosis coefficients are stated as descriptive methods (Abbott, 2011; Kirk, 2008). In this context, the arithmetic mean, mode and media being equal or close, the coefficients of skewness and kurtosis being close to 0 within ± 1 limits, the skewness and kurtosis indices calculated by dividing the skewness and kurtosis coefficients with their standard errors close to 0 within ± 2 limits. The relative variation coefficient, which expresses the ratio of the standard deviation and the mean as a percentage, is between 20 and 25 is considered as evidence for the existence of normal distribution (Tabachnick & Fidell, 2013); (McKillup, 2012); (Wilcox & Serang, Hypothesis Testing, p Values, Confidence Intervals, Measures of Effect Size, and Bayesian Methods in Light of Modern Robust Techniques, 2016); (Wilcox, Introduction to robust estimation and hypothesis testing, 2012b); (Howitt & Cramer, 2011); (Lind, Marchal, & Wathen, 2006). It is recommended that descriptive methods should be used together with other methods and the results should be evaluated together in the studies on normality assumption (McKillup, 2012); (Gnanadesikan, Scheaffer, Watkins, & A.Witmer, 1997).

6.2. T Test

As seen in “Table 6”, it can be said that there is a significant difference since $P < 0.05$ as a result of the T-Test performed to understand whether there is a difference between the perceptions of the participants of different gender on health news. When the X values are compared, it is possible to say that the perception of health news by female participants is 0.3% higher than that of male participants.

Looking at “Table 7”, it is possible to say that there is no significant difference for the purposes of use, as $P > 0.05$ as a result of the T-Test conducted according to the answers of the female and male participants for internet use purposes.

As seen in “Table 8”, there is no statistically significant difference since $P > 0.05$ according to the Covid-19 awareness responses of female and male participants.

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Table 6. Gender/Health news perception T test

Extent	Gender	N	X	SD	F	P
Health News	Female	123	2.9116	0.46157	2.396	.011*
	Male	44	2.6506	0.59892		

* $P < 0.05$

Table 7. Gender/Internet use purposes T test

Extent	Gender	N	X	SD	F	P
Internet Usage Purposes	Female	123	2.5559	0.84297	0.057	.507*
	Male	44	2.4574	0.84691		

* $P > 0.05$

Table 8. Gender/COVID-19 awareness T test

Extent	Gender	N	X	SD	F	P
Covid19 Awareness	Female	123	2.3760	0.68081	0.513	.767*
	Male	44	2.3409	0.64944		

* $P > 0.05$

When the answers given to the Perceived Stress Scale (PSS10 and PSS14) questions in “Tables 9” and “Table 10” are analyzed, there is no statistically significant difference in the effect of gender difference on perception of stress and insufficient self-efficacy.

Table 9. Gender/ASO10 T test

Extent	Gender	N	X	SD	F	P
PSS10	Female	123	3.2087	0.67997	1.904	.931*
	Male	44	3.1977	0.81312		

* $P > 0.05$

Table 10. Gender/ASO14 T test

Extent	Gender	N	X	SD	F	P
PSS14	Female	123	3.2489	0.61529	2.379	.885*
	Male	44	3.2321	0.76313		

* $P > 0.05$

6.3. Corelation

In “Table 11”, correlation analysis was made between variables. According to the results seen in the table, when the age variable is compared with the PSS Stress and the PSS Insufficient Self-Efficacy variables, it appears that there is a weak-moderate positive relationship. When the stress variable is compared with the insufficient self-efficacy variable, it is seen that there is a strong positive relationship. It is concluded that the relationship between education variable and stress and insufficient self-efficacy variable is weak.

Table 11. Mean and standard deviation values of variables and correlation between variables

Variables	Mean	SD	1	2	3	4	5
1. Age	2.95	1.238	-	-.158*	.257**	.292**	.175*
2. Education	4.67	1.258		-	.141	.188*	.061
3. PSS Stress	2.88	.513			-	.704**	.240**
4. PSS Insufficient Self-Efficacy	3.61	.746				-	.184*
5. Health News	2.84	.673					-

* $p < 0.05$, ** $p < 0.01$

When the correlation analysis table is looked at in general terms, it is seen that the feeling of stress and insufficient self-efficacy increase with the increase in the age factor, negligible the difference in education. It can be said that health news has an effect on increasing stress, even with a weak relationship.

“Table 12” shows the correlations between the items of the Perceived Stress Scale (PSS). It is seen that the items have a strong and positive relationship with each other.

Table 12. Correlation matrix between perceived stress scale (PSS) items

Item	29	30	31	32	33	34	35	36	37	38	39	40	41	42
29	1.000	0.623*	0.609*	0.702*	0.710*	0.284*	0.210*	0.247*	0.333*	0.280*	0.229*	0.278*	0.418*	0.418*
30	0.623*	1.000	0.381*	0.223*	0.310*	0.344*	0.347*	0.387*	0.322*	0.387*	0.339*	0.379*	0.428*	0.384*
31	0.609*	0.381*	1.000	0.373*	0.440*	0.340*	0.317*	0.409*	0.402*	0.492*	0.711*	0.332*	0.481*	0.484*
32	0.702*	0.223*	0.373*	1.000	0.462*	0.510*	0.411*	0.512*	0.471*	0.493*	0.348*	0.379*	0.549*	0.407*
33	0.710*	0.310*	0.440*	0.462*	1.000	0.478*	0.580*	0.351*	0.489*	0.611*	0.379*	0.342*	0.419*	0.338*
34	0.284*	0.344*	0.340*	0.510*	0.478*	1.000	0.491*	0.381*	0.510*	0.398*	0.342*	0.312*	0.411*	0.481*
35	0.210*	0.347*	0.317*	0.411*	0.580*	0.491*	1.000	0.518*	0.440*	0.611*	0.371*	0.229*	0.480*	0.418*
36	0.247*	0.322*	0.409*	0.512*	0.351*	0.381*	0.518*	1.000	0.418*	0.579*	0.339*	0.419*	0.417*	0.378*
37	0.333*	0.320*	0.402*	0.471*	0.489*	0.510*	0.440*	0.418*	1.000	0.440*	0.339*	0.379*	0.440*	0.318*
38	0.280*	0.329*	0.492*	0.493*	0.611*	0.398*	0.611*	0.579*	0.440*	1.000	0.419*	0.398*	0.384*	0.481*
39	0.229*	0.339*	0.711*	0.348*	0.379*	0.342*	0.371*	0.339*	0.379*	0.419*	1.000	0.479*	0.319*	0.418*
40	0.278*	0.379*	0.332*	0.379*	0.342*	0.312*	0.229*	0.419*	0.379*	0.398*	0.479*	1.000	0.147*	0.442*
41	0.418*	0.428*	0.481*	0.549*	0.419*	0.481*	0.480*	0.417*	0.440*	0.384*	0.319*	0.147*	1.000	0.382*
42	0.418*	0.384*	0.484*	0.407*	0.338*	0.481*	0.418*	0.378*	0.318*	0.481*	0.419*	0.442*	0.382*	1.000

** if $P < 0.005$, there is a significant relationship.

6.4. Cronbach's Alpha

The results of the reliability analysis of the perceived stress scale (PSS) are shown in “Table 13” and “Table 14”. Considering the Cronbach Alpha results given in the table, it is seen that it has a high reliability value. It can be said that the Cronbach value should be at least 0.70, while the Cronbach value of the PSS items has a strong reliability of 0.911.

Table 13. Perceived stress scale Cronbach Alpha values

	N	Mean	Variance	SD	Cronbach's Alfa	Cronbach's Alfa Based on Standardized Items
PSS	14	45.39	84.458	9.190	0.911*	0.911

*Cronbach Alfa >0.7

Table 14. Cronbach Alpha values of the perceived stress scale (ASO) sub-factors

	N	Mean	Variance	SD	Cronbach's Alfa	Cronbach's Alfa Based on Standardized Items
PSS10 Stress	6	17.78	22.498	4.743	0.853*	0.851
PSS10 Insufficient Self-Efficacy	4	14.26	8.578	2.929	0.811*	0.819
PSS14 Stress	7	20.14	27.434	5.238	0.854*	0.851
PSS14 Insufficient Self-Efficacy	7	25.26	22.171	4.709	0.870*	0.876

*Cronbach Alfa >0.7

7. LIMITATIONS AND SUGGESTIONS

In this study, it was aimed to examine the level of change in individuals' perceptions of stress and insufficient self-efficacy as a result of the attitudes and attitudes of individuals during the Covid 19 epidemic process, as well as their use practices. The limitation of this research can be accepted. In future studies, it can be suggested to examine the effects of education and income variables on perception and interpretation of health news and mood states on behavioral changes in different age groups.

8. CONCLUSION

Considering the shares, reactions and perceptions of individuals in the new media during the Covid-19 Outbreak, the effects of the stress on the individuals of the society with the effect of the decisions, practices and press news taken by the government were quantitatively measured using electronic surveys. According to the results of the research, it is seen that male participants are more influenced by health news than female participants. During the Covid-19 epidemic, it was found that internet use did not make a difference between genders and all participants used the internet for an average of 1-3 hours more per day. As a result of the answers to the question of weekly usage rates, it is seen that this period creates an increase in usage more than 1 day per week. Looking at the level of awareness regarding the Covid-19 outbreak, it was understood that the level of awareness of female participants was higher.

Another subject evaluated within the scope of the research is the measurement of the stress and insufficient change in self-efficacy caused by the effect of the epidemic process. According to the research findings on this subject, it was seen that male participants had higher stress changes and their insufficient self-efficacy anxiety increased more than female participants. It turns out that there is a positive significant relationship between the increase in insufficient self-efficacy and stress change. It was found that as the stress level increases, insufficient self-efficacy anxiety also increases. Scientific studies on stress show that stress has a strong relationship with mental health (Çevik & Şentürk, 2008). Another important result that emerges is seen between age and stress-insufficient self-efficacy perception. As the age increases, the stress level tends to increase. In proportion to this, insufficient self-efficacy anxiety also increases. In this case, it is possible to say that there is a positive and significant relationship between age and the perception of stress-insufficient self-efficacy.

In questions about the disturbance experienced by the Covid-19 epidemic process, one-third of the participants stated that they often felt discomfort during the Covid-19 epidemic process that occurred unexpectedly, and it was observed that the participants who stated this situation were especially those aged 36 and over. It is seen that nearly one-third of the participants who do not feel disturbed by the epidemic process are in the 18-25 age group. According to these findings, it can be said that mature adults have higher levels of anxiety about the Covid-19 process compared to young participants. About half of the participants state that they feel that they cannot control the important things that are happening in their lives during this process.

More than half of the participants stated that they were negatively affected by the news about the epidemic, that they thought that the news was not prepared objectively and impartially, and that reporting health news by incompetent people caused unnecessary health services. While the number of those who approve of the quarantine practices taken by the government constitutes four-fifths of the total number of participants, nearly half of the participants state that they think the applications are insufficient. De-

tailed data were obtained with interconnected scales and questions in order to clarify the perceptions of individuals towards the process, to clarify the ways and levels of following the epidemic process and to provide them with healthy and correct answers in the content of the survey conducted within the framework of the research.

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KEY TERMS AND DEFINITIONS

COVID-19: Its scientific name is SARS-CoV-2. The new type of corona virus that emerged in 2019 and causes Covid-19 disease is the seventh type corona virus that affects humans.

Digital Media: It refers to the media that exists in web, mobile, virtual reality platforms. It is the media that emerges with the existence of the Internet and computers, mobile, virtual reality, and augmented reality devices. This media; Includes branding, branding, communication, advertising, art, science, marketing, sales, finance, law and more.

Epidemic: It is a general name given to diseases that spread and show their effects in a very wide area such as a continent or even the entire surface of the world.

Insufficient Self-Efficacy: It is the individual's feeling inadequate in understanding, belief and judgment about himself/herself about the capacity to be successful by organizing necessary activities to show a certain performance.

Perception: Psychology and cognitive sciences that deal with the functioning of the mind and intelligence are called the acquisition, interpretation, selection and arrangement of sensory information. In short, it can be defined as the awareness and perception of something by directing attention to that thing.

Social Influence: It is the change in an individual's thoughts, feelings, attitudes, and behaviors as a result of interaction with another person or group.

Social Media: In short, it can be said that it is an online network where the user publishes and shares their own content.

Stress and Discomfort: It is a state of emotional and physical tension that a person feels in the face of a difficult or uncomfortable situation.

Chapter 25

Impact of Social Media on Pandemic COVID–19 Outbreak

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ABSTRACT

There are lots of social media tools that are accessible for medical or healthcare professionals, which include different social networking blogs, microblogs, media-sharing sites, wikis, virtual reality. All these different media tools can be utilized to develop or improve specialized networking and organizational promotion, education, patient education, patient care, and different public health agendas. But they also can perpetuate the risks to patients and healthcare professionals regarding the circulation of low-quality information, violate the patient privacy, and also have legal issues. To prevent all these risks, professional organizations and healthcare institutions have introduced a few guidelines. These guidelines were established to deliver emergency medicine residency programs control with leadership and best perform in the suitable practice and guidelines of social media but are valid to all residency programs that desire to create a social media presence. In this chapter, the authors describe how social media made their impact on this pandemic COVID-19 situation.

1. INTRODUCTION

The novel coronavirus (COVID-19) was found in Wuhan, China, in December 2019 (Lu H et al, 2020). Immediately the virus was spread all over the world, which results in this pandemic situation. Internationally, the governments imposed social distancing and home quarantine and other methods to stop

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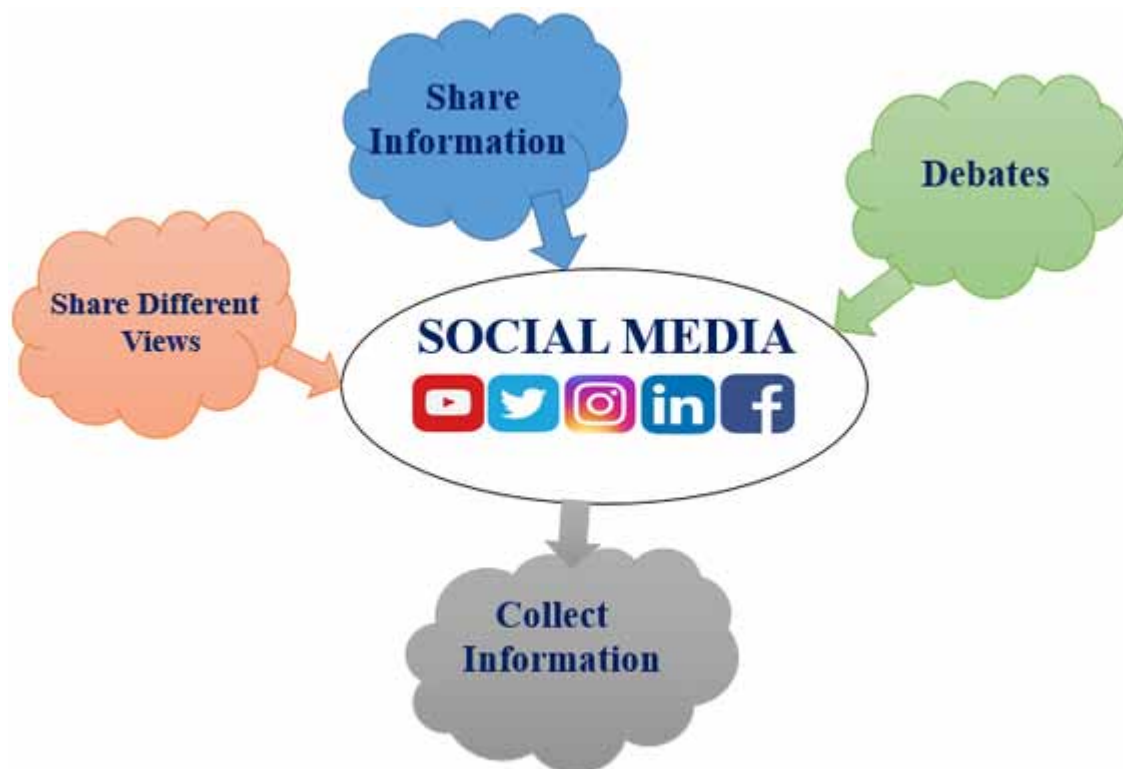
the infectious disease (Gorbalenya, 2020). Social networking sites and mass media played an important role in giving facts regarding the novel coronavirus (COVID-19). Though less information is identified about novel coronavirus (COVID-19), several rumors and fake information distributed all over world via social media that freaked public to take decision in anxiety (Machado et al, 2020). The quick distribution of wrong information and news through social networking sites like Facebook, Twitter, and Instagram became an important worry of the public and government health agencies (Abd-Alrazaq et al, 2020). Wrong information and unauthentic activities about healthcare of pandemic COVID-19 situation are distributed in social media at an extraordinary step (Machado et al, 2020). Modifying the arrival of fake news and wrong information during the pandemic COVID-19 situation is vital, as misrepresentation and rumors generates panic, anxiety and fear between societies, prompting them to numerous mental health circumstances (Chen et al, 2020). Despite of taking social network for granted as a secondary medium, it must be used to transfer vital info. Numerous governments in worldwide have taken activities against the rumors about this pandemic time, thus methods are needed to avoid such interaction difficulties. Generally, a pandemic outbreak of communicable disease can't be forecasted in a specific area, province or phase (Chan et al, 2020). The misrepresentation, misinterpretation, or fake news can suggestively ruin the interactive reaction and increase anxiety within the public. However, the data rises quickly via social networking platform, it is essential to observe media and handle the wrong information (Machado et al, 2020). Social networking platform act as the prime source of flourishing with information about the novel corona virus (Li et al, 2020). The main disadvantage of social media amongst a difficult condition as the pandemic COVID-19 situation is that social networking platform has been expediently applied as a method to transfer wrong information and fake or misinterpretation (Emanuel et al, 2020). Later the arrival of social networking sites like as Facebook, Twitter, YouTube, and Instagram etc the material communication in disaster situations has augmented internationally at several stages. Fig.1 shows the main function of social media. Social networking platform gives a place for manifesting individuals' opinion and views, which can be unpredictable and delicate during a serious condition like as pandemic COVID-19 situation (Basch et al, 2020) . Wrong information on this COVID-19 pandemic time are spreading quickly via social media and the internet, thus altering public behavior during the epidemic. These fake information requires consideration for improving emotional awareness, improvising the emergency reactions and associate judgment making (Basch et al, 2020).

1.2. Social Media Activity in the Pandemic Situation

In recent times, social media plays an important role as a source of information. Twitter is a social media platform where immediate response comes to any queries or a platform of discussion (Abd-Alrazaq et al, 2020). In this pandemic situation social media acted as boon, it gave information about 'DOs' or 'DON'Ts' and spread awareness about the COVID-19 disease (Machado et al, 2020). During the outbreak of H1N1 flu, social media was the first to inform the people (Abd-Alrazaq et al, 2020). The government organization named CDC (Centers for Disease Control and Prevention), took the help of social media to inform the people about the outbreak of Ebola and Zika disease (Wang et al, 2020). The craze for social media made it a key platform of information during the pandemic time. During this pandemic emergencies both healthcare department and people took the help of social media to interact and deliver information (Hua yet al, 2020). Fig.2 shows the advantages and disadvantages of social media during COVID-19 pandemic time. The most engaging social media platforms like Facebook, Instagram, YouTube and Twitter spreads awareness to everyone about the unauthentic information about COID-19.

Though their role is controversial (Machado et al, 2020), but it helped the people to reduce the mental stress and anxiety in this worldwide pandemic situation (Hua yet al, 2020). Though, social media must be used for good purpose, as some times it can give wrong information which can mislead people as well as it can come as a blessing.

Figure 1. Basic function of social media



1.3. Impact of Social Media in Public Emotion

Basically in any kind of pandemic situation, there is a thread to public health, so it is important to aware people not to let it be a community spread disease (Machado et al, 2020). In this pandemic time people are emotionally influence. The wrong information lead to the panic situation which let people do unnecessary activities which can be harmful for both mental and physical health for an individual (Brooks et al, 2020). In the present time people are mostly dependent on social media, they try to collect the information from different types of social media like Google, Facebook etc about their work whether it's urgent or not, they always give priorities to it (Allen et al, 2013). It is seen in this COVID-19 pandemic situation, the most searched topic in social media are virus, infection, diseases and its remedies (Machado et al, 2020). According to WHO, the people blindly following social media information about the virus suffers from anxiety, fear or mental irritation. Many news have displayed that subsidiary media coverage to corpus trauma may strengthen the preliminary signs of PTSD (Post-Traumatic Stress Disorder) (Brooks et al, 2020). In this pandemic situation, wrong evidence, and confusing news about the pandemic

of COVID-19 invaded the social media and worked groundless anxiety among many people which can make misperception and ruin mental comfort of people (Ahorsu et al, 2020).

Figure 2. Boon and bane of social media during pandemic COVID-19



1.4. Disinformation and Its Implications in Pandemic

Wrong information produces panic and mistake (Brooks et al, 2020). Incorrect info became a major problem throughout the social media platforms in the pandemic situation of COVID-19. Currently Facebook have launched a new apprise, basically which will notify the Facebook users whether they are involved with wrong information (Abd-Alrazaq et al, 2020). Several news informed that verified healthcare and Twitter accounts had minimum fake information rather than other social media cites (Ahorsu et al, 2020). Certain features or tweets of Twitter social media platform were noticed to tend to deliver incorrect and unverifiable judgment. Many researchers confirmed that the 'silliness effect', where the people joins the chat to mimicry the conspiracy theory inadvertently pulls more attention, posturing as a threat for wrong information (Thakur et al, 2020). Though wrong information is distributing nonstop on various sites, consciousness and suitable precautionary actions are of absolute importance for user safety (Machado et al, 2020). It was noticed that wrong information on social media cites about probable medicines, containing Hydroxy-Chloroquine to treat the novel corona virus infection (COVID-19), moved many

people to purchase such drugs without any medical authorization, resulting in the insufficiency of these medicines for real patients (Depoux et al, 2020). There must be cautiousness for using the social sites to stop the spread of rumors and wrong information (Tasnim et al, 2020). Distributing fast, correct news that introduces critical problems of control the infection is important (Dolan et al, 2020). Infodemiology is a prosperous area of research directed at teaching public health activities and planning public health policies to estimate electronically generated and stored the public health records (Mossberger et al, 2013). The advantage of Infodemiology is its capability to gather public health data in simultaneous from written, unstructured, image or user-made evidence which is shared via social media like blogs, websites and different network sites (Voorveld et al, 2018). Though, the dependability of user-created information is unsure (Paine et al,

2011). Frequently on social site, user-made and posted health related information about the pandemic COVID-19 disease can performance as an actual technique for public health investigation (Tasnim et al, 2020). Different social search engines and internet site designers must be needed to take steps to confirm handlers as clear and clear information as probable to stop the contrary things of information excessive, while also collaborating the importance of the pandemic and recommended the public health measures (Mossberger et al, 2013). Teaching people on the accountable and safe application of social site may, then, help to moderate the undesirable impacts detected (Depoux et al, 2020).

1.5. Effect of Social Media During Covid-19

Media reporting and public outlook can have an important outcome on both the private and public sectors in determining with respects to interrupting agendas, compared to the real requirement for public health (Brooks et al, 2020). However, people are recognized as a coincidental that deals the threat notices and take the risk problems about the pandemic situation (Depoux et al, 2020). The data concerning the risk is offered in a way that effects the people's observation of threat, particularly dramatic media commentary of a pandemic emergency (Ahorsu et al, 2020). In specific, it is thought that anger and anxiety arbitrate the influence of media publicity on the sensitivity of individual-stage danger and hence rise advantageous precautionary performances. The COVID-19 pandemic outbreak is a negative incident, causing in an erratically high number of infections and deaths, prompting negative feelings from the community (Brooks et al, 2020). People generally express their anxieties about the COVID-19 pandemic outburst through different social media platform (Thakur et al, 2020). In some examples, though, the social media are incapable to detention the prevalent on time, and therefore fail to develop the major indicator (Depoux et al, 2020). Though social media news fall behind actual COVID-19 times, it does not performance a beneficial pre-cautioning role in interactive and informing about the concern of public health (Brooks et al, 2020). Though, in this case the virus is novel and there have no sufficient information on it, misrepresentation may have been conveyed by the social site impact to different psychological outcomes like sadness, anxiety etc.

1.6. COVID-19: How Anxiety Extend via Social Media

Social media has the power to bring people closer but it is also facing few challenges like ill-using of public outlook, misbehaving in open forum and other types of cybercrime (Machado et al, 2020). Fig.3 represent the COVID-19 update till 6th November, 2020 recommended by WHO; 48,534,508 confirmed cases including 1,231,017 deaths. COVID-19 pandemic has an impact on global health structure and

Impact of Social Media on Pandemic COVID-19 Outbreak

became now became international health emergency or PHEIC (Public Health Emergency of International Concern) as recommended by WHO which is known as an unexpected incident that is defined below:

1. To establish a health threat of a community in comparison to other regions over the international outburst of disease.
2. A possible necessities of a synchronized international reaction. This explanation suggests a state that: is severe, uncommon or unpredicted; carries consequences for community health outside the affected region's national limit; and may need instant worldwide action (Depoux et al, 2020).

Figure 3. Globally COVID-19 update (6th Nov, 2020; 5:46 pm CET, reported by WHO)



However, the social network act as an actual foundation of gaining health data, it is also a source for broadcasting fake news (Wang et al, 2020). Furthermore to solve the immediate requirement to increase the public health involvements for handling the disease, the panic outbreak due to the pandemic situation in social media must be restricted (Depoux et al, 2020). The outbreak of anxiety and fake information about the pandemic situation due to COVID-19 is also known as “Misinfodemics”.

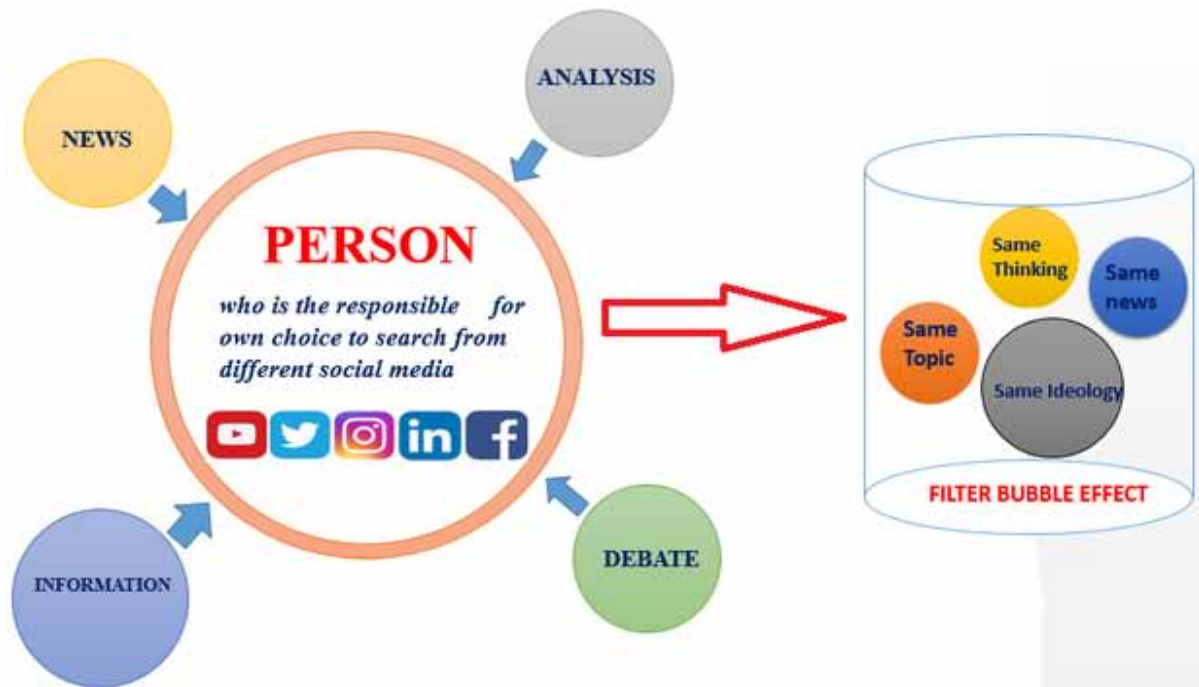
Supply and distribution of clear information, particularly when the broadcast is harsh and the forecasting improbability is mainly an essential part of handling health emergencies and epidemics in wide-scale (Machado et al, 2020). During this pandemic situation, the time is very crucial, there should be a communication between government authorities and the community to grow faith. Now a days, the population is increasing rapidly in the world wide, which is creating problem in this public health threat in this pandemic situation COVID-19. During the time of Ebola outbreak in Western Africa shows how social media has a power to effect the public reaction. Few research shows that the social media has a vital role in spreading wrong information about Ebola outbreak (Depoux et al, 2020). A research exposed that wrong information and fake tweets are spreading more rapidly as compare to authentic news (Wang et al, 2020). The content review of Twitter from 2014 to 2016 declared that the human emotions like anger, anxiety looks for information about Ebola related matter in worldwide (Machado et al, 2020).

Similarly, social media contributed in spreading gibberish accusations or conspiracy theories, and few gave them fake information about healthcare and treatments; as like as, rumored WhatsApp messages and SMS also acted as a source of fake news (Depoux et al, 2020).

1.7. Influences of Social Media

In today's world social media is the most commonly used platform. It is the source of information and knowledge. As the access to internet is trouble-free and reasonable, people makes the most out of it. Most of the users (registered) utilize this platform to spread information and news, as it is the most potential way to reach out to the individuals. One of the example is that recently during the time of COVID-19 incident, the most searched content in internet and social media is about the virus, named Corona virus (Abd-Alrazaq et al, 2020) (Li et al, 2020). It is a platform where one can take help from as well as give help. It's almost like a factory of information. The easier access to the internet helps us to connect to social media. This social media helps to connect with the people from all over the world. It is the most commonly used medium for communication. It kept people out of stress. This platform was a way to connect with family and friends which kept one out stress and anxiety; and helped to fight against monotony and loneliness. Therefore social media became the most recommended medium to reduce the mental stress due to the COVID-19 pandemic (Brooks et al, 2020). Social media have immense benefit of quick mass spreading of learning substance in the COVID-19 pandemic phase. For example, Chan et al. made a visual representation (infographic) about the supervision of confirmed or assumed COVID-19 patients by the airway administration (Chan et al, 2020). Firstly it was posted through Twitter and WeChat, and within few days it became so viral that request were coming to translate it in more than ten languages. Besides the spreading, it also helped in modification of visual representation (infographic) of any specific thing of medical organization. Rapid spread of information about precautionary methods of COVID-19 has a great impact on the mass. A latest research by Basch et al. searched with the word coronavirus in YouTube and calculated the 100 most watched videos. The research says, within March 5, 2020, the videos had more than 165 million views altogether, and among which 85% of them were by new channels. It was seen that less than $\frac{1}{3}$ of the videos, suggested about the precautionary methods of COVID-19 and less than half talked about the most common symptoms of Coronavirus. And mostly 90% of them commented on the emotional outburst like stress, anger, anxiety, loneliness and the isolated phase. This research shows the misuse of an informative platform like YouTube (recommended as a source of info), where one should share quality information rather than the quantity, only just to increase its views. In this COVID-19 pandemic phase, social media brought people together. One of the benefit of this platform during this pandemic situation is that it gave the opportunity to mutually involve in a research work (surveys, projects) (Machado et al, 2020). One of the most important fact about social media platform is that it supports online medical studies via recorded webinars, live or conferences through the social platforms (Skype, Zoom, Google Meet, and YouTube). A problem for social networking site and the distribution of data are the "Filter Bubble" (Fig.4), a term introduced by Eli Pariser in 2011.

Figure 4. Filter Bubble and its influence on human minds



It is a condition of logical separation which is supposedly a consequence of personalized searches. It is basically an online atmosphere in which individuals are opened only to the beliefs and facts that matches to their existing viewpoint (Holone et al; 2016). It limits the information an individual sees on internet, and this happens due to the weighted algorithms which the search machines, social networking sites and marketers utilize to personalize user experience. It prevents the user from viewing other various sources of distinct facts. In China, a research by Wang et al, 2020; conducting an online survey states that out of 1,210 responses, 53.8% of the respondents believed that the psychological impact of the COVID-19 pandemic as medium or extreme. Even a research group made and legalized a scale known as “Fear of COVID-19 scale”. This scale evaluate the stress and anxiety level of the individuals (Mak et al; 2009) and it also helps to take preventive measures against PTSD (Post-Traumatic Stress Disorder) which was the most common and obvious psychological consequence after SARS (Severe Acute Respiratory Syndrome) pandemic in Asia in 2003. The survey also states that some other serious diseases or activity like suicide have been accounted in some parts of the world like Germany, Italy, India and Britain (Thakur et al, 2020).

1.8. Social Media as a Defender

As the pandemic outbreak of COVID-19 was announced, the media was over-flowed with information about it. Certain information is focused to inform individuals about the novel virus. On the conflict-ing, wrong information concerning the pandemic situation and it remedies are relieving fear, panic and anxiety between publics. Social media should be used as a medium to promote the awareness regarding this pandemic COVID-19 situation to reduce anxiety among individuals by the public health care bodies

and the government agencies (Wang et al, 2020). The government of several countries' utilized social media to inform the people about the future threat. The social network platform should also be appreciated for verifying truthful information. Social networking should be applied to support the community health reaction (Machado et al, 2020). Social media like news channels, radio stations and different daily newspapers aware people to fight against rumors and fake information by announcing it time to time (Tasnim et al, 2020). Social network analyzer must support government agencies to discuss and mention on actual news on current infectious virus disease concerns. To exchange the information different social networking sources are used (Depoux et al, 2020). As people don't search or study a websites neutralizing news, a vital step should be taken to fight against the fake information. Although, people will still follow the wrong news on social networking site (Wang et al, 2020). Social media can play an important role in circulating upgraded notices and guidelines from experts to individuals, an effective public health involvements are required to avoid the downfall of the healthcare structure (Depoux et al, 2020). The vital mechanisms of effective pandemic reactions comes from the fruitful interaction between government, public healthcare system and individuals. In this existing pandemic situation of COVID-19, the improvement of an actual-period facts distribution method is must, which studies the information from different types of social networking sites in numerous languages internationally (Machado et al, 2020).

2. FUTURE RESEARCH AND DIRECTIONS

Nowadays, social networking sites gives chance to new ways of working. Mostly, people are more communicative through online networking sites rather than meeting physically. Social media is a open way of communication, searching, creating, networking and sharing information, and moreover, for example, taking virtual care of a patients/individuals through Facebook care, tweeting care, blogging care, gamification-care, infotainment care. As per ongoing situation, in future, the pandemic COVID-19 is going to take more months, however, medical involvements will increase which will lead to quarantine, social distancing and improvements in daily hygiene. These involvements will have its impact in the delay of the community spread (Salathe et al; 2020). Examining, identification of the contact, quarantine of the infected person and protective self-quarantine of associates is serious in decreasing the number of upcoming cases (Yuen et al; 2020). Specially a high degree of interaction in the mass and approval of these procedures is also severe (Mukherjee et al; 2020). These involvements have to be composed with receiving back to usual life and daily events to the best amount potential till a backing the path of the pandemic is identified (Yuen et al; 2020). Social networking sites have permitted medical practitioner, patients, scientist and researchers to cooperate in a promising survey to comprehend the effect of the pandemic COVID-19 situation. Though we are all facing this pandemic situation, we are bound to work through social networking platform and networking sites for healthcare purpose.

3. CONCLUSION

An important amount of possibly precarious wrong information has been created about the COVID-19 pandemic outbreak, and many of it has been distributed via different social media platforms. This confusing news contains of different sides of the pandemic, which is accomplished of frightening the public health security, which again exacerbates the emergency management. This fake news and rumor

about the pandemic outbreak of COVID-19 is distributed quicker than the virus. The main method recommended in this chapter was also to accurate misunderstandings by health organizations authorities. While some reports said that the accurate information can be ineffective during any pandemic time or any crisis moment; though, at the similar time several researches established the efficiency of conveying and providing the ingenuous truths by medial experts. It is also suggested that several approaches for modifying misunderstandings about wellbeing via social network media, which contains timely proficient instruction, even public health attentiveness, and rectification program with interrupted statement among common publics and on media systems. In this study, here it is also mentioned the consideration to an improvement platform which will be effective if it is useful rapidly and noticeably, along with significant document, at the similar time confirmation should also be delivered and revealed to the people. Though the novel corona virus spread rapidly, so it will better to deliver correct information regarding the situation or etiology or precaution for this virus infection. There are many experiences learned during the pandemic, which will help as an outline for managing with upcoming pandemics.

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KEY TERMS AND DEFINITIONS

Communication: The process of interacting with each other.

Coronavirus: A virus which effects human bodies through different ways like droplets of cough or sneeze, physical contact with an infected person etc. In 2019, one of the coronavirus named SARS-COV-2 or novel coronavirus starts spreading which resulted in pandemic situation, which is also known as pandemic of COVID-19.

Outbreaks: Certain unwanted happening as like as disease, flood, war, or disaster.

Pandemic: An unwanted worldwide situation.

Social Media: It is basically a virtual platform where people meet and greet virtually, give and take information.

WHO: World Health Organization; a subordinate organization of the United Nations that handles the major health matters worldwide.

APPENDIX

The propagation of disinformation on social media network is quicker than the virus infection COVID-19; it also creates heavy harmful significances on health during COVID-19 pandemic situation. Its world-wide impact on survives and livings is beyond amount as the battle against the pandemic is remaining (Yuen et al; 2020). Though, COVID-19 is the first pandemic to have a great impact on social media (Guynn; 2020), a huge tragic incident in the twenty first century, which is not resistant to the propagation of disinformation ((Rosenberg et al; 2020). As per the Director-General of the WHO (World Health Organization) announced that the pandemic COVID-19 is just like as an ‘infodemic’ of disinformation (WHO; situation report 13; 2020). On 28th March, 2020, the Secretary-General of United Nation, Antonio Guterres tweeted on his personal Twitter account that “Our common enemy is COVID19, but our enemy is also an ‘infodemic’ of misinformation” (UN, 2020). Shaw et al; 2020, stated that there will be a flood of facts on COVID-19 pandemic on social networking sites. Additional, Brennen et al; 2020, spoke that disinformation affecting to the world wide health disaster pandemic COVID-19 creates a serious threat to community health.

Chapter 26

The Role of Social Media in Preventing the COVID–19 Pandemic

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ABSTRACT

This chapter reviews the role of media in preventing the spread of COVID-19, summarizing a selection of key ideas and examples on previous scientific studies. As a result, the role of media is crucial in the prevention of the COVID-19 spread today. It is very important for it to reflect actual, honest facts, informing the public with accuracy and objectivity and without causing any distress whilst in cooperation with the global health institutions. It is obvious that all forms of media play a very important role by raising public awareness about the importance of wearing masks, maintaining social distance, taking care of hand and body hygiene.

INTRODUCTION

Social media has been an important source of communication, gathering information, self-expression as well as keeping up to date with changes around the world since it was first established. Public were able to reach people, organisations, government bodies easier than ever before with the use of various platforms created in the past 20 years. This year, in 2020, with the Coronavirus pandemic, social media platforms have become once again the focal point and the centre of attention where public could reach medical data, guidance and news of the recent developments in the world. With the nationwide lockdowns and the increase of time spent at domestic spaces, the time spent on social media has also increased. As well as keeping with up to date news including the number of cases and the news from the world, governments used digital media to set out new measures, health guidances and instructions to follow and slowdown

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the spread of the virus if i need to give an example from our country, the Ministry of Health continues to inform the public during the pandemic process on its official page (<https://covid19.saglik.gov.tr/>).

One of the key takeaways has been how media could work to educate public to eliminate the spread of the virus. This includes promoting personal hygiene through certain implementations to daily lives with small actions such as the guidance on washing hands with soap for a minimum of 20 seconds as well as avoiding face contact after touching surfaces at highest risk of exposure to the virus. Also, maintaining social distance from others and wearing a face covering at public spaces were key messages communicated through media. The explanations made by the experts on these issues have been valuable and guiding for a great part of the population. Today holds more advantage and hope to slowdown the spread of the virus in terms the technological advancements in digital media and reaching the public in shorter times compared to previous pandemic periods. However, this also brings the challenge to minimise the spread of misinformation and ensuring that the education campaigns for the public are formed safely and in compliance with medical guidelines.

During the COVID-19 pandemic, the social media has been globally enabling active user participation and offering new opportunities to improve public health outcomes. All healthcare workers in the globe that have mobilized all their power to prevent the spread of COVID-19 had a large exposure on the media that reached billions of people. Governments, scientific advisers, and health organizations around the world learned from each other and have been working through the pandemic together. Therefore, media had a great role in informing the public with data and facts while minimizing the level of distress.

RESULTS

The serious intense respiratory disorder COVID-19 pandemic has had a noteworthy affect on worldwide wellbeing, economy and society as its entirety. Different measures are being taken to avoid the fast spread, with digital media playing a pivotal part, particularly within the utilisation of visual information to spread data, versatile wellbeing to arrange restorative assets and to promote open wellbeing campaigns. However, advanced media moreover faces a few challenges like deception, need of direction, and data spillage. This study observes recent academic and practice based research papers in this field and highlight key takeaways from the relationship between media and public health.

“We encourage the increased use of digital media with a focus on improving trust, building social solidarity, reducing chaos, educating the public on prevention measures, and reducing the medical burden in facility-based sites (Bao, Cao, Xiong, & Tang, 2020).”

Bao H., Cao and their colleagues in their research published in 2020, reported that social media plays a very important role in communicating the COVID-19 outbreak to the public all over the world and managing medical resources. They advocate the utilization of advanced media with building social solidarity, decreasing chaos, teaching the open on avoidance measures, and diminishing the therapeutic burden in facility-based destinations. Similarly, in a study conducted in 2020, Yigitcanlar and colleagues stated that there is a strong relationship between the information in the media and the contamination case information, and thus, it is important to look at the interaction between the spread of the disease and the media to reduce the spread of COVID-19.

“As expected, results from regression analyses indicated that a higher level of social media use was associated with worse mental health. More exposure to disaster news via social media was associated with greater depression for participants with high (but not low) levels of the disaster stressor. Moreover, path analysis showed negative affect mediated the relationship of social media use and mental health. These findings suggest that the disaster stressor may be a risk factor that amplifies the deleterious impact of social media use on depression. In addition, excessive exposure to disaster on social media may trigger negative affect, which may in turn contribute to mental health problems. Future interventions to improve mental health should consider elements of both disaster stressor and negative affect (Abdoli & Heidarnejadi, 2020)”.

Recent studies show that as much as it can be informative and preventive for spreading the virus, it may have some negative consequences on public health if left unguided. In a study conducted in 2020, Abdoli and Heidarnejadi stated that social media is associated with poor mental health, constantly being exposed to bad news causes people to suffer mental depression, and that is why the rate of depression in the society has increased.

“We strongly believe that this model is a simple and suitable approach that may be helpful for other low-income or war-torn countries in the context of health-related disasters. This subject is of high importance and we believe that this approach may ameliorate public health knowledge, thus, participate in defying the COVID-19 consequences (Mackenzie & Gulati, 2020).”

Mackenzie & Gulati, 2020 In a study they conducted, stated an opinion as above.

“Our findings offer insight into how pediatric studies and clinics can communicate with participants as they age, even as new technologies and social media platforms emerge and replace old ones. For optimal retention, pediatric clinical staff should consider communication approaches offering flexible and tailored options for young adults participating in HIV research (Berman et al., 2020).”

In a study conducted in the USA on HIV and COVID-19 pandemics in 2020, Berman et al. investigated the preferences on social media use for health purposes based on different age groups. They have found that younger people prefer social media to get health information compared to older people who are more likely to choose face-to-face appointments in health clinics. With the nation-wide lockdowns brought in by multiple governments, many non-urgent face-to-face medical appointments and interactions have ceased, and most of the public adapted to the digital world and new ways of seeking medical help. However, searches on web browsers are not always reliable and may be misleading in providing information. Sousa-Pinto et al., examined the web browsing data in 17 countries and suggested that the role of Google Trends in monitoring the COVID-19 pandemic could be negatively affected and GT data on COVID-19 was more closely related to the coverage of the media rather than epidemic trends. Therefore, there is a risk that the dominance of media coverage on web-based searches may sabotage the role of Google Trends (GT) in monitoring coronavirus disease (COVID-19).

“Performance of VTM was evaluated by several quality assurance measures. Based on Ct values of spiking experiments, we found that our VTM supported highly consistent amplification of the SARS-CoV-2 target (coefficient of variation = 2.95%) using the Abbott RealTime SARS-CoV-2 EUA assay on the

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Abbott m2000 platform. VTM was also found to be compatible with multiple swab types and, based on accelerated stability studies, able to maintain functionality for at least four months at room temperature. We further discuss how we met logistical challenges associated with large-scale VTM production in a crisis setting including use of staged, assembly line for VTM transport tube production (Singh, Dixit, & Joshi, 2020)”.

In another study Singh, Dixit, & Joshi, 2020 they conducted in 2020, they reached a conclusion as stated above.

“We briefly discuss the interplay between health behaviours and mental health, and the possible changes in these areas resulting from anti-pandemic measures. We also highlight a call for greater research efforts to address the short and long-term consequences of changes to health behaviours (Arora & Grey, 2020)”.

Similarly Arora & Grey, 2020 examined the behavioral changes made by the COVID-19 pandemic on society. They started to examine the effects of changes in mental health of people and found that changes in sleeping patterns, increase in substance use, decreased physical activity, and changes in diet can lead to serious changes that can subsequently have negative consequences on mental health. Also, the study on 24-hour news cycle during the COVID-19 pandemic, along with other disasters and have found negative impact on mental health (Schroyer, D., 2020). This area needs further research from a wider research groups to assess the direct short and long-term effects of COVID-19 on mental health.

“Based on our analyses, we anticipate cases to be reported in Saudi Arabia and Indonesia; additionally, countries with a moderate to low IDVI (i.e. ≤ 0.7) such as Indonesia, Pakistan should be on high alert and develop COVID-19 response plans as soon as permitting (Bisanzio et al., 2020)”.

Bisanzio et al. Tried, 2020, detected spatial and temporal spread of COVID-19 cases by following twitter correspondence with a specific geography and claimed that social media data can be used to predict the spatial-temporal spread of infectious diseases such as COVID-19. In fact, these geospatial datasets are widely used by governments to track and trace and monitor public health to inform those who might have been exposed to the virus based on their previous travels or visiting specific venues. For these systems to work, a big majority of the public will need to use advanced technologies such as smart phones with the required minimum upgrade. Even though this then brings the questions of data privacy and sharing information of the public through social media, in most cases it has been proven to detect and prevent further virus spread in cities and they have expressed their opinion as:

“In 15 of these countries, rises in anosmia and ageusia searches occurred in the same week or 1 week after they were identified in the media as symptoms of COVID-19. When data prior to March 16, 2020 were analyzed, anosmia and ageusia GT data were found to have variable correlations with COVID-19 cases and deaths in the different countries. Our results indicate that COVID-19 -related GT data are more closely related to media coverage than to epidemic trends (Sousa-Pinto et al., 2020)”.

Sousa-Pinto et al., 2020 they conducted on 15 countries, they discussed the physical effects on the human body infected with corona virus.

The following article serves as a means to highlight the need for increased scrutiny of the value and potentially adverse effect the 24-hour news cycle has on individuals, particularly residents in a long-term care setting amidst the COVID-19 pandemic or other large-scale catastrophic events. The work will emphasize what is currently known regarding the impact media plays on an individual, including mood, opinion, worldview, and overall mental health and wellness. The conclusion will focus on discussing current means of assessment with future recommendations for heightened evaluation in this already vulnerable population (Schroyer, 2020).

In an article published in 2020, Schroyer gave an opinion as above. To determine impact of key parameters with media impact and control measures for the later outcome of the outbreak, we also carried out the uncertainty and sensitivity analyses. These findings confirm the importance of the responses of individuals to the media reports, and the crucial role of experts and governments in promoting the public under self-quarantine. Therefore, for mitigating epidemic COVID-19, the media publicity should be focused on how to guide people's behavioral changes by experts, and the management departments and designated hospitals of the COVID-19 should take effective quarantined measures, which are critical for the control of the disease (Yan et al., 2020).

In the study they conducted in 2020, Yan et al. emphasized that the media could alter public knowledge about emerging infectious diseases and thus change the attitude and behavior of the public towards these diseases. They also emphasized that the media would have a significant impact on the development of the COVID-19 outbreak. And they followed the daily news on 12 major websites in China with Hospitals reporting COVID-19 patients in China and gave their opinion to increase the public awareness efforts of scientists through the media to alleviate the devastating effects of COVID-19.

“Sensitivity analysis suggested that, during the early phase of the COVID-19 outbreak, enhancing the response rate of the media reporting to the severity of COVID-19, and enhancing the response rate of the public awareness to the media reports, both can bring forward the peak time and reduce the peak size of the infection significantly. These findings suggested that besides improving the medical levels, media coverage can be considered as an effective way to mitigate the disease spreading during the initial stage of an outbreak (Zhou, Wang, Xia, Xiao, & Tang, 2020)”.

In an article published in 2020 Zhou, Wang, Xia, Xiao, & Tang gave an opinion as above.

The social media advertisement campaign was an effective and efficient strategy to collect large scale, nationwide data on COVID-19 within a short time period. Although the proportion of men who completed the survey was lower than those who didn't, interventions to increase male responses and enhance representativeness were successful. These findings can inform future research on the use of social media recruitment for the rapid collection of survey data related to rapidly evolving health crises, such as COVID-19 (Ali et al., 2020).

Ali et al. They expressed their opinion as above in an article they published.

“The findings are invaluable for authorities to understand community perceptions and identify communities in needs and demands in a pandemic situation, where authorities are not in a position to conduct direct and lengthy public consultations (Yigitcanlar et al., 2020).”

In a study they conducted in 2020, Yigitcanlar et al. Stated that there is a strong relationship between the information in the media and the contamination case information and thus, it is important to look at

the interaction between the spread of the disease and the media and to reduce the spread of COVID-19 in the media.

In another study they conducted in 2020, Chao, Xue, Liu, Yang and Hall examined how the media affected the psychology of the Chinese people after the outbreak of COVID-19 in China. They observed that the news in the media had a negative effect on the mental health of the people, and that these news caused sadness and anxiety on the people, but that people were informed about the methods of protection from this epidemic by experts through the media channel, which relatively reduced the fear and anxiety of people. The importance of making statements by official sources and preventing information pollution in the media has been emphasized.

Providing evidence-based medical information and reliable advice is a difficult task for classical entities, especially in a war-torn country with a fragile health system. Mackenzie and Gulati observed the relationship between the media and epidemic in 2020. They reported that in non-English speaking countries, non-governmental scientific organizations act as a bridge between the original scientific, medical resources and the public. During the COVID-19 pandemic, informing the public especially those living in developing countries is vital to decrease the nationwide impact of the pandemic.

“All three studies found a negative relationship between COVID-19 conspiracy beliefs and COVID-19 health-protective behaviours, and a positive relationship between COVID-19 conspiracy beliefs and use of social media as a source of information about COVID-19. Studies 2 and 3 also found a negative relationship between COVID-19 health-protective behaviours and use of social media as a source of information, and Study 3 found a positive relationship between health-protective behaviours and use of broadcast media as a source of information. When used as an information source, unregulated social media may present a health risk that is partly but not wholly reducible to their role as disseminators of health-related conspiracy beliefs (Allington, Duffy, Wessely, Dhavan, & Rubin, 2020).”

Allington et al. They expressed their opinion as above in an article they published.

Zhao, Cheng, Yu, and Xu identified four main findings in a study they conducted in 2020. First, they found that public interest in the COVID-19 pandemic is changing with the media, and that it can be divided into three phases. Second, the keywords in the media searches that attract the public's attention may be different, Third, the public's positive emotions instead of their negative feelings over the hot developments regarding the COVID-19 outbreak, fourth and lastly, they divided the COVID-19 issues into five categories: 1) The status and effect of newly detected COVID-19 cases, 2) Determination of the measures to be taken to prevent and control the epidemic, 3) Determination of the source of the infection, 4) The importance of the field health services that play the most important role in the treatment of the epidemic, 5) Worldwide epidemic and suspect improving the investigation of cases. As a result of these studies, they suggested that social media can be used to measure public attention to public health emergencies, and they expressed that governments and health departments around the world can use the media to better inform the public about health and prevent the spread of COVID-19.

Despite various promising results on the positive impact of social media on the prevention of pandemic, there is a danger of misinformation and its potential results on public health. In a study from 2020, Bastani and Bahrami argue that, on the grounds that false news and information pollution in social media spread very rapidly, this information could mislead the public, health scientists stated that such news in the media should be controlled immediately. The messages of social media users in Iran were checked. They reported that one of the biggest reasons for the rapid spread and proliferation of

misleading misinformation written in the media was that the accuracy of these articles was not checked by officials. Especially some nutritional and dietary recommendations, written about vaccines and some solutions were shown as examples of this misinformation pollution. By dynamically using social media on emergency issues related to health by health scientists, educating the public in the long term is one of the best methods to prevent false news. Also, with appropriate monitoring by health scientists during the COVID-19 epidemic, false information can be prevented on social media and the public can be guided with correct information which would be effective in reducing the epidemic.

CONCLUSION

Social media has not been the most rigorous way to collect information on health-related issues in the history, especially for self-diagnosis or any forms of self-treatment. Seeking medical advice from health professionals has always been a more knowledgeable form of seeking medical help rather than from social media as it carries risks of misinformation and negative results on health. Some studies reviewed in this research have shown a direct link between exposure to distressing news from social media and poor mental health. However, with the start of COVID-19 pandemic, health promotion through media has significantly increased all over the world. Because of its rapid spread at global scale as well as many unknowns about its treatment and its lethal effects, public awareness have been key in protecting public health and reducing the number of deaths in the world.

During the COVID-19 epidemic, many changes occurred around the world, and the negative effects of the epidemic were felt strongly. Social media had both positive and negative effects on public physical and mental health. In this process, social media has raised the awareness of the society as it is used even more as a communication source today than before. Developments all over the world were conveyed to the user via social media. During the lockdown periods, individuals distracted from their stress and united with others through screens thanks to social media. However, as it is hard to monitor all the news on social media, unfortunately fake news and misinformation spread very quickly. The research on media and the impact on public health during the uncertain times brought by the pandemic is particularly important to analyse today in order to take the appropriate necessary measures as there is always a future potential for multiple waves or new pandemics as can be learned from the past.

FUTURE RESEARCH AND DIRECTIONS

We believe that health education to be given to the public about epidemic diseases through the media and social media will also have a wide range of access to health information from reliable sources, and if information pollution can be prevented, it will be effective in reducing the level of fear of disease and minimizing psychological consequences as well as contributing to the early detection of pandemic cases.

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KEY TERMS AND DEFINITIONS

Corona Virus: A potentially severe, primarily respiratory illness caused by a coronavirus and characterized by fever, coughing, and shortness of breath. In some patients, the disease can also damage major organs, as the heart or kidneys.

COVID-19: Short for *co(rona)vi(rus) d(isease) (20)19*, the year in which the outbreak of the disease was first identified; so named by the World Health Organization in 2020.

Distance: The extent or amount of space between two things, points, lines, etc.

Education: The act or process of imparting or acquiring general knowledge, developing the powers of reasoning and judgment, and generally of preparing oneself or others intellectually for mature life.

Epidemiology: The study, assessment, and analysis of public health concerns in a given population; the tracking of patterns and effects of diseases, environmental toxins, natural disasters.

Humans: May refer to that which is, or should be, characteristic of human beings. In thus describing characteristics.

Media: The means of communication, as radio and television, newspapers, magazines, and the internet, that reach or influence people widely.

Pandemics: An epidemic (a sudden outbreak) that becomes very widespread and affects a whole region, a continent, or the world due to a susceptible population. By definition, a true pandemic causes a high degree of mortality (death).

Pneumonia: An acute disease of the lungs, caused by the bacterium *Streptococcus pneumoniae* and characterized by fever, a cough with blood-tinged phlegm, and difficult breathing.

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Quarantina: A period of time during which a vehicle, person, or material suspected of carrying a contagious disease is detained at a port of entry under enforced isolation to prevent disease from entering a country.

Social Media: Websites and other online means of communication that are used by large groups of people to share information and to develop social and professional contacts.

Transmission: Transmission is the act of transferring something from one spot to another, like a radio or TV broadcast, or a disease going from one person to another. Transmission can also be a communication sent out by radio or television, while the transmission of a disease is the passing of that virus or bacteria between people.

Viral Diseases: *Virus*, explained in everyday words, is an extremely tiny particle that causes an infectious disease. It is generally made up of some RNA or DNA coated in protein. It can only multiply in the cell of hosts that are alive. That means, technically, viruses are not themselves living.

Chapter 27

COVID-19 Deaths on the Digital Media

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ABSTRACT

The COVID-19 pandemic has reached a level that threatens the health of the whole world. This study aimed to prevent misinformation on this subject by examining the death-related dimension of COVID-19 disease. In the study, the internet archive of three newspapers (Sabah, Hürriyet, and Sözcü) with the highest circulation as of October 2020 was searched with the keywords “corona death” and “COVID-19 death.” A total of 120 contents in three newspapers (40 items from each newspaper) were selected by a simple random sampling technique and all of them were subjected to content analysis. As a result, the COVID-19 disease was handled in a panic-inducing manner. This situation reflected the images. The deaths will increase even more in the winter months of 2020. Although there are initiatives regarding vaccination, not all people can benefit equally in the short term. Measures are often emphasized, especially by the Minister of Health. While COVID-19 deaths are increasing all over the world, how are they so low in China? This is a question in the contents.

1. INTRODUCTION

The Covid-19 pandemic has reached a level that threatens the health of the whole world. The number of cases and the mortality rate is increasing day by day. With the spread of Covid-19, many contents began to be published.

Receiving news is vital in today's world. Reliability in media is one of the indispensable features of media organs (Akdağ, 2020). When it comes to the Internet, it is getting harder to get accurate news. The opportunity to take real information on the Internet has become increasingly difficult. Fake news about the pandemic increased also. There is information pollution in the media about the situations where the epidemic can cause death. There is an increasing panic in society about the risk of death. Especially the information pollution in social media increases the panic situation of the public.

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This study aimed to prevent information pollution on this subject by examining the death-related dimension of Covid-19 disease.

2. COVID-19 DEATHS AND RISK FACTORS

Different themes are touched upon in the literature regarding Covid-19. However, the common point of the studies is that they focus on risk factors in deaths. In addition to studies that monitor the conditions of Covid-19 patients and report this, there are also studies focusing on the conditions of people at risk.

Different People Groups Have Different Risks

Emphasizing that death poses different risks in different people, Alipour (2020) reported that people were divided into groups such as A, B, C, D, E, F and that the most deaths were in groups D, E, and F and that they encountered those with liver problems in the first deaths they analyzed. They also found that overweight people had a higher risk of death than those who were underweight. They revealed that those with heart problems are also at risk.

The Materialistic Character of Links About Death Statistics

On the other hand, Dağ (2020) follows the course of illness and death through networks such as <https://www.worldometers.info/coronavirus/>, <https://coronavirus.jhu.edu/map.html>, with a spirit of the secular and materialistic character of humanity that reduces death to statistics. According to Dağ, Joshua Sperber thinks that people, who were previously trapped in virtuality and digitalism, about tracking death through their mobile phones, experienced a disconnection from both themselves and their social environment and experienced virtual communication exponentially due to the isolation they experienced due to the coronavirus.

Older People Are at Risk

Arumugam et al. (2020), in their study on the risk of death of Covid 19 in India, it has been revealed that children of all ages are susceptible to COVID-19 and that there is no significant gender discrimination in this regard. He found that Maharashtra, Kerala, and Delhi are the regions where Corona is most common, and most of the cases have happened in Maharashtra. They reported that older people are more likely to be infected and can cause serious and even fatal respiratory illnesses such as acute respiratory infections.

With a similar emphasis on the elderly, Nischal et al. (2020) also revealed that people aged 65 and over are at a higher risk of death from COVID-19 than young people. There are differences in mortality rates among the elderly in various geographical regions of the world. European countries and Canada have two to three times higher mortality than the average global elderly mortality rate from COVID-19; Africa and some Southeast Asian countries have two to three times lower mortality rates among the elderly population. The higher elderly mortality rate in European and American countries is due to the higher number of older people living in these countries.

Older people add that men, those with hypertension, diabetes, cardiovascular disease, and chronic lung disease are at risk. At the same time, obesity and smoking are increasingly risky situations. While

the average case fatality rate for adults under 60 is less than 0.2%, it is 9.3% for those over 80.4 years old (Jordan, 2020). Besides Turk (2020) emphasized in his study that the elderly live with the fear of death.

Giving the Numbers of Deaths is Verifying Country by Country

Eser (2020) observed the Covid-19-induced deaths in Turkey, China (Wuhan), Belgium, lower than in Scotland, UK, USA, Italy, Sweden, Netherlands, Canada, and Israel; on the other hand, it has found that it is higher than Germany, South Korea, Australia, Poland, Portugal, and Japan. The standardized mortality rate in Covid-19 in Turkey is at a very similar level to Switzerland and India. According to the findings of Eser in terms of Covid-19 deaths in Turkey, the population represents that it has a double advantage due to a higher proportion of very young people and old female people whose probability of death level less when compared to developed countries. Eser argues that countries give the number of cases with different calculations. For example, while Turkey reporting only positive cases; many countries are reporting suspected cases also. Turkey has a low older mortality rate due to the lower older age population. There are insufficient data to compare Turkey with other countries.

Jordan (2020) also highlighted various risks. He emphasized that the death rate of those caught with Covid-19 is higher than the seasonal flu. Compiling data from many studies on risk factors, the researcher stated that all adults over the age of 70, those with respiratory problems, those with cardiovascular disease, and those with cancer are at high risk.

Pregnant Women Are at Risk

Pregnant women are also mentioned in the literature as risky groups in Covid-19. Hantoushzadeh et al. (2020) evaluated the test results of 9 pregnant women diagnosed with severe disease in Iran at the onset of symptoms and afterward. As a result of the study, it was revealed that seven out of 9 women died, one was seriously ill and lived on a breathing apparatus. Researchers stated that pregnancy is a risk factor.

People With Chronic Diseases Are at Risk

Kara (2020) focused mainly on Covid-19 risk in his study. He noted that the symptoms associated with Covid-19 can be very mild (including some cases without reported symptoms), severe, or fatal. He emphasized that the possibility of life-threatening Covid-19 disease increases especially in those with chronic diseases (high blood pressure, heart and lung diseases, diabetes, etc.) and in individuals with advanced age. According to the study, the spread of the Covid-19 outbreak in urban areas is more. Poor people living in rural areas are less likely to be exposed to the disease. The researcher states that individuals living on the streets, with limited access to clean water, and refugees or immigrants are among the social groups that are more affected by the epidemic. WHO (2020) reported that the elderly, especially those with chronic health conditions such as hypertension, heart conditions, and diabetes, are susceptible to the risk of Covid-19 infection. Also, the elderly not only face greater health risks, but they also have more difficulty sustaining their lives during this period (United Nations, 2020).

Differently, Schultze et al. (2020) assessed the association between ICS and COVID-19-related death among people with COPD or asthma using linked electronic health records (EHRs) in England, UK. Their results do not support a major role for regular ICS (inhaled corticosteroid) use in protecting against COVID-19-related death among people with asthma or COPD.

Williamson et al. (2020) mentioned some risk factors in their study too. They stated that Covid-19-related death was associated with: being male, greater age and deprivation, diabetes; severe asthma; and various other medical conditions. Compared with people of white ethnicity, black and South Asian people were at higher risk, even after adjustment for other factors.

There is a study before this pandemic, in 2016. In their study, Nemli and Demirdal (2016) pointed out that Coronavirus disease may cause severe respiratory failure. They also stated that the highest risk group was men. The researchers pointed out that people over the age of 50 catch this disease more quickly. They pointed to a serious rate of 40% in terms of mortality. This study is important in terms of predicting Covid-19 pandemic.

Other Issues

Another study is about increasing death rates. Sayılı and Şahin (2020) aimed to show the change in the death rate and evaluate the number of excess deaths in Istanbul during the COVID-19 pandemic period. They found as a result of their studies, death rates increased by 15% to 55% and 3654 excess deaths occurred in Istanbul during the first 8-weeks of the COVID-19 pandemic.

Besides in the study of Usta ve Gökcan (2020) women who have kids say that their children are afraid of the news about deaths due to Covid-19. So they don't want to open the television. Sardelis (2020) examined the data of The World Health Organization for the Coronavirus disease 2019 (COVID-19). He founded that the Coronavirus pandemic has been exponentially increasing both globally and outside of China while they have been exponentially decreasing inside China.

In summary, when the literature on Covid-19 is evaluated, predominantly above the age of 65, chronic patients and the people who have some respiratory problems are at risk. According to gender men are more at risk than women. Countries mention different numbers from each other about the number of cases of Covid-19. Data on fewer elderly deaths in Turkey may not reflect the truth because the proportion of the elderly in Turkey is less than in many countries. In addition to all these, it has been emphasized that the deaths of Covid-19 negatively affect the psychology of children and the elderly. It has been pointed out that while deaths are increasing exponentially all over the world, they are decreasing in China.

3. AIM

The main purpose of this study is to reveal how deaths related to Covid-19 are presented by online newspapers. The main question of the study is "How are Covid-19 deaths framed on internet news sites?". For this main purpose, answers to the following sub-questions were sought:

1. What are the main and side themes of the contents?
2. From which part of the online newspaper the contents are given? (World, health, agenda, etc.)
3. What are the news sources? (Doctor, health institutions, Ministry of Health, associations, etc.)
4. What is the main problem highlighted in the contents?
5. What is the age and gender of the patient associated with death?
6. What is used in the news images in the content?
7. What is the perspective on death?

4. METHODOLOGY

In the study, the internet archive of three newspapers (Sabah, Hürriyet, and Sözcü) with the highest circulation as of October 2020 was searched with the keywords “corona death”, and “Covid 19 death”. A total of 120 contents in three newspapers (40 items from each newspaper) were selected by a simple random sampling technique and all of them were subjected to content analysis. The content analysis was performed in exactly 12 main and 213 sub-categories. Two independent coders coded the contents. The percentage of inter-coder consistency is 83.51.

5. FINDINGS

This section presents the findings of the study under the following titles:

5.1. Newspapers, Content Types, and the Months of Publication

The contents were classified according to the newspapers, content types, and the months of publication.

Table 1. The contents according to the month of publication

Newspaper	March	April	May	June	July	August	September	October	Total
Sözcü	2	4	1	1	6	11	14	1	40
Sabah	0	7	2	4	7	1	19	0	40
Hürriyet	0	0	0	0	8	1	39	0	40
TOTAL	2	11	3	5	13	13	72	1	120

According to Table 1, the contents were published in September (f=72; %60) mostly. The reason is that the researcher searched the keywords in October. Similarly, deaths increased the most in September. But this is related to how search engines work because search engines show the most recently published content first.

Table 2. Content type

Newspaper	News	Column	Total
Sözcü	39	1	40
Sabah	40	0	40
Hürriyet	39	1	40
TOTAL	118	2	120

Table 2 shows that the contents are predominantly “news” (f=179; %98,33). The issue was discussed in “columns” as the second most common content type (f=2; %1,66). This finding might imply that there is insufficient interest in discussing the issue in columns.

5.2. The News Sources and Newspaper Sections

This section discusses the contents according to news resources and online newspaper sections.

Table 3. News sources

News Sources	Newspapers			TOTAL
	Sözcü	Sabah	Hürriyet	
Ministry of Health	3	24	1	28
Unstated	11	4	9	24
Health ministries of other countries	5	2	8	15
Doctors	4	3	3	10
Foreign researches	1	2	4	7
Ordinary people	4	0	2	6
Russian Coronavirus Infection Control and Prevention Center	0	0	5	5
Politicians	3	3	0	6
Other	9	2	8	19
TOTAL	40	40	40	120

According to Table 3, the news sources in the contents are predominantly “Ministry of Health” (f=28; %23,33) that is followed by “unstated sources”(f=24; %20). These contents are at least in the Sabah newspaper. The newspaper with the highest reference to the Minister of Health is Sabah (f = 24; 85.71%). “Health ministries of other countries”, “doctors” and “foreign studies” are important news sources that follow.

Table 4. Newspaper section

Newspaper section	Newspaper			TOTAL
	Sözcü	Sabah	Hürriyet	
World	18	9	19	46
Agenda	7	11	4	22
Health	13	3	0	16
Life	0	14	0	14
Gallery	0	0	6	6
Other	2	3	11	16
TOTAL	40	40	40	120

Table 5. Main theme

MAIN THEME	Newspapers			TOTAL
	Sözcü	Hürriyet	Sabah	
Covid-19 deaths	38	40	40	118
Young deaths	2	0	0	2
TOTAL	40	40	40	120

The codes in the “other” category are as follows: “Foreign media” (f = 4), “WHO” (f = 3), “columnist” (f = 3), “Istanbul Health Directorate” (f = 1), “Reuters” (f = 1), “Worker Health and Safety Assembly Report” (f = 1), “NGO” (f = 1), “TUIK” (f = 1), “Chinese virologist” (f = 1), “USA Disease and Control Learning Center” (f = 1), “Worldometer” (f = 1) and “TTB member” (f = 1).

According to Table 4, the contents are predominantly in the “world” section (f = 46; 38.33%). It is followed by “agenda” (f = 22; 18.33%), “writers” (f = 16; 13.33%) and “life” (f = 14; 11.66%).

The encodings in the “other” category are as follows: “Family” (f = 4), “video” (f = 3), “local news” (f = 3), “authors” (f = 3), “technology” (f = 1), “HürriyetMahmure” (f = 1) and “HürriyetKelebek” (f = 1).

Table 6. Sub-themes

SUB-THEMES	Newspapers			TOTAL
	Sözcü	Sabah	Hürriyet	
The increasing number of cases	29	30	34	93
Call for measures from the Minister of Health	4	25	2	31
Measures were taken by countries	4	0	6	10
The USA, Brazil, and India being the countries with the highest number of cases	8	0	0	8
The most deaths are aged 65 and over	2	0	3	5
The USA is in the first place in deaths	4	1	0	5
Increasing deaths in Mexico	4	1	0	5
The decrease in the rate at which the disease turns into pneumonia	0	5	0	5
Deaths will increase in the autumn months	1	2	3	6
Trump’s insensitivity is related to the deaths in the USA	4	0	2	6
Covid-19 is being reported as natural death	3	0	1	4
Second wave panic of countries	1	1	2	4
The lowest death rate is under two years of age	3	1	0	4
Those in intensive care are 60 years and older	1	3	0	4
Influenza increases the risk of death of Covid-19	0	2	2	4
Other	64	31	5	100
TOTAL	132	102	60	294

5.3. The Main and Sub-Themes in The Contents

This section presents the main and sub-themes of the contents

According to Table 5, the main theme of the contents is mainly “deaths caused by Covid-19” (f = 118; 98.33%). It is followed by “young deaths” (f = 2; 1.66%).

According to Table 6, the sub-theme of the contents is predominantly “the increasing number of cases” (f = 193; 31.63%). “Call for action from the Minister of Health” (f = 31, 10.54%) follows. Other prominent sub-themes are “measures taken by countries”, “USA, Brazil, and India are being the countries with the highest number of cases”, “deaths will increase even more in autumn”, “the highest number of deaths is 65 years old and over”, “the USA is in the first place in deaths”, “the increase of deaths in Mexico”, “the decrease in the rate of the disease turning into pneumonia”, “Trump’s insensitivity is related to the deaths in the USA”.

The encodings in the “other” category are as follows: “229 deaths in Iran on July of 21, increasing deaths gradually” (f = 3), “increasing deaths in India, Brazil and Mexico” (f = 3), “warning not to polemic about the cause of death” (f = 3) “Istanbul, Ankara, Gaziantep, Mardin, Konya, Bursa, Diyarbakir have a maximum number of cases” (f = 3), “until September more than 1 million people lost their lives” (f = 3), “Turkey is the 22-23rd country in the ranking of deaths. (f = 2), “Trump protest” (f = 2), “Minister of Health criticizing the deputy’s sharing on death” (f = 2), “the rate of increase in the number of cases in Australia, Netherlands, France, Belgium, USA, Germany, Lebanon”(f = 2), “according to August data, the most cases are in the age range of 25-49” (f = 2), “12 people under 15 years of age and 6 people under 2 years old died in five days” (f = 2), “people between the ages of 25-49 have high risk of transmission (f = 2), “risk of death of those with chronic inflammation” (f = 2), “India, Australia and Argentina’s case record” (f = 2), “India’s death rate arrive “(f = 2), “the increase in deaths in Costa Rica “(f = 2), “Corona’s epicenter passed from the USA to India” (f = 2), “1200 people worked at filiation team in Turkey “(f = 2)”, “Tekirdağ, Balıkesir, Samsun, Kırşehir, Düzce are famous for their measures” (f = 2), “intensive care occupancy rate” (f = 2), “pneumonia rate 6.7% or 6.5” (f = 2), “chronic patients, over 60 years old, under 2 years old, puerperals are at risk (f = 2) “the most deadly day in Turkey is April 19” (f = 1), “the increase in the number of cases in educational institutions” (f = 1), “Germany’s living doubts about vaccine developed by Russia” (f = 1), “The highest rate of new cases is in West Marmara” (f = 1), “Singapore’s good management of Covid 19, low mortality rate” (f = 1) “Formun death of cardiovascular diseases is not recorded as Covid-19” (f=1), “217 of the 220 children who are sick also have the virus in their family” (f=1), “0.9 percent mortality rate in children” (f=1), “sore throat, fatigue and novelization are the most common symptoms in children” (f=1), “13.3% of sick children are Syrian and Iraqi migrants” (f=1), “warning that the vaccine to be produced is unlikely to be enough for everyone” (f=1), “the highest death rate is in İstanbul” (f=1), “death rate is 2.57 percent” (f=1), “62% of first deaths are from America” (f=1), “falling the death toll in Africa while rising in Europe” (f=1), “Spain’s death rate rises steadily” (f=1), “the death rates in September and May are nearly the same” (f=1), “Turkey is the eighth country with the most patients recovering” (f=1), “The USA, Spain, Germany, China and Italy are the countries where the most patients recover” (f=1), “people in the UK don’t mind Covid 19 and sunbathe side by side in the lake” (f=1), “33% increase in suicides in Australia” (f=1), “Covid-19 is more contagious than flu” (f=1), “mask protest in Berlin” (f=1), “one person dies every five seconds on the earth” (f=1), “rising deaths in Ukraine” (f=1), “200 workers died because of Corona in one month” (f=1), “rising deaths in Australia Victoria” (f=1), “cremation of the coffin of the deceased from Covid-19” (f=1), “drop in case transmission age to 15-49” (f=1), “claim that death rates

are skewed" (f=1), "the proportion of people under the age of 17 diagnosed in Turkey is 5.6%" (f=1), "the drug "Dexamethasone" reduces the risk of death in patients in intensive care" (f=1), "vaccine studies of Russia and China" (f=1), "those at risk should get flu shot" (f=1), "medical assistance from Turkey to Serbia" (f=1), "opening of amusement parks and thematic parks in July" (f=1), "67% of deaths in April were male and 33% were female" (f=1), "average age of cases infected is 42" (f=1), "first death in Vietnam was in July" (f=1), "decrease in the number of deaths in 6 countries" (f=1), "the thought of lifting the restrictions in July" (f=1), "Covid 19 is more risky for athletes' hearts" (f=1), "young people are also under threat" (f=1), "flu vaccine provides 80 percent protection by creating antibodies in the body" (f=1), "drop in death rate in August" (f=1).

5.4. Gender and age-related to the main problem pointed and death

Under this subtitle, there is gender and age information in the contents about deaths.

Table 7. The main problem pointed

PROBLEM	Newspaper			TOTAL
	Sözcü	Sabah	Hürriyet	
Increasing deaths	29	39	39	107
Alleged misleading about corona deaths	5	0	1	6
Other	6	1	0	7
TOTAL	40	40	40	120

According to Table 7, the problem pointed out in the contents is predominantly the "gradual increase in deaths" (f=107; 89.16%). It is followed by the "alleged misleading about corona deaths" (f = 6; 5%).

The codes in the "other" category are as follows: "The allegation that the countries are separated into countries that manage/cannot manage the pandemic process well" (f = 2), "chronic patients have the risk of death" (f = 2), "death is also observed under the age of 15" (f = 1), "workers are the riskiest group" (f = 1), "burning the coffin of the deceased" (f = 1).

Table 8. Gender of the deaths and terminally ill people

Gender	Newspapers			TOTAL
	Sözcü	Sabah	Hürriyet	
Unstated	34	38	37	109
Male	5	2	2	9
Female	1	0	1	2
TOTAL	40	40	40	120

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According to Table 8, the gender of the dead or terminally ill people predominantly was not stated in the contents (f=109; 90.83%). It is followed by “men” (f = 9; 7.5%). Only two women were mentioned about death, one of them did not die, she defeated death at the age of 104.

Table 9. Age of the dead people or terminally ill people

Age of the deaths	Newspapers			TOTAL
	Sözcü	Sabah	Hürriyet	
Unstated	24	32	32	88
65 age and older	0	4	4	8
Old	4	1	1	6
All ages	2	1	0	3
Other	10	2	3	15
TOTAL	40	40	40	120

Table 10. Visuals

Visuals	Newspapers			TOTAL
	Sözcü	Sabah	Hürriyet	
Table /visuals which give information about Corona	19	169	0	188
Crowd group of masked people	3	30	35	68
Masked health worker	1	7	32	40
Healthcare professionals and patients (Masked)	13	2	20	35
Minister of Health	3	29	1	33
Masked woman	1	3	26	30
Doctor and patient taking the test	1	0	24	25
Masked man	4	0	15	19
Covid-19 stamped mask/blood tube	5	1	13	19
Chinese virologist	0	0	18	18
Burned/transported coffin/corpse	2	2	12	16
Healthcare professionals at the bedside of risky patients	9	5	2	16
Hands doing blood tests	1	0	13	14
Mask	0	0	12	12
Visual of the virus	1	8	1	10
Masked students	2	0	4	6
Other	22	11	27	60
TOTAL	87	267	255	609

According to Table 9, the age of deaths or terminally ill people predominantly was not stated in the contents (f=88; 73,33%). In cases where the age of death is stated, the expression “65 years and over” is used predominantly (f = 8; 25%), followed by the expression “old” (f = 6; 18.5). The number of content stating that “all ages” can be associated with death is 3 (2.5%).

The codes in the “other” category are as follows: “47 years old” (f = 2), “15-49 years old” (f = 2), “56 years old” (f = 2), “over 60 years old” (f = 1), “80 years and over” (f = 1), “over 60 and under 2 years old” (f = 1), “under 15” (f = 1), “33 years old” (f = 1), “51 years” (f = 1), “89 years” (f = 1), “73 years” (f = 1), “64 years” (f = 1).

5.5. Visuals in The Content and Attitude Towards Death

Under this subheading, people/places/visuals, etc., and attitude towards death has been evaluated.

According to Table 10, the visuals in the contents predominantly include “table/ visuals that give information about Corona” (f=188; 30.87%). “Crowded group of masked people” (f = 68; 11.16%), “masked health worker” (f=40; 6.56%), “healthcare workers and patients (masked)” (f = 35; 5.74%), “Minister of Health” (f = 33; 5.41%), “masked woman” (f=30; 4.92%) and “doctor and patient taking the test” (f=25; 4.10%) is followed primarily by visuals.

The codes in the “other” category are as follows: “Doctor” (f = 5), “columnist” (f = 4), “computer paramedics” (f = 3), “masked workers” (f = 3), educators. and students (with mask) (f = 3), “politician” (f = 3), “medicine developed for corona” (f = 3), “deceased person (old photo)” (f = 2), “Boris Johnson” (f = 2), “soldiers” (f = 2), “President of WHO” (f = 2), “passport photo of the deceased” (f = 2), “masked child” (f = 2), “summer place” (f = 1), “district governor” (f = 1), “masked protesters” (f = 1), “Canadian Prime Minister Trudeau” (f = 1), “Chinese citizen” (f = 1), “tests” (f = 1), “mayor” (f = 1), “death certificate” (f = 1), “Trump (f = 1),” obese person “(f = 1),” wedding “(f = 1),” researchers “(f = 1),” unmasked crowd in China “(f = 1),” masked men and women (f = 1), “USA flag” (f = 1), “tourism centers” (f = 1), “masked people in a cemetery” (f = 1), “image of people in India” (f = 1), “Trump protesters” (f = 1), “crowded group of people protesting in masks” (f = 1), “British sunbathing in the lake” (f = 1), “masked people worshipping” (f = 1), “dormitory” (f = 1), “laboratory” (f = 1).

Table 11. Attitude towards death

Attitude	Newspapers			TOTAL
	Sözcü	Sabah	Hürriyet	
Panic-inducing / Eerie	26	13	33	72
Temperate / Discreet	1	23	1	25
Neutral	12	2	1	15
Stimulant	1	2	4	7
Sad	0	0		1
TOTAL	40	40	40	120

According to Table 11, a “panic-inducing / frightening” attitude predominantly was used against death in the contents (f = 72; 60%). It is followed by a “mild / prudent” attitude (f = 25; 20.83%). This attitude

is composed of content originating from the Minister of Health. Contents that attitude death in a “neutral”, “septic” and “sad” way comes after. Doctors are the source of all content with a “stimulating” attitude.

6. FUTURE RESEARCH AND DIRECTIONS

This study provided an overview of Covid-19 deaths. The following suggestions can be considered for new studies.

- Studies can be conducted to examine Covid-19 deaths by country.
- Covid-19 deaths can be classified according to the provinces in Turkey.
- Studies can be conducted on drugs or vaccines that prevent Covid-19 deaths.
- More detailed interviews can be made regarding Covid-19 deaths with doctors.
- Studies can be conducted on the reflection of pandemic and death in children.
- Studies in the literature on Covid-19 deaths can be analyzed with content analysis.

7. CONCLUSION AND DISCUSSION

Covid 19 deaths are increasing day by day. As of October 26, 2020, the number of cases in the world has reached 43 million 289 thousand 569 and the death rate has reached 1 million 158 thousand 106. The whole world is in a state of panic about the death of the disease in question. Therefore, data on Covid-19 deaths attract the attention of the public.

The 120 content examined in this study mainly consists of news. The insufficient number of columns suggests that the subject has not been adequately studied and there is a deficiency in this regard.

Those who are in the position of source person in the contents are mainly the “Minister of Health” (f = 28; 23.33%). The newspaper that gives the most reference to the Minister of Health is Sabah (f = 24; 85.71%). Unidentified content follows the Minister of Health (f = 24; 20%). These contents are at least in the Sabah newspaper. “Health ministries of other countries”, “doctors” and “foreign studies” are important news sources that follow.

The basic theme of the contents is deaths from Covid 19. When the side themes are evaluated, the first place is “the increasing number of cases”, “a call for measures from the Minister of Health” and “the measures taken by the countries”. The countries with the highest number of cases and deaths are the USA, Brazil, and India. Most deaths were at the age of 65 and over. This situation overlaps with the relevant literature (Jordan, 2020; Nischal et al., 2020). The rate of the disease turning into pneumonia has decreased, and this rate is 6%. According to the contents, deaths will increase in autumn. According to results negligence of the USA President Donald Trump is related to the deaths in the USA. According to the contents, it reveals that Covid-19 is reported as natural death, the lowest death rate is under two years old, those in intensive care are 60 years and over, and flu increases the risk of death.

Istanbul, Ankara, Gaziantep, Mardin, Konya, Bursa, Diyarbakir have the most numbers of cases. Tekirdağ, Balıkesir, Samsun, Kırşehir, Duzce are at the first level about taking measurements. Turkey’s number of deaths ranking is 22-23.

Chronic patients, over 60 years old, less than two years old, and puerperal are at risk. This situation is mentioned in the literature (Nischal, 2020; Hantoushzadeh et al., 2020). The determination that 13.3%

of sick children are Syrian and Iraqi immigrants coincides with the concerns in this area (Kara, 2020). It supports the literature stating that 67% of those who died in April were men, 33% were women. So men were most at risk (Jordan, 2020). Besides, the data indicating that most casualties are 65 and over are also supported by the literature.

One of the main problems pointed out is “the increasing number of deaths”. However, the problems related to “misleading about deaths”, where countries that manage the pandemic process well and those that cannot manage well differ, and that “chronic patients have the risk of death” are also mentioned in the literature (WHO, 2020; Eser, 2020; Jordan, 2020).

The visuals in the content mainly include “table/visual that gives information about Corona”. It is followed by “crowded masked group of people”, “masked health worker”, “healthcare workers and patients (in a mask)” and “Minister of Health”. The fact that corpses, coffins, and patients at the time of death are frequently featured in the images is an indication that the panic element comes to the fore. Even one fatality in the coffin passed up the fear created by the registration of the disease to be burned in Turkey. The attitude to death is predominantly “panic-inducing / frightening.” While this attitude is predominant in Hürriyet and Sabah newspapers, Sabah newspaper has a “temperate and prudent” attitude. The Minister of Health is the resource person in all of the content in which this attitude is used. The number of ingredients with a stimulating attitude is 7. Doctors are the source person for content with this attitude.

As a result, the Covid-19 disease was handled in a panic-inducing manner. This situation reflected the images. The pandemic is spreading. The deaths will increase even more in the winter months of 2020. Although there are initiatives regarding vaccination, not all people can benefit equally in the short term. Measures are often emphasized, especially by the Minister of Health. While Covid-19 deaths are increasing all over the world, how they are so low in China. This is a question in the contents. Promising content about the Covid-19 vaccine points to the summer of 2021 as a date, the earliest. However, there is controversy over the full positive effect of the vaccine.

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KEY TERMS AND DEFINITIONS

Increasing Deaths: The number of deaths is increasing day by day due to COVID-19.

Mortality Rate: The rate of people who died because of COVID-19.

Older People: Persons over 65.

Panic Health News: The news about COVID-19 deaths.

Reuters: It is a foreign news agency referenced by Turkish online newspapers.

Risky Groups in COVID-19: Groups of risk of deaths, old people, men, pregnant women.

Risky People: People at risk of death.

Worldometer: The site that reports the corona case numbers and mortality rates.

Chapter 28

Analysing Digital Media Contents Representing COVID–19 Pandemics With “21–K Method”

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ABSTRACT

COVID-19 was originated in Wuhan city of Hubei Province, China in December 2019 and has seen many countries ask people who have potentially come into contact with the infection to isolate themselves at home or in a dedicated quarantine facility. In the study, the authors aimed to analyse the context of news and informative scientific discourses of World Health Organization and Turkish Ministry of Health published in digital media with “21-K” method, which is a content analysis method developed by the authors. The categories to be used in the “21-K” method and their discursive examples are as follows: Topic; Heroes: Primary Heroes, Secondary Heroes, Living Heroes, Dead Heroes; Contrasts; Culture; Intersection; Intent; Adoption; Word/Word Games; Rules; Badness; Fight; Proving; Fear; Crisis; Cunning; Anger; Anxiety; Loss; and Codes.

INTRODUCTION

On December 31, 2019, the China Health Authority alerted the World Health Organization (WHO) to several cases of pneumonia of unknown aetiology in Wuhan City in Hubei Province in central China. The cases had been reported since December 8, 2019, and many patients worked at or lived around the local Huanan Seafood Wholesale Market although other early cases had no exposure to this market (Stratton & Tang, 2020). On January 7, a novel coronavirus, originally abbreviated as 2019-nCoV by

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WHO, was identified from the throat swab sample of a patient (Hui et al. 2020). This pathogen was later renamed as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) by the Coronavirus Study Group (Gorbalenya, 2020) and the disease was named coronavirus disease 2019 (COVID-19) by the WHO. The WHO warned that the best way to prevent and slow down its transmission is for all to be well-informed about the COVID-19 virus, the disease it causes and how it spreads (https://www.who.int/health-topics/coronavirus#tab=tab_1). When the first case of a new type of respiratory infection were reported to the World Health Organization (WHO) on December 31, 2019 (WHO, 2020), the outbreak was supposedly domestic, limited to Wuhan, China. This corona virus seemed to be far away and insignificant to most people and also to physicians around the world. Just a few weeks later, on March 11, the WHO declared the new disease (then named COVID-19) a global pandemic (Ghebreyesus, 2020), as the virus (also called SARS-CoV-2) spread rapidly around the world with huge infection cases and associated deaths in many countries.

The rapid increase in the number of patients has required our physicians to learn to protect the society and themselves while intervening with affected patients. With the understanding that the disease is viral and contagious, it has turned into a pandemic, social isolation and quarantine measures have been applied in many countries around the world.

Considering the size of the target audience affected by the messages conveyed by the mass media, especially the traditional mainstream channels, regarding the Covid_19 pandemic affecting the world, the points that the news content published in these tools and the statements of the guests invited to the programs can be carefully considered. In terms of improving health literacy in the media; it is important for health editors or content consultants to have a good command of medical knowledge and terms, and to consider the public interest while creating the contents of health news and health programs. In this context, although Iyengar was the first to adapt the preferred framing analysis to media research in order to distract attention from other directions by emphasizing certain aspects of reality; Most of the existing framework analysis in this area has taken Entman (1993) as a guide. According to this tradition, the effects of journalists' routines, news sources and contents, and broadcasting policies of news media on news production are important in media research.

Media constitute one of the main means through which text consumers get to know more about coronavirus and its escapades. Media outlets have equally risen up to the occasion to give the virus a wide publicity and reportage across the world. Hence, COVID-19 has been the subject of continuous widespread media coverage, especially since the beginning of 2020. The science related studies have explored the epidemiology, causes, clinical manifestation, diagnosis, prevention and control of the novel coronavirus. However, studies exploring the linguistic intervention have not emerged. Studies in this domain, like the current one, are urgently needed to contribute their linguistic and discourse interventions to combatting the outbreak of COVID-19.

BACKGROUND

During times of public crises, governments must communicate crisis information effectively and efficiently to the public; failure to do so will cause individuals to become fearful, uncertain and anxious in the harmful and unidentified conditions.

Citizen engagement during times of crisis is crucial for understanding public priorities and concerns, while minimizing mass panic, fear, and anxiety. Through engagement with the public, governments

can develop citizens' understanding of their actions and self-resilience in crisis response, as well as increasing the capabilities of government agencies in processing crisis information and providing public services (Chatfield & Reddick, 2018; del Mar Gálvez-Rodríguez et al., 2019; Graham, Avery, & Park, 2015; Stark & Taylor, 2014). Social distancing measures, travel bans, self-quarantines, and business closures are changing the very fabric of societies worldwide. With people forced out of public spaces, much conversation about these phenomena now occurs online, e.g., on social media platforms like Twitter. Citizen engagement refers to the involvement of citizens in public affairs, with the aim of building trusted relationships beyond simple information exchange.

Focusing on the COVID-19 pandemic, first reported in China in December 2019, this study further explores the contents formulated by public health agencies during public health crises. Social media research by public relations scholars has shown that the principles of dialogue communication are important determinants for online communication effects (del Mar Gálvez-Rodríguez et al., 2018; Wang & Yang, 2020). Hence, Covid-19 pandemics is a prevalent condition that affects the lives of individuals around the world. In spite of its medical and social significance, little research has been done on the content analysis of governmental agencies' speeches in Turkey, the challenges that the individuals and their families experience in social life. To fill this gap in the literature, this study examines how the mainstream Turkish digital media cover and frame Covid-19-related stories, through a qualitative 21 K content analysis.

MAIN FOCUS OF THE CHAPTER

Language, Content and Discourse

It is known that words are constitutive of reality and language is important and words have effect in our personal lives as well as in formal politics (Shepherd, L., 2010:144). According to the Van Dijk's lexical analysis; words shows us the underlying semantic concepts. Choosing one specific word instead of the other one may be the sign of some specific opinions of a speaker. For this reason these words are not unbiased (1991:53). Since the words choice is usually associated with the style of discourse, choosing specific words may be also a sign of ideologies of the speaker (Van Dijk, 1988:81-82).

Discourse comes forth as both the social practice of discrimination and the main source for people's discriminative beliefs and ideas (van Dijk, 2000). From a more general perspective, it can be said that “discourse is both socially constituted and socially constitutive” (Bishop and Jaworski, 2003: 246). People's perceptions of the world are articulated and shaped through discourse. As a social practice, discourse constructs and gives meaning to group belongings and intergroup relations. Therefore, an analysis of discourse in a society reveals how group belongings are pictured through the background of this discourse.

Keeping in mind that discourse shapes and articulates people's knowledge of the world, it is important to mention that knowledge and power are closely related concepts. As Foucault emphasizes, “power produces knowledge”; “power and knowledge directly imply one another”; and “there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations” (1977:27). It is argued that every socially constructed discourse that becomes dominant serves as a framework, which defines ‘wrong’, ‘good, and ‘bad’ as social concepts, and sets those concepts as ideological notions. In this perspective, ideology

can be defined as “shared social representations that have specific social functions for groups (van Dijk, 1998:191). From a social psychology perspective, discourse is thought as a social practice where group belongings and intergroup relations are constructed.

Discourse cannot be separated from its context; therefore, understanding the roots of any discourse depends on the evaluation of its context. As van Dijk (2010) asserts, if discourse is purposed to control the mind, context should be controlled beforehand. In a traditional and socio-linguistic manner, context is explained as “something that people refer to as something social [...] context] refers to everything that has to do with the social situation, and that situation is the context” (van Dijk, 2010: 14). However, van Dijk (2010) emphasizes that the important thing is how people represent the context in their mind and how they interpret it. Therefore, context does not stand for an objective social situation that influences discourse, but rather for the way people subjectively represent it. It can be said that “the context is not objective, i.e. if it is not an objective social situation but a subjective mental model for the situation, any kind of interpretation would be different for each person” (van Dijk, 2010:15).

Digital Media and “Pandemics Communication”

Large crises such as a pandemic require major behavioral changes, imposing significant burdens on individuals. In this process all institutions, especially the health ministries of the countries, have important duties in order to reduce the negative effects of the pandemic, provide the public with the right information and guide individuals. The importance of communication tools that ensure the connection with the society in the fight against the pandemic is better understood day by day.

Pandemics have been experienced many times in the history of the world with diseases such as black plague, cholera, influenza, swine flu, typhoid, and throughout history, communication tools have been used in line with the opportunities of the age. In the age of communication and technology we are in, interactive digital media, which is called new media, has greatly changed the way people receive news and communicate.

Media is as one of the main discursive field influenced by ideologies. It is possible to see the reflections of the dominant discourse and ideology in the sample in the usage of words. To begin with, the space that the Internet offers for news journalism has two aspects. The first one explains how there is literally more space for news compared to hard copy; and the second one covers geographical reach (Fenton, 2010). In other words, with the help of the Internet, the possible amount of news coverage increases and more people can have access due to the elimination of geographical limitations. In addition, speed of the Internet benefits both readers/users and those who practice journalism. Journalists can use the Internet to collect data without even leaving their office and it is much more faster to publish their news online. And with this speed, online readers can access news that is relevant, up-to-date and immediate.

Online or digital journalism is defined as “the use of digital technologies to research, produce and deliver (or make accessible) news and information to an increasingly computer-literate audience” (Kawamoto, 2003:4). And various technology-based characteristics of the concept are emphasized such as hypertextuality, interactivity, nonlinearity, the use of multimedia, convergence, customization and personalization. (Kawamoto, 2003). When compared to its predecessor, Ward (2002) summarizes what make online journalism practices distinctive. According to the author, the range of access to sources, the amount one can access, the speed of access, ability to analyze data, and the ability to tap in to debates and discussions are the benefits of online as a research tool. When it comes to publishing online, the differences lie within features of information dissemination, archiving, the relationship with the reader,

interactivity, and linkage. According to Ward (2002) publishing online can provide new opportunities for information dissemination and build a more dynamic relationship with the reader.

Pavlik (2013) asserts that the key to the viability of news media in the digital age is innovation. According to the author, news media use innovation strategies in three areas (2013: 190):

These are (1) creating, delivering and presenting quality news content; (2) engaging the public in an interactive news discourse both in terms of citizen reporters and in concert with social media where a public dialogue can easily occur online; and (3) employing new methods of reporting optimized for the digital, networked age.

In addition, capacity, flexibility and permanence can be added to these features (Stovall, 2004). In online journalism, limitations of time and space are eliminated; the web can handle a wide variety of forms like words, pictures, audio and video for the information it presents; and its content is more permanent, if properly maintained, than any other kind of medium. From another perspective, although the need for speed in the digital news production may damage the accuracy of news; Joseph (2011) argues that the speed of the digital news age allows journalists to correct information more rapidly than traditional news media. In other words, even though the notion of speed may cause accuracy problems, it also enables immediate correction of information if an error is found.

Shoemaker and Reese look at social reality in two ways: they advocate that personal social reality consists of the person's own experiences and the values and information shared with those around him/her. For them, when social reality is especially emotional or exciting, it is strongly influenced by the media. Currently constructed and the reconstructed information are stored over time. For them media content is fundamentally a social construction (2014:56). Shoemaker and Reese use the term 'mediated reality', which means the view of the world that the media portray. They believe that media content does not mirror reality and the world in media differs significantly from other representations of reality. They say that; “*producers of news and entertainment content mediate reality through the mere process of doing their work, but also because of their relationship with culture, power and ideology*” (ibid.:39). Thus, examining how digital media represent the context of news and informative scientific discourses of World Health Organization and Turkish Ministry of Health can give us an opinion about the health behaviors produced in the society.

Methodology

During crises, government agencies have historically used social media to release information, observe public behaviors and opinions, control and quash rumors, facilitate crowdsourcing and cooperation, build social cohesion, mobilize resource flows, and promote academic research (Alexander, 2014; Tang et al., 2015; Zhang et al., 2019).

WHO published its first social media message on January 4 and the first technical report on January 5 and shared it with the global media. On January 10, he presented a comprehensive technical guidance package with advice to all countries on how to detect, test and manage potential cases, based on what is currently known about the virus on the COVID-19 page on its website. On the COVID-19 pages of WHO, there are ways of protection from the virus, myths about the subject, frequently asked questions, status reports and detailed information about the virus. Press conferences were frequently held during the pandemic and the records were posted on the website (<https://www.who.int/health-topics/>

coronavirus#tab=tab_1). In addition, various informative online reports and studies about the disease have been prepared. (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/strategies-and-plans>). Regarding crisis communication, a plan template has been formed for the ministries of health and disease control centers in which the communication process is explained and the issues to be considered in crisis communication (<https://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/publications/2017/crisis-communications-plan-template-2017>). In addition to these, informative and educational content such as photos, videos and Infographics have been published from official social media accounts.

In Turkey, a person returning from Europe Covidien-19 with the positive diagnosis was confirmed that the disease entered the country on March 11, 2020. On March 13, Health Minister Fahrettin Koca made a statement via his official Twitter account and stated that the first person infected with coronavirus was under observation and that necessary measures were taken. Following these developments have established the Republic of Turkey Ministry of Health about the illness ALO 184 hotline, where all current and detailed information is located, it has published the <https://covid19bilgi.saglik.gov.tr/tr/> sites. In addition to detailed information about the virus, all communication activities such as the COVID-19 guide, presentations, booklets, posters, videos and outdoor advertisements are included on the site. T.R. A press conference, which is broadcast live almost every day, was held by the Minister of Health, and information was provided on statistical information and current status of the disease. In addition, up-to-date statistical information, photos, videos and infographics are regularly shared from the official social media accounts of both the Minister of Health and the ministry.

This study examines how the mainstream Turkish digital media cover and frame COVID-19 related stories and informative scientific discourses of World Health Organization and Turkish Ministry of Health published between March 2019 and September 2020 through a qualitative 21-K content analysis method published in widely visited search engine motor. The “coronavirus 19” and “pandemics” key words are chosen for data gathering.

“21-K” Method is a “language-discourse-text” analysis system. The text handled in the “21-K” method is analyzed by dividing it into text sections text with the Turkish K letter 21-K. In this context, language, discourse and text arise from cross-sectional relations as well as from inter-word relations. The reason is that language, discourse and text are not limited as at the natural language level. At the same time, non-linguistic reality encounters fictional narrative in intra-linguistic reality. Therefore, the language, discourse and texts that we take into the selection field in our study will be analyzed by turning to their deep structures rather than their surface structures.

The categories to be used in the “21-K” Method and their discursive examples are as follows: 1. Topic: Coronavirus-19-Pandemic. 2. Heroes: 2.1. Primary Heroes: Doctors-Scientists, World Health Organization, Ministry of Health (Dr. Fahrettin Koca), Scientific Committee. 2.2. Secondary Heroes: Nurses, Laboratory Workers, Pharmacists, Dentists, Patients, Hospitals, Hospital Administrative Staff. 2.3. Living Heroes: The animals that caused the virus to appear, the Bat. 2.4 The Dead Heroes: The Vaccine, the Mask. 4. Contrasts: Illness vs. Health, Vaccine Advocates vs. Vaccination Opponents 5. Culture: Eastern Societies-Western Societies. All cultures collaborates to fight against the virus. 6. Intersection: All countries crossed in virus treatment (Vaccine and Medicine) 7. 9 Intent: Did the Coronavirus Outbreak occur intentionally or unintentionally in China? 10. Adoption: All countries on the world accepted the existence of the virus. 11. Word / Word Games: Stay at Home, Chinese Virus, Life Sits Home, Wuhan Virus, Three Rules. 14. Rules: We will overcome difficult days. 12. Badness: Coronavirus. 13. Fight: There were toilet paper and diapers stocking in markets in all countries of the

world, especially in England-Italy and Spain. Later, “Mask” fights started in all countries. 14.Proving: Vaccine studies. 15. Fear: There is fear of death, there is a fear, there is anxiety and uncertainty. Fear is used to control the masses. With the coronavirus, a fear has been created. Uncertainty. 16 The Crisis: A great crisis has occurred with the coronavirus. The crisis is created, and the solution to the crisis is said to me. 17.Cunning: Finding the vaccine.18.Anger: Anger against the virus. 19. Anxiety: Death anxiety, sickness anxiety, anxiety disorder. 20 Loss: Those who died from the virus. 21. Codes.

FINDINGS

Topic 1: Coronavirus-19-Pandemic

Corona Virus (COVID-19) is a Pandemic that originates in Wuhan, China, spreads all over the world and affects many people. Therefore, this Pandemic is the fastest and most difficult to control virus by transmission. In this context, it spreads to large masses by respiratory tract. China is a country that consumes a wide variety of animal foods (such as bats, insects, snakes). The germs carried by such animals infect humans and cause a great epidemic.

1 Heroes:

1.1 Primary Heroes:

- Doctors
- Medical Assistants
- Medical Students
- Scientists
- World Health Organization
- Ministry of Health (Dr. Fahrettin Koca)
- Science board

1.2 Secondary Heroes:

- Nurses
- Health personnel
- Those working in laboratories
- Pharmacists
- Dentists
- Nurses
- Hospital Administrative Staff

1.3 Live Heroes:

- Animals that cause the virus to appear, Bat, Monkey.

1.4 Non-Living Heroes:

- Vaccine
- Medicine
- Mask
- Colania
- Soap
- Disinfectant

Medical tents
Pandemic Hospitals
Intensive care services

2. **Confusion-Chaos:**

With the emergence of the virus, first there was Chaos all over the world and then it turned into Chaos.

3 **Contrasts:**

Illness vs. Health
Vaccine supporters vs. Vaccine opponents
Good vs. Evil
Health vs. Illness
Those who wear a mask vs. Those who do not wear a mask
Those who follow the social distance rules vs. Those who do not follow the social distance rules
Life vs. Death
True Information vs. False Information
Vaccine Fans vs. Vaccine Opponents
Optimists vs. Pessimists

4. **Culture:**

The coronavirus did not differ by culture. Eastern Societies-Western Societies or all cultures have worked together to fight the virus.

5. **Intersection:**

All countries have crossed over in virus treatment (Vaccine and Medicine).

6. **Running:**

All countries of the world remained at the same level with the virus.

7. **Rules:**

14 Rules and 3 Rules have an important place in the fight against coronavirus. The guidelines for home quarantine have been published on the Republic of Turkey Ministry of Health's web site as below (<http://hsgm.saglik.gov.tr>, access time: 17th October 2020):

8. **Intention:**

Did the Coronavirus Outbreak occur intentionally or unintentionally in China.

9. **Admission:**

All the countries of the world accepted the existence of the virus and tried to make joint decisions. All the countries of the world have taken common rules and decisions. The curfew is the obligation to wear a mask. The most effective way to deal with the virus is when people must follow the rules. In this context, wherever there is a problem, it must be prohibited and this must be accepted. Block bans will not be enforced and regional bans and rulings will continue. Therefore, wherever there is a problem, it will be isolated.

10. **Word / Word Games:**

“Stay at home”
“Chinese virus”
“Life Fits Home”
“Social Distance”
“Wuhan virus”
“Three Rules”
14 Rules.

The virus entered the interstate.
We will overcome the difficult days.
The people must follow the rules.
Corona is on the rise in the world.
Corona is on the rise in Europe.
Total loss of life.
New records were set in the number of cases.
2nd stage plan in corona.
The corona is alarming.
Controlled and regional new rules.
You should leave the mind of summer and switch to the mind of winter.
Summer complacency must come to an end.
If there is a risk, we do not exist.
Medical tents that have become the symbol of the epidemic.
“Halay” with the virus.
Second peak of the first wave.
Danger bells are ringing.
What will happen if we get a virus?
They wear the mask either on their chin or elbows.
COVID-19 passwords.
We are here too.
Second wave in coronavirus.
COVID-19 tsunami.
Quarantine days.
Disease symptoms.
Coronavirus is taking the world by storm.

11. **Evil:**

Coronavirus-Virus has done the worst harm to humanity by affecting the whole world. In March, the days are getting worse by the appearance of the first cases in Turkey. The virus, which is a harbinger of evil, is infecting more and more people every day. When we look at history, two important events are seen as “war and epidemic” evil. Over 30 million people around the world have contracted coronavirus. Half of the people must be immunized in order for the major epidemic to be brought under control.

12. **Fight**

In all countries of the world, especially England-Italy and Spain, toilet paper and diapers were stocked in the markets. Later, “Mask” fights started in all countries. Turkey lent a helping hand and exported “Mask” to many countries around the world .

13. **Proof:**

They are vaccine studies and when the vaccine is available, the fight against the virus will be proven.

14. **Fear:**

There is a fear of death, a fear, anxiety and uncertainty. Fear is used to control the masses. A fear of virus has been created with the coronavirus. Uncertainty is always a cause of fear.

15. **Crisis:**

A major crisis has arisen with the coronavirus. Crisis is created and the solution of the crisis is said to me.

16. **Tournament:**

Vaccine studies and Finding Vaccines are an important trick. In this context, the most effective solution against coronavirus is seen as a vaccine. Scientists say that the definitive solution to protect against coronavirus is a vaccine. Therefore, especially in China, vaccine studies are carried out in 24 countries, including Turkey. In large epidemics, half of the people need to be immune and it is a long process in the process. The reduction of this long process depends on vaccine availability. Health Minister Dr. Fahrettin Koca announced on October 3, 2020 that the vaccination study was carried out successfully.

17. **Anger:**

All countries of the world are very angry with the spread of the virus from China. Therefore, especially America and some European countries filed a lawsuit against China.

18. **Anxiety:**

The coronavirus epidemic, which swept the world, continues to spread in more than 40 countries. In this context, people all over the world are concerned about whether vaccines and drugs will be available and whether they can start a normal life.

19. **Lost:**

The number of deaths in the whole world and in our country is over one million. The number of people caught in coronavirus worldwide has exceeded 33 million, and the number of deaths has exceeded 1 million.

20. **Codes (Symbols)**

Medicine symbol (single or double snakes wrapped around the staff)

The COVID-19 Pandemic process, which affects the world and we are in, is a process that is aimed at the health of all societies and individuals and is still ongoing and when it will end. Therefore, in this process, the symbol of medicine has become visible in digital environments. In this context, the symbol of medicine “snake wrapped around the staff” is mainly used by the World Health Organization, Ministry of Health, Medical Faculties, Pharmacy, Dentistry, Health Institutions and Organizations. The symbol of medicine has taken the eyes of the people, the deep structures in the symbol, back from the beginning to the pagans, ancient cultures, primitive and universal mythology.

The medicine icon is a snake wrapped on a staff. In this context, the symbols of “snake” and “scepter” have been attached to social conditions in the development of medicine since ancient times, with religious, linguistic and cultural facts; beliefs, mysticism, hermeneutics and instincts have been instrumental in the development of health sciences. The snake symbol means “the secret of life and death” or it can be interpreted as such and it also means illness, evil and punishment. It also symbolizes power, might, protectiveness, precaution and foresight. The survival of the snake has been regarded as a symbol to extend human life. In all cultures and myths, the symbol “giant snake with its own tail in its mouth” symbolizes rebirth, subconscious, power of nature, intuition and eternity. At the same time, giant snakes have been an important symbol in every culture and myth and symbolize “birth-death-rebirth”.

In all cultures, the tree reaches under the ground with its roots and to the sky with its branches, and the tree symbolizes both underground and aboveground. In this context, the “staff” or “wand-stick” that we will discuss first is made of wood.

The serpent is considered as Satan’s collaborator in the stories in the holy books. In fairy tales, he is a treasure guard and mentioned as a mystical being. It symbolizes strength and immortality. The “snake”, the primary hero of the symbol of medicine, has been the symbol of “healing”, “healing”, “knowledge”, “wisdom”, “power”, “youth”, “rebirth” and “immortality” from the beginning until today. The serpent is the power of the underground. Diseases, evil and death are underground. In Yusuf Has Hacıp’s book “Kutadgu Bilig”, which is one of the most important works of Turkish Culture, the snake (Akgün.1988: 8-9) is mentioned in addition to many animals. From the beginning to the present, snake venom has been regarded as healer.

The ancient Egyptian city of Thebes is the most important medical center. The totem of The City of Thebes or the Ancestor of the Clan and its sacred animal is the serpent. One of the most important places in our country, Harran is one of the first medical centers in history. A 9-century-old clay medicine bottle from the medieval period was found in the Harran region (Access Date: February 15, 2020). On the medicine bottle, there is a snake relief with open mouths entangled with each other.

The snake is also an important symbol in Greek mythology and it appears as Medusa. In other words, the narrative Medusa is the mortal one of the three monster sisters. In other words, it is one of the Gorgoes. When Perseus cut Medusa’s head, two children were born from the blood flowing, one of them was Pegasos and the other was Khrysaor. Gorgoes are three sisters, Sthenno “Euryale and mortal Medusa. The hair of these three sisters is covered with snakes. They have golden wings and bronze hands to fly (Erhat, 2010: 118).

Among the primitive tribes, the symbol of “snake” and “young girl” appears as a primitive form of expulsion from Paradise (Campbell, 2003: 409). The Jews in the desert are starved and thirsty and complain to the prophet Moses. God sends burning snakes to the people, and the snakes bite everyone. The tribe comes to Moses and asks him to beg God to remove the serpents from them (Campbell, 2003: 165). This incident is mentioned in the Bible as follows: “The people of Moses,” Why did you take us out of Egypt so that we could die in the desert? Because there is no bread, no water. ‘(Numbers.Bab.21: 162) and God sent poisonous snakes among the Hebrews as punishment, they bit the people, many peoples of Israel died (Numbers.Bab.21: 162)

There is the symbol of “Shahmaran”, which has an important place in Turkish culture. Şahmeran “Shah-ı Mârân” is the King or Sultan of the snakes in Persian (Develioğlu.1962: 693) or is a female being like Mermaid, six serpents and a female being.

Elijah, also known as the Prophet Elijah, is the narrative of the quest journey with Rabbi Yeşua Ben Levi (Demir-Çomak. 2015: 167). In this narrative, the herb of immortality or herb is a very important symbol and the herb gathering is a ritual or a ceremony in ancient cultures (Eliade.2003: 296) When we look at the “Grass of Immortality” narrative of the Epic of Gilgamesh, which is the first literary discourse of humankind from the beginning; When Gilgamesh saw the death of his closest friend, comrade Enkidu, his corpse was in fear of death at his head and decided to seek immortal life. Gilgamesh goes on a quest to find the “Grass of Immortality”, which symbolizes the life of immortality. Looking at the narrative, when Gilgamesh learned that the grass of immortality was at the bottom of the sea, he dived to the bottom of the sea, “He snatched that plant, without minding its thorns.” (Gilgamesh Epic. 2015: 117). In this context, Gilgamesh says to the sailor Ur-Shanabi, “This plant is exactly the fear of death.” (The Epic of Gilgamesh. 2015: 117). In this narrative, when Gilgamesh takes the herb of immortality, he sets out for his hometown of Uruk and takes a break on the way. Gilgamesh begins to rest and sees a hole filled with cool water and cannot bear it, he jumps into the water. He took the scent of the plant,

came out of a snake hole and snatched it quietly, changed his shirt at that moment, while returning. (The Epic of Gilgamesh. 2015: 117).

In this context, if we look at Greek Mythology, we come across a physician god Asklepios. Physician god Asclepius is the son of Apollo from Kronis. The physician, son of Apollo, is a god and a symbol of medicine. Next to Asclepius is always the rooster (symbolizing the rising sun) and his dog (the healer is the sacred animal). Greeks call it Asklepios, Romans call it Aesculapius. The raven informs Apollo that his wife cheated on him. Apollo is very angry with this news and makes the feathers of the bird with white feathers black (Erhat.2010: 62). Apollo punishes his wife Koronis. Koronis, who is pregnant with Physician God Asclepius, will be burned alive. Apollo does not want his unborn child to be cremated and takes Asclepius out of Koronis' belly. Apollo surrenders Asclepius to the horse-man Kheiron to raise and raise him. Kheiron lives in the forest and has come to the secrets of nature. Kheiron teaches all he knows to Asklepios (Erhat. 2010: 62). Thus, Asclepius was raised as a physician. Asklepios had all the knowledge of medicine and learned how to make medicine. At the same time, he chased secrets to resurrect the dead. Asklepios, the temples of the god were named “Asklepieon”. In other words, god temples are used as healing or hospitals.

Asclepius has cured many debilitated patients. As Asclepius was demigod and mortal, the great god Zeus sent lightning on Asclepius and Asklepios was under the thunder. The “Prescription of Immortality” in the hands of Asclepius fell on a weed, rained, the essence of the article was mixed with the weed and the panacea “garlic” plant grew green. ” were seen as. The physician god Asclepius, the mystical heroic symbol, always has his staff wrapped with snakes next to him. The staff, which is among the most important herbal symbols, is a very important symbol of power and dignity that prophets, king-prophets, physicians, sages and saints have with them.

In the narrative of medicine, if we want to look at Hippocrates (Hippocrates) as the most important physician, we come across “Physician Oath” or “Physician Oath”. In this context, Hippocrates is regarded as the father of the physician oath. In other words, his lineage is based on the famous physician and healer, the physician god Asklepiades of Kos Island. It is stated that Hippocrates was born on the island of Kos in 460 BC (islamansiklopedisi.org.tr/Hipokrat.Access Date: 21 January 2020). Hippocrates first received his medical education from his father Heraclius and later from the philosopher Democritus. Hippocrates also took lessons from the philosopher Gorgias after Democritus. Since he is a Kos Islander, he taught medicine in the hospitals here.

SOLUTIONS AND RECOMMENDATIONS

This pandemics process that creates differentiation and reconstruction in social, physical, psychological, and biological dimensions in every life of people; reformulated a new environment in micro scale (in family and friends, etc.) environment, and in a macro scale (in the public, business environment) etc.). In eliminating the fear and anxiety caused by health issues in the focus of this new and different life, the media coverage and speeches of the state elders and members of the health science board explanations play an important role. Words, that are known in the medical literature but which are not well known by the public, have been placed in our language through the media and have started to be encountered frequently due to the epidemic. For example, newly emerging and reoccurring the first word was “pandemic”.

With the declaration of the Covid-19 pandemic, the uncertainty and the feelings of anxiety with it came to individuals. In the discourses of WHO and the Ministry of Health of Turkey, which were in-

cluded in our study, it was seen that words such as Covid-19, quarantine, social distance, and fillation, which the public recently learned, were instructive. In this way, individuals can express their emotional states related to the pandemic more easily. The presence of similar expressions in the world media also gives individuals the feeling that they are not alone. On the other hand, the use of the same expressions by national and international health authorities and supporting them with positive motivating discourses has been a method of reducing stress and anxiety in the society.

FUTURE RESEARCH DIRECTIONS

The COVID-19 pandemic represents a substantial challenge to the maintenance of global human wellbeing. Future researches about a comparative content analysis of the messages given by the Ministries of Health of all countries and related public institutions towards the society will be a contribution to the field.

In addition to this, further studies may reveal on fighting COVID-19 misinformation on social media. A salient recent example of this is the COVID-19 pandemic, which has bred a multitude of falsehoods even as truth has increasingly become a matter of life-and-death. In the case of COVID-19, this misinformation comes in many forms - from conspiracy theories about the virus being created as a biological weapon in China to claims that coconut oil kills the virus. At its worst, misinformation of this sort may cause people to turn to ineffective or directly harmful remedies, or, more dangerously engaging in risky behavior and inadvertently spreading the virus.

CONCLUSION

Recent outbreaks such as H5N1, Sars, COVID-19 reveal the importance of being ready at the institutional and individual level for these difficult crisis situations. Pandemic periods affect vital activities in all countries of the world and radically change the life flow of individuals ((Phases of Disaster, 2020).

The Pan American Health Organization recommended the following elements for an effective crisis communication plan during the influenza outbreak in 2009:

- Informing and educating
- To improve knowledge and reasoning
- Building and maintaining trust and reputation
- Positioning the institution or agency as the main source of information. ● Connecting with the community
- To promote solidarity and cooperation
- Promoting constructive diorama
- Ensuring public support for policies and plans
- Creating informed decision making mechanisms
- Dealing with rumors and misunderstandings
- Promoting appropriate behavior

The findings of our study provide several implications for government practices in engaging citizens through digital and social media during global pandemic crises. Governments may post and respond to citizen questions to increase interactions with the public in order to improve the engagement level. First, government agencies should comprehensively use rational and emotional valences to satisfy public information demand and to analyze their behavioral changes during different stages of crisis. Government digital and social media can therefore satisfy the needs of citizens to the greatest extent through the releasing of customized pandemics information. Government and public health agencies should consider how media richness matches content type and emotional valence when creating posts. When latest news about the pandemic is released by government and public health agencies, the impact of plain text is no less than that of pictures or videos.

Emotional valence involves positive and negative emotion in a personal information experience (Ji et al., 2019). Existing literature supports the motion that emotional valence has a significant influence on citizen engagement, but conclusions are debated. Zavattaro et al. (2015) indicated that government agencies like to release posts with positive emotions to encourage citizen engagement, and that citizens prefer to interact with government social media accounts which deliver posts containing positive emotion. Hence, considering how the statements of the Ministry of Health and the World Health Organization, which were included in our study, were reflected in the news content, it was determined that the level of anxiety and fear included in the 21 K method such as future anxiety in the society, anxiety of finding the vaccine late, virus and fear of death increased. As stated in the crisis communication plan above, the Ministry of Health has intensified its “word games” and “rules” emphasized messages that the pandemic has not yet ended and that all citizens should continue to take measures.

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KEY TERMS AND DEFINITIONS

Content Analysis: A research tool used to determine the presence of certain words, themes, or concepts within some given qualitative data (i.e. text or news stories). To quantify and to analyze meanings and relationships between these items. Researchers can then make inferences about the messages within the texts, the writer(s), the audience, and even the culture and time of surrounding the text.

Content Framing: Conceptualized different unit of analysis such as text or visuals in news stories or digital media posts to discover the degree to which the selected frame was featured in the story.

Pandemics Communication: A form of communication that should be done regularly and interactively by public health professionals and government health institutions in times of increasing uncertainty, unknowing the treatment process and when it will end which affects the health of the whole society.

Chapter 29

The Use of Twitter for Informing the Public in the COVID-19 Epidemic: Example of Health Science Committee of Turkish Ministry

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ABSTRACT

The coronavirus disease (COVID-19) has influenced the whole world from the moment it appeared. The epidemic had implications in many different areas of all countries of the world. Turkey is among the countries affected by the COVID-19. In this study, the uses of Twitter and the levels of informing the public of COVID-19 Science Committee Members in Turkey were examined. In this process, it was thought that the public needed more information about the epidemic. In this study, 10 COVID-19 Science Committee Members were determined by drawing lots. Their tweets on Twitter were investigated using both qualitative and quantitative content analysis methods. These tweets were analyzed within the categories determined according to content analysis. This study found that the Twitter posts of members of the scientific committee were important in informing the public.

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INTRODUCTION

COVID-19 was firstly appeared in 2019 in Wuhan, China. It caused a massive global epidemic. It has become an important public health problem. This virus is highly contagious and can be transmitted through droplets and close contact. The spread of the virus occurs due to coughing, sneezing, close contact with an infected person exposed to respiratory droplets or aerosols (Chakraborty and Maity, 2020: 2). It is one of the biggest epidemics in world history. Informing the public about the disease during epidemic processes plays an important role in both preventing the spread of the disease and eliminating the panic feeling in the society. The communication between public health institutions and the public is seen as an important tool in responding to disease epidemics. The poor communication between the community and healthcare institutions may be a factor in accelerating the spread of the disease (Reynolds et al., 2002; Abraham, 2020: 10).

The health communication has many issues to contribute. The health communication places emphasis on combining theory and practice in understanding communication processes and changing human behavior. Especially, the most of the threats to global public health are based on human behavior in a period. So, the importance of health communication is better understood (Rimal and Lapinski, 2009: 247). During the COVID-19 epidemic, many communication tools has used to inform the public. During this period, social media has one of the most important tools that people meet their communication needs. The internet has an important source of health information for the public in this epidemic. In 2012, the 72% of internet users (59% of adults) in the United States reported that they were searching for health information online. In the United States, the 77% of health-related online searches were initiated through a search engine such as Google, which specifically leads to social media sites such as Facebook, Instagram, Tumblr, Twitter, and YouTube (Haslam et al. 2019: 54). Although the misuse of social media in health communication brought many problems with it, it has features such as easy communication, participation in communication, picture-sound and networking which was making it a frequently used communication tool (Tanyıldızı, 2020). In the COVID-19 epidemic, the social media has widely used by both government and private healthcare institutions.

In the literature, there have many scientific studies on the use of social media in health communication in the COVID-19 epidemic (Chen et al, 2020; Cuello-Garcia et al, 2020; Depoux et al, 2020; González-Padilla and Tortolero-Blanco, 2020; Hou et al, 2020; Islam et al., 2020; Kuchler et al., 2020; Li et al., 2020; Nabity-Grover, 2020; Rao et al., 2020; Sahni and Sharma, 2020; Tanyıldızı, 2020; Tanyıldızı and Tokgöz, 2020). In this study, the twitter accounts of the members of the scientific board created by the Ministry of Health for COVID-19 in Turkey were examined. The purpose of this research is to reveal how the members of the scientific board have informed the public about COVID-19 via twitter.

HEALTH COMMUNICATION

The health communication is one of the most important sub-disciplines of communication studies. The health communication has an important role in improving individual and social health. By using communication strategies, the awareness of the target audience about a health problem and its solution can be increased. The public health communication as a sociocultural practice has existed long ago. It goes as far as the first attempts to stimulate, educate and influence the behavior of individuals and communities facing public health problems (Salmon and Poorisat, 2020). The health communication includes accurate,

accessible and understandable health information about health that is transmitted to target audiences to improve health. At the same time, the health communication is the scientific development, strategic dissemination and critical evaluation of this knowledge (Bernhardt, 2004: 2051).

The health communication is an important and necessary factor in saving lives during the epidemic crisis. The health communication, which was properly and well-developed, can make it easier for societies to cope with uncertainty and fear. The health communication can encourage and manage the necessary behavioral change and meet the fears and hopes of individuals in the face of a crisis (Finset et al., 2020). The health communication is a versatile and multidisciplinary approach. The purpose of health communication is to influence individuals, communities, health professionals, private groups, policy makers and the public. It is done to advocate, promote, adopt or maintain health-related behavior, practice or policy. It wants to increase the knowledge level of the society about health in a positive way (Schiavo, 2013: 7).

Health is a social, fundamental human right in today's modern democratic societies. This fundamental human right is closely related to the realization of rights and freedoms such as nutrition, housing, work, education, living, freedom from racial discrimination and torture, respect for privacy, access to information, assembly and demonstration rights. These rights are all interdependent. Health communication is the whole of the activities in the process of obtaining the right to health, exercising the right to health, providing and controlling health services (Çınarlı, 2008: 5).

Health communication has a lot to contribute. The field of health communication is recognized in part for combining theory and practice in understanding communication processes and changing human behavior. This approach is valid at a time, when most threats to global public health (through diseases and environmental disasters) stem from human behavior. The health communicators bring together researchers and practitioners from different disciplines. Thus, they have a unique opportunity to provide meaningful input to improve and save lives (Rimal and Lapinski, 2009: 247). The health communication has become an important tool in promoting public health. The health communication principles are currently used for a variety of disease prevention and control strategies, including advocacy for health problems, marketing of health plans and products, educating patients about medical care or treatment options, and educating consumers about healthcare quality issues. In addition, new communication technologies and Internet expand access to health information. At this point, problems such as equal access to information, accuracy of information, effective use of new media come to the fore in health communication (Thomas, 2006: 4). For health communication to improve, these new problems need to be addressed.

THE USE OF TWITTER IN HEALTH COMMUNICATION

The use of the internet as a communication tool in the field of health has become widespread. Many patients have electronic health records. Surgeons can follow patients on the internet. People with chronic illnesses often use the Web to better understand their illness and share their worries and fears. The concept of medicine and health informatics has emerged. This concept is concerned with the role of communication technology in knowledge transfer between people and information resources (Feeley & Chen, 2013: 8).

The individuals can access more information with the internet and social media, but it is not enough to have the knowledge. Although information is available, it may not be clearly structured, organized, or even accessible. The previous studies have revealed four main reasons for this: (1) some of the available information is false information; (2) most of the available information is irrelevant; (3) information entropy:

information is poorly organized and presented; and (4) information overload, too much information for people to make sense of (Islam et al., 2020). There are multiple sources of content in new media. The amount of information has increased, but the quality of the messages is uncontrolled (Resnyansky, 2014).

The flow of information on social media is particularly important in situations where the novelty, rapid development and unpredictability of the situation can lead not only to misinformation, but also to poorly structured and presented information, such as the COVID-19 pandemic. In order to solve the problems in the pandemic, to manage and communicate with individuals about the situation, to comply with the recommended health measures; correct information is very important. Social media can be regarded as a powerhouse of both real and fake news articles (Islam et al., 2020). Social media contribute to improving health communication in the COVID-19 epidemic on the one hand, and causes undesirable effects on the other hand. It supports health communication; because social media tools help to inform the public about the epidemic in the right direction, to raise awareness, to spread the rules to be followed, to reduce panic, to support psychologically by providing interaction between people. In addition, the social media help to eliminate the negativities of COVID-19 caused by the restriction of face-to-face meeting opportunities in many areas such as education, tourism and art (Tanyıldızı, 2020). Therefore, the correct use of social media in health communication is an important issue.

The social media enables health advocates to reach a wider audience. It provides a platform for developing two-way communication with the public and facilitating more participation in advocacy campaigns than ever before (Kareem and Akoja, 2019: 41). The use of Facebook, YouTube, Twitter and other social media tools to spread health messages has increased significantly in recent years.

Twitter is an online microblogging with social networking functions. The users of this micro blogger can send and read 140-character text-based messages (Uittenhout, 2012: 18). With the COVID-19 epidemic, Twitter has delivered messages that sensitize and educate people about the state of the disease, its spread, terrifying factors and mitigation strategies. This communication has made it easier for the public to access important information on time using hashtags. In emergencies, social media allows people to interact with each other and with the authorities to share and consume information (Palen et al. 2009; Rao, 2020). During the COVID-19 process, it is possible to say that both important officials of the state on health and other health leaders inform the public intensively on Twitter.

RESEARCH METHODOLOGY

Since the beginning of the COVID-19 epidemic, a scientific committee has been established by the Ministry of Health in Turkey. The scientific board has duties such as examining the developments related to the epidemic and advising state administrators. Besides, it is another duty of the scientific board to inform the public properly. In this study, the information of the members of the scientific committee to the public about COVID-19 was examined. As an example, eight scientific board members were selected (Wikipedia, 2020).

The scientific board members were determined by lot. Following the normalization process of the members of the scientific board, their shares were examined. The study was limited to the dates of 1 July - 15 July. Twitter posts of the members of the scientific committee on these dates were analyzed using content analysis method. The tweets of them were analyzed with qualitative and quantitative content analysis. The content analysis is a research technique that makes objective, systematic and quantitative definitions of the written explicit content of communication (Berelson, 1971: 18). It is used to provide

an objective, measurable and verifiable explanation of the open and visible content of the messages (Fiske, 1990: 176).

The hypothesis of this research is that the members of the Ministry of Health Scientific Board effectively use Twitter to inform the public in the COVID-19 epidemic in Turkey.

FINDINGS AND INTERPRETATION

The findings obtained as a result of content analysis were given in the form of a table. In the tables, “number” is indicated by “N” for short. The scientific findings and comments obtained from the research are as follows:

Quantitative content analysis findings:

Table 1. Number of Twitter Followers of the Scientific Committee Members

Scientific Committee Members Name-Surname	Prof. Dr. Fahrettin Koca	Prof. Dr. Ateş Kara	Prof. Dr. Serap Şimşek Yavuz	Prof. Dr. Recep Öztürk
Number of Followers	6 million	263,000	22,600	11.500
Scientific Committee Members Name-Surname	Prof. Dr. Tevfik Özlü	Prof. Dr. Zeliha Tufan Koçak	Prof. Dr. Pınar Okyay	Prof. Dr. Selçuk Kılıç
Number of Followers	108,300	9,393	147	383

The table shows the total number of followers of the science board members on Twitter. According to the table, the person with the highest number of followers was Prof. Dr. Fahrettin Koca. Prof. Dr. Ateş Kara was second. According to the table, the third scientific committee member with the highest number of Twitter followers was Prof. Dr. Tevfik Özlü. Based on these data, it was possible to say that usually the rate of Twitter usage by the members of the scientific board was high. Although some of the members of the Scientific Committee had high Twitter usage, it was observed that some of them used the twitter less.

Table 2. Total Number of Tweets and Retweets of Scientific Committee Members

Scientific Committee Members Name-Surname	Prof. Dr. Fahrettin Koca		Prof. Dr. Ateş Kara		Prof. Dr. Serap Şimşek Yavuz		Prof. Dr. Recep Öztürk	
15-day tweet counts	N	%	N	%	N	%	N	%
	89	96,8	2	100	14	66,7	10	58,8
15-day retweet counts	3	3,2	-	-	7	33,3	7	41,2
Scientific Committee Members Name-Surname	Prof. Dr. Tevfik Özlü		Prof. Dr. Zeliha Tufan Koçak		Prof. Dr. Pınar Okyay		Prof. Dr. Selçuk Kılıç	
15-day tweet counts	N	%	N	%	N	%	N	%
	34	97,1	8	80,0	4	66,7	8	100
15-day retweet counts	1	2,9	2	20,0	2	33,3	-	-

Table 3. Number of Tweets of Scientific Committee Members about COVID-19

Scientific Committee Members Name-Surname	Prof. Dr. Fahrettin Koca		Prof. Dr. Ateş Kara		Prof. Dr. Serap Şimşek Yavuz		Prof. Dr. Recep Öztürk	
	N	%	N	%	N	%	N	%
Number of tweets about COVID-19	63	68,5	2	100	14	66,7	1	25.0
Off-topic tweet counts	29	31,5	-	-	7	33,3	2	75.0
Scientific Committee Members Name-Surname	Prof. Dr. Tevfik Özlü		Prof. Dr. Zeliha Tufan Koçak		Prof. Dr. Pınar Okyay		Prof. Dr. Selçuk Kılıç	
	N	%	N	%	N	%	N	%
Number of tweets about COVID-19	35	100	5	50,0	5	83,3	8	100
Off-topic tweet counts	-	-	5	50,0	1	16,7	-	-

The table 2 showed the total number of tweets and retweets of the members of the scientific board for 15 days. According to the table, the person, who tweeted the most in 15 days, was Prof. Dr. Fahrettin Koca. Then, it was Prof. Dr. Tevfik Özlü and Prof. Dr. Serap Şimşek Yavuz, respectively. In total, the scientific board member Prof.Dr. Ateş Kara had the lowest number of tweets and retweets.

Table 4. Distribution of the Number of Tweets of the Members of the Scientific Committee by Days

Scientific Committee Members Name-Surname	Prof. Dr. Fahrettin Koca	Prof. Dr. Ateş Kara	Prof. Dr. Serap Şimşek Yavuz	Prof. Dr. Recep Öztürk
Days	N	N	N	N
Monday	15	-	4	
Tuesday	13		1	
Wednesday	15	2	6	1
Thursday	16	-	3	
Friday	14	-	2	1
Saturday	7	-	5	
Sunday	12	-	-	1
Scientific Committee Members Name-Surname	Prof. Dr. Tevfik Özlü	Prof. Dr. Zeliha Tufan Koçak	Prof. Dr. Pınar Okyay	Prof. Dr. Selçuk Kılıç
Days	N	N	N	N
Monday	4	-	3	2
Tuesday	7	1	-	2
Wednesday	8	5	-	2
Thursday	6	1	1	2
Friday	1	2	-	2
Saturday	4	-	-	2
Sunday	5	1	2	1

Table 3 showed the number of tweets sent by the members of the scientific committee about COVID-19 for 15 days. According to the table, the person, who tweeted the most about COVID-19, was Prof. Dr. Fahrettin Koca. The second most tweeted person was Prof. Dr. Tevfik Özlü. Prof. Dr. Serap Şimşek Yavuz ranked third. Prof. Dr. Recep Öztürk was the member who tweeted at least about COVID-19 at the selected time of the study.

Table 4 showed how the number of tweets of the members of the scientific committee is distributed by day. According to the table, the distribution of the tweets sent by day was regular. Prof. Dr. Fahrettin Koca posted the most tweets on Thursday. His least tweeted day was Saturday. Prof. Dr. Ateş Kara posted both tweets on Wednesday. Prof. Dr. Serap Şimşek Yavuz, Prof. Dr. Tevfik Özlü and Prof. Dr. Zeliha Tufan Koçak made the most tweet on Wednesdays. Prof. Dr. Pınar Okyay tweeted the most on Monday. Prof. Dr. Selçuk Kılıç tweeted an equal number of tweets every day of the week. Prof. Dr. Recep Öztürk tweeted only 1 tweet on Wednesday, Friday and Sunday.

Table 5. Number of Comments, Retweets and Likes in Tweets of Scientific Committee Members on COVID-19

Scientific Committee Members Name-Surname	Prof. Dr. Fahrettin Koca	Prof. Dr. Ateş Kara	Prof. Dr. Serap Şimşek Yavuz	Prof. Dr. Recep Öztürk
Number of Comments	61.224	361	194	-
Retweet counts	265.014	979	1760	2
Number of likes	2.714.100	4.600	3549	14
Scientific Committee Members Name-Surname	Prof. Dr. Tevfik Özlü	Prof. Dr. Zeliha Tufan Koçak	Prof. Dr. Pınar Okyay	Prof. Dr. Selçuk Kılıç
Number of Comments	486	22	-	27
Retweet counts	1335	54	5	-
Number of likes	10.601	273	36	104

The table showed the number of comments, retweets and likes in the Tweets of the scientific board members about COVID-19. According to the table, the person who received the most comments, retweets and likes in the posts, parallel to the number of followers, was Prof. Dr. Fahrettin Koca. Prof. Dr. Tevfik Özlü was secondly located. Although the tweet number of Prof. Dr. Ateş Kara was 2, the retweets and likes was quite high. This means that the tweets posted are followed by many people and the information was high. Prof. Dr. Pınar Okyay and Prof. Dr. Recep Öztürk were the persons whose tweets were never commented. Prof. Dr. Selçuk Kılıç was the member who did not retweet at the selected time of the research. Prof. Dr. Zeliha Tufan Koçak and Prof. Dr. Selçuk Kılıç's comments were found as close to each other. Prof. Dr. Serap Şimşek Yavuz received more retweets, although they tweeted less than Prof. Dr. Tevfik Özlü.

Table 6. Presentation Form of the Tweets of the Scientific Committee Members about COVID-19

Scientific Committee Members Name-Surname	Prof. Dr. Fahrettin Koca	Prof. Dr. Ateş Kara	Prof. Dr. Serap Şimşek Yavuz	Prof. Dr. Recep Öztürk
Text	17	-	6	
Photo-Picture	5	-	-	
Video	-	-	-	-
Table	-	-	-	-
Video + Text	15		-	
Photo + Text	11	2	4	1
Table + Text	15	-	-	5
Scientific Committee Members Name-Surname	Prof. Dr. Tevfik Özlu	Prof. Dr. Zeliha Tufan Koçak	Prof. Dr. Pınar Okyay	Prof. Dr. Selçuk Kılıç
Text	26	-	-	-
Photo-Picture	-	-	-	-
Video	-	-	-	-
Table	-	-	-	-
Video + Text	1	1	1	-
Photo + Text	7	4	4	-
Table + Text	-	-	-	8

Table 6 showed the way in which tweets from scientific committee members about COVID-19 are presented. There were differences in the way the shares are presented. According to the table, Prof.Dr. Fahrettin Koca, Prof.Dr. Serap Şimşek Yavuz and Prof.Dr. Tevfik Özlu were the members of the scientific board who mostly use only the text in their tweets. Prof. Dr. Selçuk Kılıç made all his posts by interpreting the tables. Prof. Dr. Ates Kara, Prof. Dr. Zeliha Tufan Koçak, Prof. Dr. Recep Öztürk, Prof. Dr. Pınar Okyay and Prof. Dr. Selçuk Kılıç were member of the scientific board who uses both a visual material and a text in all of his posts. The photographs and videos were shared by adding the necessary information. There were not members of the scientific committee who only share tables or videos.

Table 7 showed the distribution of the number of tweets of the members of the scientific board by category. Since some tweets fall into more than one category, the number of tweets varies. The most shared topics were about individual measures and the epidemic process. The name that shares the most in the category of individual measures was Prof. Dr. Fahrettin Koca. The second name to share the most in the category of individual measures was Prof. Dr. Tevfik Özlu. The name who shared the most about the epidemic process was Prof. Dr. Fahrettin Koca. The second most tweeted person on the epidemic process was Prof. Dr. Tevfik Özlu. Prof. Dr. Zeliha Tufan Koçak, Prof. Dr. Pınar Okyay, Prof.Dr. Selçuk Kılıç's all tweets about COVID-19 were directed towards the epidemic process. Prof. Dr. Ateş Kara had a total of two tweets. Both of these tweets were about individual measures. Prof. Dr. Recep Öztürk had a tweet in total. This tweet was also related to the epidemic process.

Table 7. Distribution of the Number of Tweets of the Members of the Scientific Committee by Category

Scientific Committee Members Name-Surname	Prof. Dr. Fahrettin Koca	Prof. Dr. Ateş Kara	Prof. Dr. Serap Şimşek Yavuz	Prof. Dr. Recep Öztürk
Categories	N	N	N	N
Normalization Process	5	-	-	-
National Measures	10		-	-
Individual Measures	25	2	6	
Epidemic Process	23	-	8	1
For Healthcare Professionals	4	-	-	-
Vaccine Studies	2	-	-	-
Health Alerts	2	-	-	-
Education	2	-	-	-
Off topic	29	-	7	-
Scientific Committee Members Name-Surname	Prof. Dr. Tefvik Özlu	Prof. Dr. Zeliha Tufan Koçak	Prof. Dr. Pınar Okyay	Prof. Dr. Selçuk Kılıç
Categories	N	N	N	N
Normalization Process	2	-	-	-
National Measures	3	-	-	-
Individual Measures	18	-	-	-
Epidemic Process	14	5	5	9
For Healthcare Professionals	-	-	-	-
Vaccine Studies	2	-	-	-
Health Alerts	-	-	-	2
Education	1	-	-	-
Off topic		5	1	1

Qualitative Content Analysis Findings

In this section, qualitative analysis of the data obtained within the scope of the research were included. The most interacting tweets were examined. For this reason, 3 tweets of the members of the scientific board that received the most comments, retweets and likes were analyzed. The tweets of the scientific committee members, the categories of these tweets and their information status were examined.

Prof. Dr. Fahrettin Koca's 3 most commented tweets were given below:

- “EVERYONE WHO OUR MESSAGE REACHED wears his mask outside today, does he strive to obey the distance rule? HOW MANY ARE WE AGAINST THE EPIDEMIC? ” (4,7 thousand comments)
- During the inspection of the Istanbul Civil Traffic Teams Authority, 42 people came out of the 14-person capacity minibus, which could not close its doors due to the excess of passengers. “HOW MANY ARE WE AGAINST THE EPIDEMIC?”. (3,5 thousand comments)

- “There is no evidence that the virus is less transmitted by mutation, but there are data to suggest the opposite: (((Tracking changes in SARS-CoV-2 Spike: evidence that D614G increases the infectivity of the COVID-19 virus: Cell”. (6 comments, 16 retweets, 52 likes).

The tweets with the most comments, likes and retweets provide information about the epidemic course. In addition, the importance of individual measures was emphasized in the tweets. It is seen that he has been shared about the epidemic in various studies. Prof. Dr. Serap Şimşek Yavuz’s most engaging tweets are about public attention to individual measures more.

During the selected period of this study, Prof. Dr. Recep Öztürk has a single tweet regarding the COVID 19 epidemic. This tweet was given below. The number of comments, likes and retweets for this tweet were given below:

- “The course of COVID-19 in our country and in the world “was published in Kriter magazine.” (2 retweets - 14 likes).

With this tweet, Prof. Dr. Recep Öztürk announced that information about how COVID-19 is progressing in Turkey and World is published in a magazine. He has contributed to those who want to learn more about COVID-19.

Prof. Dr. Tevfik Özlü’s tweets with the most comments, likes and retweets were given below:

- “Our citizens who will return to their homeland, Anatolia, and come together with their relatives and friends due to feasts or holidays! Although it may be very difficult, we have to follow the rules below to protect our loved ones and ourselves. Because the most common reason for our cases right now is not following these rules. “(964 likes, 166 retweets, 38 comments).
- “This time I will write the unknown, not the known.” It is the first tweet of information starting with. (864 likes, 137 retweets, 57 comments).
- “I think two of the most important factors that reduce compliance with the measures in our country are: smoking and our habit of eating together.” (777 likes, 59 comments).
- “Honglei Sun et al. From China Agricultural University reported in their article published in Proc Natl Acad Sci USA on June 29, 2020:” A new flu virus that can cause a pandemic “was detected in swine agriculture workers.” (140 retweets)

Prof. Dr. Tevfik Özlü’s tweets that receive the most interaction were generally directed towards individual measures and the course of the epidemic. In most of the tweets, it was emphasized that the public should comply with social distance and take responsibility. Apart from this, information was given by referring to various studies carried out abroad.

Prof. Dr. Zeliha Tufan Koçak shares the most comments, likes and retweets below:

- “A reference book as a reference for legal processes in the COVID-19 Global Epidemic. It was prepared under the editorship of Prof. Dr. Mr. İzzet Özgenç. I congratulate @TUBA Academy and all our teachers who contributed. “(16 comments, 6 retweets).
- “The measures taken in the epidemic, those made in the administrative field, and those in the field of economy. A comprehensive book by @TRombudsman. Turkey’s struggle with the coronavirus disease.” (3 comments, 47 likes, 8 retweets)

- “Not all children and teenagers are super contagious. An article from BMJ that summarizes the studies showing that the secondary (secondary) attack rate of children is low.. Children are not COVID-19 super spreaders: time to go back to school”. (1 comment, 43 likes).
- “An important publication from # TÜBA: Anatomy of the Global Epidemic: The Future of Humanity and Society ... We discussed the effects of the epidemic on # higher education, health and applied education under the title of Transformation of Health Education After the Global Epidemic”. (68 likes, 14 retweets).

Generally, she shared the current medical literature on COVID-19. All of the posts were in the epidemic process. Instead of warning the public about social distance or a mask, she shared scientific studies.

There were not likes, comments or retweets in Prof. Dr. Pınar Okyay’s own posts. There were likes and retweets only in the tweets he shares as retweets. For this reason, analysis could not be done.

Prof. Dr. Selçuk Kılıç’s shares with the most likes and retweets were given below:

None of Prof. Dr. Selçuk Kılıç’s posts were commented on. The most retweeted and liked tweets were below:

- “We’re doing fine for full opening. The case / test ratio dropped from 2.6% yesterday to 2.3% today, the lowest value in the last three weeks. NEW CASE NUMBER started to push 1000’s (1192). CASE IN TREATMENT is in a horizontal course ”(6 retweets, 17 likes)
- “The decline continues with acceleration. Approximately 5,500 people have recovered in the last five days and the CASE IN TREATMENT has come to 14,000s. Nearly a month’s lowest CASE / TEST rate (2%), NEW CASE NUMBER goes down to less than 1,000 (1,024) over the weekend ”. (16 likes, 4 retweets)
- “Good week, the fall has started again. The CASE / TEST ratio has come to one of the lowest values in almost a month, 2.1%. NEW CASE NUMBER we are very close to the 1000s (1,086). CASE IN TREATMENT has reached 18.000s. ” (15 likes, 5 retweets).

When Prof. Dr. Selçuk Kılıç’s posts that receive the most interaction were examined, it was seen that messages regarding the epidemic process were mostly given. By evaluating the daily number of cases and the size of the epidemic, information was provided about the epidemic process. The public was guided by how data should be read.

CONCLUSION

Twitter has one of the most used networks among social networks. The one of Twitter’s main goals is to convey the word succinctly. For this reason, Twitter has been used for information purposes from time to time. Twitter has been used to inform and guide the public, especially during the COVID-19 pandemic.

Twitter has been used during the COVID-19 epidemic in Turkey. The various messages have been given to the public about COVID-19 via Twitter, which is used by both health professionals and citizens. The COVID-19 Scientific Committee Members also made statements on their personal twitter accounts in Turkey. In this study, the uses of Twitter and the levels of informing the public of COVID-19 Science Committee Members in Turkey were examined. The results obtained in this study were given below:

- Except for some members of the COVID-19 scientific committee, it can be said that these committee members did not insufficient inform the public about COVID-19 on Twitter during the selected time in this study. The Minister of Health, who is also a member of the scientific board, was found as the member who uses Twitter the most effectively. The person, who received the most likes, comments, and retweets in their posts, was also Prof. Dr. Fahrettin Koca.
- The text was generally used in the presentation of the messages of the members of the scientific board on Twitter. The texts were sometimes enriched with photographs. Furthermore, the use of tables and videos was not very common.
- It revealed that the members of the scientific board generally informed their followers about the epidemic process and individual measures. It was very important to provide information about the epidemic to reduce panic in the community. The sharing this information with the public by board members can reduce panic. In addition, the keeping the epidemic under control can be achieved by taking individual precautions. Therefore, it was a correct approach for the members of the scientific committee to inform the public about these issues via Twitter.

As a result of the research, the hypothesis of the research was not confirmed. Although some of the members of the Scientific Committee in Turkey had high Twitter usage in the COVID-19 epidemic, it was observed that some of them used the Twitter less. Health communication is should be uses different mass media to reach target audiences. Today, the one of the most influences of these mass media is social media. During epidemic periods, social media should be used more effectively in informing the public in health communication. Therefore, the social media tools must be help inform the public about the epidemic in the right direction, raise awareness, spread the rules to be followed, reduce panic, and provide psychological support by providing interaction between people.

FUTURE RESEARCH AND DIRECTIONS

The health communication has become very important in today's world where health and environmental problems are increasing. The technological transformation in the media has also affected health communication. The new communication tools have now been added to health communication studies, which were previously carried out with classical mass media. The one of the most important of these tools is social media. In order to contribute more to health communication activities and to solve the problems in this area, it is necessary to increase the studies on health communication and social media. The contribution of social media in health communication can be explained with the scientific articles to be made.

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KEY TERMS AND DEFINITIONS

Communication: Communication is the act of transferring emotions and thoughts from one entity or group to another through the use of understood signs, symbols, and semiotic rules.

COVID–19: It is an infectious respiratory disease that originated in China in 2019 and spread around the world.

Epidemic: Disease that infects most of the people, animals, or plants in a short time.

Health Communication: It is the common area of health and communication. It performs tasks such as raising awareness on health-related issues, offering solutions, and informing the public.

Health Science Committee: The board that provides advice on health-related issues, especially in times of major health-related problems.

Public Information: In democratic societies, public and private institutions make public statements in their decisions, actions, and transactions.

Social Media: It is a digital platform where simultaneous information sharing is captured by user convenience and communication speed, which is available with new communication technologies.

Twitter: Twitter is an online microblogging with social networking functions.

Chapter 30

Precaution or Stigma?

Older Adults in the Turkish National Press During COVID-19 Pandemic

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ABSTRACT

Coronavirus disease (COVID-19) has led to an increase in stigmatizing and discriminatory discourses against older individuals in the community. Explaining that older adults are the highest risk group, labeling individuals based on chronological age instead of personal characteristics, restrictive measures taken, and the way these measures are framed and presented in mass media resources for these individuals reinforced negative stereotypes such as “illness,” “mental decline,” “uselessness,” “isolation,” and “poverty.” In this chapter, news media, as one of the sources leading to the circulation of negative messages about individuals of older age, is reviewed; stigmatizing and discriminatory statements and applications upon the appearance of older adults in Turkey in the national press (Sozcu, Hurriyet, and Sabah newspapers) are discussed, and solution have been made.

INTRODUCTION

COVID-19 disease has turned into a pandemic that affects the whole world in a period of two months. When it was declared pandemic by the World Health Organization (WHO) on 11 March 2020, the disease had spread to 114 countries and more than 118,000 cases were detected (“WHO Director-General’s”, 2020). As of November 2, 2020, in 216 countries and territories, 46,403,652 confirmed cases and 1,198,569 deaths in total (WHO COVID-19 Dashboard, 2020) have been reported. In this period, countries have taken measures according to their own political, economic and cultural structures. Although taken at different levels in different countries during this period (Coronavirus Government Response Tracker, 2020), many practices such as closing border gates, stopping international flights, curfews, quarantine

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practices at various levels, transition to distance education, financial support aids, making the use of masks compulsory, banning collective activities have been implemented (Wood, 2020).

Although the measures taken differ from country to country, it is possible to say that the common point of most countries is the perspective of older age people. During this period, Centers for Disease Control and Prevention announced that 8 out of 10 people who died due to COVID-19 in the United States were aged 65 and over, and individuals in the older age group were at high risk ("Older Adults" 2020). The WHO Regional Director for Europe said that more than 95% of coronavirus deaths in Europe are over the age of 60 (Keaten, 2020). Along with similar statements made by organizations, everyone, from politicians to mainstream media, has accepted the notion that individuals aged 65 and over are vulnerable to COVID-19 because they are under high risk. Based on this determination, the measures and practices structured for older adults have also been adopted by the public (Jimenez - Sotomayor, Gomez - Moreno and Soto - Perez - de - Celis, 2020: 1661-1662). However, the way in which the measures were implemented and conveyed fed negative stereotypes and caused stigmatization. For example, during this period in Italy, using age as a criterion for resource allocation in cases where intensive care unit beds and ventilators were not sufficient, caused ethical debates (Lintern, 2020; Cesari and Proietti, 2020). Older adults abandoned in a nursing home were found dead in Spain (Martinez, 2020), The Texas' Republican lieutenant governor Dan Patrick explained that individuals over the age of 70 can sacrifice themselves to save the American economy (Beckett, 2020). In the discussions on the implementation of herd immunity policy in the UK, it has been discussed how many deaths can be accepted, which will mostly involve individuals in the older age group (Shaw, 2020). Former Minister of Health of Ukraine, Illia Yemets used the term "corpse" for individuals of older age and stated that donors should not spend money on older people (Sorokin, 2020).

One of the driving forces of these stigmatizing practices, which cannot be considered separately from the social context, is handling aging from a biological perspective. In clinical studies that started in the middle of the 18th century, aging cells were perceived as deviations from the norm, and senility were considered a disease that should be treated. Today, the symptoms of aging are tried to be treated with anti-aging, and the old age-disease connection brought by this ongoing perspective affects people's belief systems and attitudes. Social policies prepared with this perspective address old age as the increase in dependency and decrease in productivity, and individuals in the older adults are labeled as an economic burden and problem. The media, which reflects general attitudes towards older individuals, emphasizes the youth-beauty link with the same perspective and reinforces negative stereotypes towards older adults. (Westerhof and Tulle, 2007: 237-241). In the process of COVID-19, where the connection between illness and old age is strengthened, all mass communication channels, including the news media, which is one of the channels of transmission of the measures taken for older adults produced stigmatizing and discriminatory messages consciously or unconsciously, and have become social structures that continue to stigmatize them (Corrigan et al., 2005: 551; Reynolds, 2020: 501; Jimenez - Sotomayor, Gomez - Moreno and Soto - Perez - de - Celis, 2020: 1664). In this chapter, starting from this context, the concept of stigma is described first, and then stigmatizing statements on the older adults in the newspapers in Turkey and solution offers are discussed.

STIGMA AND DISCRIMINATION

The concept of stigma is “disgrace” according to Erving Goffman. Others, believing that they possess something different from the normal one, trivialize individuals or groups stigmatized in stigmatization. Goffman talks about three types of stigma: bodily ones caused by physical deformations; characteristics perceived as perverse and immoral such as mental illness and homosexuality, and ethnological stigmas stemming from race, nation and religion (1963: 4). According to Goffman, individuals who define themselves as normal believe that the members of a stigmatized category cannot be regarded almost as human by objectifying them in society and discriminate them (1963: 2-5). To speak about stigmatization which is the relationship between “attribute and stereotype”, that is, we can think of as a “mark” that connects individuals to stereotypes (Link and Phelan, 2001: 367), interrelated components need to come together (Link and Phelan, 2001: 367; Major and O’Brien, 2005: 395).

The first component that can be considered as the beginning of stigmatization is labeling. In labeling, differences between people are defined and classified based on factors such as skin color, sexual orientation, gender, and disease (Link and Phelan, 2001: 367). Each classification may be a label, but not every labeling may lead to stigmatization. Social relations system and context are effective. For example, every disease diagnosis is a “label”, but in order to be able to talk about stigmatization, it must go beyond the adjective before the person’s name with other components in the social context and contain negative meanings. Common cold symptoms such as runny nose and sneezing, which will not be taken seriously at any time, can nowadays cause you to be stigmatized with the thought that you have COVID-19 disease.

The person or groups labeled by the dominant group are associated with negative stereotypes after labeling. In this process, everyone included in the labeled group is homogenized and generalization is usually made upon negative characteristics. In fact, both the dominant group and the labeled group are not homogeneous, but at this stage, the dominant group defines itself with the characteristics of its best members, while defining those labeled with the worst member of the group and homogenize them. In another component, prejudice, the individuals or groups that are tagged are coded as “others” and dissociated into “us” and “them” in the mind. In the last stage, cognitive and emotional processes are transformed into behavior and discrimination is experienced. That is, the stigmatized person or group is trivialized and excluded by the dominant group (Link and Phelan, 2001: 367-371; Çayır, 2012: 11-14). Briefly, stigma, which starts with a label, is a dynamic process in which discrimination, exclusion, loss of status, and power hierarchy perform together (Fraser et al., 2016). With the constant repetition of labeling and making it permanent, the stigmatized individual accepts the label and internalizes the stigma. So he/she begins to act accordingly (Rapolienė, 2015: 64- 65). When stigmatized individuals or groups act in accordance with stereotypes, it is not considered as an issue. However, problems arise when they aspire to a role that is not considered stereotyped. For example, you may be a homosexual singer or fashion designer in Turkey, but you cause eyebrows to raise when you want to go into politics (Çayır, 2012: 12).

According to Major and O’Brien, the stigmatization process affects the stigmatized person in four different mechanisms. First, stigmatized individuals may be exposed to negative behavior and direct discrimination. Besides, stigmatization, by affecting the stigmatized people via self-fulfilling prophecies can cause them to act in accordance with the expectations. Stigmatization can automatically activate negative in-group stereotypes and lead to stereotype-like behavior in the individual. Finally, stigmatization threatens the social identity of the individual. The person can develop ways of coping with these threats or develop involuntary reactions such as anxiety (2005: 396-399).

STIGMA IN HEALTH AND COVID-19 PANDEMIC

Stigma in health encompasses negative stereotypes, attitudes and behaviors against a person or group with the disease, places associated with the disease, or things related to it. Considering that all diseases are labels, sometimes health conditions themselves can lead to a stigma. For example, being disabled, being HIV positive can lead to stigmatization (Roberto, Johnson and Rauhaus, 2020: 368). Fear of infection and lack of knowledge are among the driving forces of this kind of stigma in health and especially during epidemic periods. In addition, stereotypes, prejudices, and policies defining the “normal” existing in the society are among these driving forces. Stigma in health is experienced in a social context and cannot be separated alone. In this process there is an overlap with “other stigmatization markers such as age, gender, race and class” (Roelen et al., 2020). Groups such as non-whites, the elderly, refugees, the low educated, the poor are at the target of stigma.

Periods of crisis such as pandemics can lead to the emergence of various forms of stigmatization or to the consolidation of existing stigma. For instance, in the ongoing COVID-19 pandemic, places associated with the disease and therefore people associated with that place could be stigmatized. For example, Donald Trump, the 45th president of USA, calls the virus “China Virus” (Bredemeier, 2020) because the coronavirus was first seen in China. In this discourse, Trump labels China by emphasizing the word “China” instead of “corona”, trying to make its connection with COVID-19 perpetual and even blames China. Being not limited to this alone, conspiracy theories and baseless information about the emergence of the disease in a global sense have been disseminated and this situation caused Asian countries to be targeted. Racist and anti-immigrant behaviors fed by rhetoric as such have been seen Turkey (Coşkunarda and Taylan, 2020) and in many other countries. For example, 1500 incidents involving racism, hate speech, discrimination and physical assault were reported between March and May 2020 in the USA alone (Human Rights Watch, 2020). There has been news in the UK that between January and March 2020, hate crimes against the Chinese increased and tripled when compared the ones in the previous two years (Mercer, 2020). Racist and anti-immigrant behaviors associated with COVID-19, which is not limited to these countries, have been seen on many continents, including Africa (Solomon, 2020).

In addition to the locations associated with the disease, individuals diagnosed with the disease or healthcare workers are also subject to stigmatization during epidemic. In this process, individuals who define themselves as “normal” or “healthy” may exclude or dismiss healthcare workers, or people of whom they think are sick in order to protect their health or they can avoid them. People who get sick or die can be accused of being sick because of not complying with quarantine conditions or taking adequate precautions (Roberto, Johnson and Rauhaus, 2020: 369). In Ebola in Africa and Serious Acute Respiratory Syndrome (SARS) outbreaks in some Asian countries experienced in previous periods, behaviors such as avoidance, maltreatment and exclusion towards patients and healthcare workers have been reported (Roelen et al., 2020). Such behavior has also been seen in the COVID-19 pandemic. Examples such as the disseminating the personal information and photos of the woman diagnosed as the first coronavirus case in Ecuador on social media, asking tenants diagnosed with COVID-19 to be evacuated from their homes, people throwing stones to the orphanage where its volunteer works after he was diagnosed with the disease in Haiti, exposing a patient to allegations claiming that he contracted the disease through prostitution in Indonesia (Armario, 2020) are stigmatization of people diagnosed with the disease. In addition, some of the healthcare professionals serving in the front line during this period had to live separately from their family members due to the risk of contamination. They faced difficulties in meeting their shelter and food needs, they were excluded from society, and even exposed to violent behavior

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(Singh and Subedi, 2020). In the text WHO explained attacks against healthcare related to COVID-19, it is stated that healthcare workers are called “contagious rats” and reported discrimination against their family members (“Attacks on health care”, 2020). In this process, the health workers in Turkey were not permitted to stay in a hotel (“They did not let the doctor”, 2020) or the ones staying in were asked to leave the hotel (“9 doctors from”, 2020), have been exposed to violence (“The health worker who”, 2020; “God damn them”, 2020), removed from their homes (“Healthcare worker couple”, 2020), or were excluded (Coşkunarda, 2020).

In the COVID-19 pandemic, the “age” factor has also worked as an effective marker and increased the stigmatization of older age group individuals. Older adults have come to the fore in health policies due to the high probability of having chronic health problems and the high risk of death in COVID-19 disease (Roelen et al., 2020). However, while determining and applying policies in this process, chronological age was used for distinction and individuals were labeled. In various parts of the world and in Turkey, discussion about focusing only on the older age as a fragility factor, the idea that individuals of older age need to be isolated and to whom the treatment is prioritized have led to stigmatization (Roelen et al., 2020; Previtali, Allen and Varlamova, 2020: 506; Brooke and Jackson, 2020; Monahan, Macdonald, Lytle and Levy, 2020: 890). At the beginning of the COVID-19 epidemic, the disease was depicted as the “problem of individuals in the older age group” (Ayalon, 2020: 1). Some countries were able to react slowly, at first thinking that only older people were at risk (Morrow-Howell, Galucia and Swinford, 2020: 529-530) and in the first measures they took, they were able to isolate older people from the society by imprisoning them at home. This discourse and age-based isolation policies have caused young people in many countries to feel strong or immune to COVID-19, and older adults to be stigmatized as the “vulnerable” segment of the society (Ayalon, 2020: 1-2; Previtali, Allen and Varlamova, 2020: 508; Fraser, et al., 2020: 693). Older adults, separated as a homogeneous group, are seen as a threat because they oppose current practices on the one hand, and on the other hand, they are considered as a dependent, undefended and vulnerable group (Ayalon, 2020: 1). For example, comments such as “They’re on their way out anyway” during this period, the “Boomer Remover” hashtag disseminated on social media (Aranson, 2020; Sparks, 2020; Monahan, Macdonald, Lytle and Levy, 2020: 891; Fraser, et al. 2020: 694) and devaluing memes such as “#curfewforpeopleover65” (#65yasustusokagacikmayasagi) in Turkey (Tuna Uysal and Tan Eren, 2020: 1153) are spread as messages that the lives of older adults are worthless.

MANIFESTATIONS OF STIGMATIZING IN THE TURKISH NATIONAL PRESS

The widespread belief that individuals of older adults are respected in the social structure of Turkey creates the perception that there is no stigma and discrimination. However, as clearly shown in the results of the “Aging in Turkey Imagination and Practice” (2019) research, aging in Turkey is postponed to the future as an undesirable phenomenon and are expressed with the negative aspects. Negative associations such as “illness, health problems, death, biological losses, economic difficulties, dependency on others” about aging and sanity were mostly emphasized by the participants of the study. It was also found in the research that individuals of older age were also seen as a social group to be cared for by family or the state and were found to be exposed to discrimination (Aging Imagination and Practice in Turkey, 2019: 85-105). In this section, where the appearances of this negative perception, which is reinforced due to the fact that they are a risk group, are discussed, and the news in the press has been examined. Factors such as the selection of which elements will be highlighted in the media, the use of photography and

visuals are decisive in the formation of semantic patterns. In this respect, it can be said that the media play a role in the spread of negative stereotypes and prejudices based on age (Fraser, et al., 2020: 693; Fealy, 2012: 88, Palmore, 1999: 96-97) and it reproduces the stigmatizing discourses about older people by putting these discourses into circulation.

For the determination of re-produced stigmatizing discourses in Turkey, the curfew time announced for individuals of older age is taken as basis, and the news in the best seller national press are examined. In Turkey, after approximately ten days when the first cases of COVID-19 were seen, the curfew for the older adults was announced on March 21, 2020. Citizens over the age of 65 and with chronic diseases are prohibited from leaving their homes, wandering in open areas, parks, and traveling by public transportation. In the scope of the study, starting the day of the proclamation of the restrictions for the older adults in Turkey, news in the country's three best-seller national newspapers (Hürriyet, Sözcü, Sabah) are considered for ten days (21-31 March 2020). In order to reach the news "old", "elderly", "65 years and over", "COVID-19" keywords were searched on the websites of these newspapers (www.hurriyet.com.tr, www.sabah.com.tr, www.sozcu.com.tr). In addition, the date range was determined in the Google search engine and the news were scanned and compared. As a result of the screening, a total of 195 news items were accessed, 58 in Sözcü, 79 in Hürriyet and 58 in Sabah. In the preliminary analysis of the accessed news, each report is thematically coded according to its content. In the study, which aims to draw attention to stigmatization through the news in the press, addressing individuals of older adults in the news headlines was discussed and the news was analyzed with thematic analysis.

In order to see the manifestations of stigmatization in the news, how individuals of older adults are defined in the news headlines was first examined, in other words, which words are used in the headlines. As can be seen in Table 1, it was determined that the subject of the news was associated with age in 119 of the 195 news stories examined. It has been observed that the chronological distinction of age 65 and over, which is used by the government in measures taken and in policies such as health and retirement, is used in 45 stories. Even this arbitrary distinction (Ayalon et al., 2020) alone is problematic for many reasons. First, the category formed by the use of chronological age in the measures taken for individuals in the older adults is practically problematic. For example, an individual who has a birthday on March 22 and is officially 65 years old cannot go out, while another individual born in April or May can go out. The short time in between does not provide clear information about the health status of that individual. Secondly, creating the age of 65 and over category and labeling this group as "old" mean homogenizing all of them by ignoring the biological, psychological and social differences (D'cruz and Banerjee, 2020; Previtali, Allen and Varlamova, 2020: 506). This homogenization means evaluating an individual aged 65 and an individual aged 85 in the same way.

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Table 1. Naming older adults in news headlines

Naming The Older Adults	Sözcü	Hürriyet	Sabah	Sum
Age 65 and over	15	15	11	45
Old man / old woman	5	5	4	17
Elderly citizens	1	1	7	9
Elderly	8	4	14	28
Uncle / aunt	5	1	1	8
Old farmer / elderly neighbor	2	0	0	2
X year old man / woman / citizen	2	1	1	4
Grandmother / grandfather	2	0	1	3
Retired citizen	0	0	1	1
Our elderly / our seniors	0	0	2	2

It can be said that individuals in the older age group are labeled with the word “elderly” the most in the headlines. The word “elderly”, which is used in reference to vulnerability and fragility, is used in a protective or derogatory context by giving the right of property to the powerful one and arouses sympathy (de Medeiros, 2020; Vervaecke and Meisner, 2020). In other forms of use where this vulnerability is observed, individuals in the older adults lose their gentlemen or lady title and are reduced to the status of uncle, aunt, and grandmother.

When looked at the thematic trend of the news (Table 2), it was found that the services of state institutions such as receiving salary from home, nursing home tracking system or the aid provided to elderly people during the ban period were mostly reported in the news. It can be said that elderly people portrayed in these news as people who need the support of young people and dependent, are the subject of compassionate ageism (Vervaecke and Meisner, 2020) subjects. That while services and aid for the elderly are shown in such news may show that the poor and those in need of help are generally highlighted. These news, which reinforces the perception that every elderly person in the category of “older age” is in need of assistance, appear with titles such as “The gendarmerie plowed the old farmer’s field!” (2020), “All eyes are on them... Everyone mobilizes” (2020), “The police deliver the needs of citizens aged 65 and over to their homes” (2020), “Neighborhood guards came to the aid of the old woman” (2020), “Governor Yerlikaya: We are starting the distribution of food parcels for people over 65 years old” (2020), “The elderly are calling, the state is running: The action of the Muğla Governorship that has received applause” (2020). In essence, such news covers the aid for the needy and the organization of the state’s curfew. Nevertheless, it is presented as aid and service to all individuals in the “elderly” category and therefore reinforces negative stereotypes. In fact, individuals who can meet their own needs when the curfew is lifted are shown as unable to meet their needs, or the age of the poor individuals in need is emphasized, not their poverty. This type of news, which leaves the answer to the question of whether the elderly or poor is in need actually unclear, also encode older people in such a way that they cannot fulfill their responsibilities with the expressions of “we are thinking of you”, “we are making these restrictions for you”, and images of aid and compassion reinforces stereotypes of their “fragility” and “dependency” (Vervaecke and Meisner, 2020). The problems in access to basic needs during such restrictions applied in Turkey stands out as another factor in this kind of news. Although it seems that

there is no problem in news such as “He ordered mineral water from the police in the curfew!” (2020), there is a risk that individuals in the older age group who did not report that they were socially isolated and lonely would be adversely affected by these restrictions and could not access basic necessities (Brooke and Jackson, 2020).

Table 2. Distribution of the topics in the news

Themes	Sözcü	Hürriyet	Sabah	Sum
Details of the curfew	3	2	5	10
Negative behavior towards the older people and responses	8	8	7	23
Negative practices (elderly report line, removal of benches in parks, cancellation of free transportation cards, etc.)	7	8	2	17
Warnings about the need to paying attention to the older people as a risk group and the necessity of staying at home	3	3	4	10
Older adults who do not obey the curfew and go out	7	12	7	26
Legal information (penalty for going out, tax suspension)	3	2	2	7
Police, gendarmerie and municipal controls	3	3	0	6
Penalties imposed on older people who go out on the streets	3	3	2	8
Government implementations such as delivering salary to homes, nursing home tracking system and aids for older people	9	30	27	66
Objections of older people who object to the curfew	1	0	0	1
Older adults who make a request in accordance with the curfew	3	2	1	6
Other news	5	2	0	7
Company statements	3	4	1	8

The second most common theme in the news is the headlines that include individuals of older age group who do not comply with the curfew. In the headlines like “The new occupation of our police: Elderly people who disobey ...” (2020), “The old man in the risk group insulted the reporters, pulled out a knife” (2020), “The old man made people give up: Show me handsome in the photo!” (2020), “The event that shocked! When he was not taken into the public bus, he jumped in front of it” (2020), “The mayor who said ‘Go home’ hit by the cane from a grandmother” (2020), “This is how old uncles are hidden from the police” (2020), the stereotypes that individuals in the older age group cannot take on their own responsibilities or that they experience “mental declines” are reinforced, and they also become the target of “patronizing attitudes” (Fraser, et al., 2020: 693). Older adults are told what they should or should not do as if they do not have autonomy, such as “they should not go out”, and those who do not comply with this ban are trivialized by being criminalized as a criminal or presented as something funny. Another theme that feeds this derogation is the news regarding the measures taken in relation to the older people who do not comply with the curfew. These news are added to the restrictions and contain more reduction and insulting practices and messages. In news such as “The AKP municipality that established an ‘Elderly Report Line’: Call us if you see old people!” (2020), “Corona virus measure with wire fence for people over the age of 65!” (2020), “Benches were surrounded by wire and a letter saying ‘Stay at your home, Edirne, do not force your luck’ was hung on them” (2020), “The benches in Bahçelievler were

removed” (2020), “Transportation cards of over 65 years old are canceled in Ankara” (2020) deprecia-tory and insulting applications like report line founded for reporting old people, wiring the benches or removing them for preventing them to sit, canceling their transportation cards temporarily are visible.

The third theme that the news focuses on is discriminatory and violent behavior towards old people. In all this process, the way both the state and the media framed the measures and the “walling off the old” language made the distinction between the old and young people crystallized. This situation also caused young people to avoid responsibility and have the illusion of seeing themselves as immune to the virus (Previtali, Allen and Varlamova, 2020: 508). More importantly, during the pandemic period, this increasing division between young people and old people caused the youth to direct their anger, fear and irritation about the COVID-19 process to the outer group, that is, individuals of the older age group (Ayalon et al., 2020). In the examples, which are also seen in Turkey in this case, young people showed negative behavior that even leads to violence against individuals of older adults. In the news-papers, reporting these behaviors under the headlines such as “In Manisa, the police mistreated the old man! Statement from Police” (2020), “Usurped with ‘Do you want cologne?’!” (2020), “Another video of shame! They forcibly stopped the old man and poured cologne on his head” (2020), “They poured water on the old people sitting on the bench and warned about coronavirus!” (2020) and showing their videos continuously cause these events to appear natural and legitimate.

Another issue that can be evaluated together in the news is the curfew itself. When we consider all the categories separated as details of the curfew on this issue; legal issues such as what the penalty to be given in case of breach of the ban; police, gendarmerie and municipal controls; penalties imposed on old individuals who go out on the streets all as a measure taken, it is possible to say that the measure itself constitutes a basis for stigmatization (Roelen et al., 2020).

It was seen that among the 195 news stories analyzed, there was only one story that included the de-mands, needs and criticisms of individuals in older age group. In the article titled “Who will pay my rent and who will give my bread?” (2020), the reactions of old people who have to work against the curfew were discussed. It is possible that Sabah and Hürriyet newspapers, which are considered to be close to the government, do not contain such news. However, the fact that there is only one story on this subject even in the newspaper claiming to be opposed to the government is a manifestation of the individuals in the older age group being seen as a “burden” to the society. Because of this thought, the demands and needs of older people are not taken into consideration in political decisions and their voices are rarely heard (Fraser, et al., 2020: 693).

SOLUTIONS AND RECOMMENDATIONS

The first thing that can be done to minimize the stigma in the context of COVID-19 listed in the chapter is the careful use of language. References to the origin of the virus that will cause labeling and mes-sages that might strengthen negative stereotypes towards both individuals of older age group and other groups and make them look guilty or bad should be avoided (Roelen et al., 2020; “Reducing Stigma” 2020; WHO, UNICEF, IFFR 2020). In addition, it should be avoided to tell old people what to do with a “paternalistic attitude” (Ehni and Wahl, 2020: 519). In addition to individual avoidance, the media should also engage in ethical reporting (WHO, UNICEF, IFFR 2020), should not share images with negative consequences which can be potentially stigmatizing, and of course pay attention to the language they use. In order to increase public awareness, opinion leaders should be encouraged to speak against

stigmatization in news media and social media, and the media should be used effectively in order for the society to access correct information. Besides, chronological age-based categories and policies should be discussed and ethical-based rules on access to medical care should be developed (Ayalon et al., 2020; Ehni and Wahl, 2020: 516-519).

Intergenerational contact and communication is an important tool in reducing negative attitudes and behaviors such as discrimination. For this reason, ways to strengthen social relations between different generations should be tried, even if they are not physical. Common activities such as online services (Zoom, FaceTime, Skype, social media, etc.) communicating by phone, mail, reading and discussing the same book (Ayalon et al., 2020) may be considered. However, in this process, the “digital gap” should be taken into account (Ayalon et al., 2020) and alternative solutions such as providing equipment and short trainings should be developed for individuals in older adult group with limited access to technology.

FUTURE RESEARCH DIRECTIONS

Research should be done on the relationship of age with other markers in order to better understand the mechanisms of stigmatization, that is, on the intersection of different groups such as old-poor-woman-Asian.

CONCLUSION

Despite warnings and efforts against age discrimination and stigmatization, it can be said that since the beginning of the COVID-19 pandemic, negative stereotypes and prejudices towards older adults are much more visible and discrimination is increasing. It is known that intergroup conflicts arise in times of crisis, when uncertainty and information gaps increase, and when resources are scarce. In this process, the boundaries of the distinction between older adults and young people became clearer and this situation was reflected in attitudes and behaviors. The repetition of all components of stigmatization such as labeling, devaluation, discriminatory behaviors, and the spread of negative stereotypes in the news causes this problem to deepen. For this reason, steps should be taken to support intergenerational solidarity, including but not limited to the proposed solutions.

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KEY TERMS AND DEFINITIONS

Ageism: Age-based discrimination.

Discrimination: Unequal or negative behaviors directed at a person or group because of a certain characteristic. While stereotype is cognitive and prejudice is emotional, discrimination is the behaviors that refer to them.

Labeling: It can be called as the beginning of stigma. It is the perception and naming of a person, group, or behavior as a deviation from the norm.

Pandemic: It is the spread of an infectious disease to a wide area in the world and affect a large number of people.

Prejudice: Usually negative emotions are fed by stereotypes.

Stereotype: The positive or negative images and belief we create in our minds about a certain object or group.

Stigma: Making an individual who is perceived differently from the normal decreased to a less valuable status and exposed to discrimination due to the label placed in front of his/her name.

Chapter 31

COVID-19 and the Mass Media: A Scenario of the Pandemic in India

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ABSTRACT

COVID-19 is the cause of the greatest pandemic of the century that affects almost every nation of our globe. In India, mass media has played a significant role in this pandemic situation. The media coverage revealed fearlessly the condition of COVID-19 and provides a pictorial view of the situation in front of the readers and viewers. The main objectives of these fearless journalistic works were to provide the public valuable authentic information, create awareness among the public, eliminate fake propaganda and fake news, highlight the problem face by the ordinary public, and to provide the government a medium to speak with the public for the public interest. Mass media served as a vital weapon to fight against COVID-19. The valuable information and instructions provided by mass media created awareness among the public and which played a major role to deescalate the graphical representation of active COVID-19 cases. The outbreak of COVID-19 and the dogmatic approaches of the mass media in the pandemic situation have recalled the concept of media as the third pillar of democracy.

INTRODUCTION

The term pandemic was almost obsolete and unused for a prolonged period. The arrival of COVID-19 makes the term common and now almost everyone becomes aware of it. The greatest pandemic of the century was caused by a highly transmissible unknown viral disease called COVID-19, which has changed the scenario of the entire globe. During the crisis of COVID-19 the globe was busy in tackling with one of its greatest pandemic. Almost every nation has been affected and thousands of people die every day in various part of the world. India was not discrete from its affects but India was ready from the very beginning of its arrival with various strategies, medical facilities and mass media. In India during the COVID-19 crisis, the roles played by mass media were extraordinary and cannot be ignored. Mass media has performed multi dimensional roles during the crisis.

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Mass media have long been recognised as a powerful forces and a fourth pillar of democracy which continuously monitored over the situation during the pandemic crisis. In India, mass media has done their works with a terrible speed after the outbreak of COVID-19. They became highly active and have played some responsible roles during the pandemic situation. They highlight the scenario of COVID-19 from across the globe while on the other they provides valuable information and instructions related to COVID-19. The information provided by mass media played a significant role against the greatest pandemic of the century. Indian mass media continuously update their stories with appropriate headline on a regular continuous basis which mainly informed the citizen about COVID-19 and its various details. They collect and disseminate various news stories related to COVID-19 from various part of the nation and of the globe with an objectives of dissemination of valuable authentic news and information, maintaining proper communication system, creating awareness among the public, highlighting the problem face by the ordinary people, giving government a medium to speak with the public for public interest, and elimination of fake propaganda and fake news.

These objectives were highly crucial for the society to maintain safety and peace during the COVID-19 crisis but it was seen that the fake propaganda and fake news turned into a major issue during the pandemic crisis. Fake news move like grapevine and always tried develop a misconception among the society. Removing the fake news becomes a challenge for mass media as well for the society. However Indian mass media has tried desperately to eliminate those fake propaganda and fake news with proper, accurate and authentic news to established safety, stabilities and harmony within the social system during the pandemic.

MASS MEDIA AS A SOURCE OF INFORMATION

In India, information has served several significant roles during the COVID-19 pandemic crisis. Information performs various functions and supports the society from various dimensions. Indian government declared lockdown on 24th March 2020 with the outbreak of COVID-19. Nearly 1.3 billion Indian wilfully locked themselves within their residents for the safety. Mass media were the only sources of information for them, through mass media they received various data and information related to the situation of various places, medical facilities, government activities and various announcements.

Indian mass media has played a wide role in information gathering and dissemination not only within the nation but also across the globe during the pandemic. Mass media continuously provided several valuables national and international news about the Corona virus and COVID-19 on regular basis. Through the mass media Indian citizen get a pictorial view of how Corona virus spread the COVID-19 in the city of Wuhan in China. It also informed how other countries were fight against COVID-19. The vivid descriptions of the tragic stories of United State, Brazil, Italy, Spain, Russia, Iran and many other countries that were highly affected have been also disseminated through mass media. Mass media act as a major source of international news during the pandemic situation of COVID-19.

Along with these tragic stories, various research related stories of Sar-Cov-2 or COVID-19 were also got published in various mass media after the outbreak of pandemic. It has informed the public about laboratory or research oriented activities based on Sar-Cov-2 or COVID-19. These stories mainly related to the structure of corona virus, development of test kit, development of medicine and vaccine production etc. However, this news stories are highly popular and provides a light of hope to the public in amid of global pandemic situation.

Indian mass media disseminate information on Corona virus and COVID-19 in various ways. Along with news presentation eBooks were also became a vital mode of information dissemination. Indian media house 'The Hindu' launched a wonderful eBook with titled '*The Pandemic Notebook*'. The subtitle highlights the objectives of the eBook where they mention "A handy guide from The Hindu on understanding the corona virus pandemic and staying protected against COVID-19". The book is highly valuable as it contained various data and information related to COVID-19 and its precautions. In its introduction the book mentioned (Prasad, Perappadan, Shelar, Koshy; 2020):

"The Hindu has been covering the pandemic since the early days with the highest journalistic standards, ensuring that science and safety are the primary focus. For the benefit of our readers, we are now compiling the most relevant parts of our coverage in the form of an eBook that we hope will be a handy guide to good health practices as well as in fighting misinformation"

Case Study: News article on Covid-19 vaccine published in Hindustan Time's news website.

A well known Indian news media 'Hindustan Time' published and posted on its website on July 4th, 2020 an article with headline "*India's COVID-19 vaccines ready for human trials: All you need to know about Covaxin and ZyCoV-D*". The news article provides vivid descriptions about the progress of India's indigenously produced vaccine of COVID-19. It discussed about two Indian companies Bharat Biotech International Ltd and Zydus Cadila that has got an approval from the Drugs Controller General of India (DCGI) for human clinical trials for their indigenously developed vaccine against Sars-Cov-2 (Ray, 2020.)

MASS MEDIA SUPPORT IN AWARENESS CREATION

While discussing the role of mass media in context of pandemic situation and COVID-19, the activities of mass media in awareness creation among the public cannot be ignored. In awareness creation, the mass media has taken a significant role. Mass media propagated various news stories related to COVID-19, corona virus and safety precautions with a wonderful presentation. Their impact on the public was in highest form. Governmental and several non-governmental organisations used various forms of mass media to propagate information for creation of public awareness about COVID-19 and corona virus. In the initial days of the outbreak of COVID-19 in India, the mass media were started to inform how COVID-19 spreading among the public, source of transmission, Symptom of COVID-19 and various precautions and preventive measures. All these information propagated by mass media desperately tried to create social awareness among the public.

Mass media highlights COVID-19 as a highly transmissible disease which spread from person to person who comes in close contact with the infected one. When infected person breath-out, cough or sneeze they expel tiny droplets which contain the virus. This information suggests to maintained social distance which was necessary to stop and to deescalate the rate of spread of infection. In India, the symptom of COVID-19 was also propagated through mass media by various government organisations and several NGO. The symptoms of fevers, dry cough, shortness of breath, tiredness, sore throat, headache, etc suggest the public to contact immediately with the doctors and hospitals. The awareness related to symptoms is highly necessary to deal with COVID-19. Along with these mass media also disseminate

various precautions and preventive measures instructions such as stay home stay safe, avoid touching nose and eyes, use of mask and gloves, washing hand with soap at regular interval, use of high alcohol based sanitizer for hand sanitizing etc which also create a high level social awareness among the public.

Case Study: Public service advertising of Health and Family Welfare Ministry of Government of India on COVID-19 precaution.

Indian government has desperately tried to deescalate the growth rate of corona by creating awareness among the public through public service advertising. The advertising encourages the public to adopt various precautionary measures.¹ Indian senior veteran actor Shri. Amitabh Bachchan broadcast a public service advertising of Health and Family Welfare Ministry of Government of India on COVID-19 precautions. The advertising was broadcast on *Doordarshan* and on various Indian television channels where the senior actor suggests various precautionary measures against Corona virus that caused COVID-19. The advertising with its wonderful presentation suggest the public what to do and how to act during COVID-19. The advertising also provides government helpline number to support the public against COVID-19.

MASS MEDIA STAND AGAINST FAKE NEWS:

The global pandemic was a serious threat and challenge to entire globe. Within the crisis of COVID-19, fake news and fake propaganda was a major issue. Fake news is actually disinformation or hoaxes used to confused the public and government authorities. It always tried to escalate the misconception among the public and to affect various system of the society. However the pandemic situation is highly critical and full of fake news along with the right one. The fake news were mainly generated from various social media, irresponsible news portal and unauthorised blogs for gaining cheap popularity. UNESCO in its issue brief with title '*Journalism, press freedom and COVID-19*' stated in the 'Key trends 1' with sub headline '*Fueling the pandemic, a dangerous disinfodemic has arisen*'²:

"As the novel corona virus has reached nearly every country on earth, there has also been mass circulation of falsehoods that spread as fast as the virus itself. These lies have helped pave the path for the infection and they have sewn mayhem in how societies are responding to the pandemic. Recognizing that danger, United Nation Secretary -General Antonio Guterres has warned that "our enemy is also the growing surge of misinformation" "

In India several fake news or hoax spread like grapevine and develop various misconceptions among the society which dramatically tried to create confusion and affect a major section of the society at large (Sahoo, 2020). Fake news was travelled much faster than the corona virus in India. According to a recent report by the fact checking website BOOM, COVID-19 related fake news which began climbing in the third week of March took a massive spike in early April, Out of 178 fact checks the website conducted since the onset of COVID-19 in the country, as much as 35% of them were fake videos, 29% images and a similar percentage were doctored messages on range of issues such as fake diagnosis and treatment, falsified quotes by celebrities with their photos, false notifications and lockdown guidelines among other.

Propagation of fake news and fake propaganda was a major drawback for the society and in the pandemic situation removing fake news became a major challenge for the mass media. Mass media were deliberately tried to eliminate the fake news and fake propaganda through its random news presentation which consist of real and authentic information and data. The news of mass media narrates the real situation of COVID-19 in front of the public and removes the misconception which developed through the propagation of fake propaganda and fake news. Mass media also highlight several stories showing government action against those who are propagating fake news. Through these actions, government shows a responsible view towards society and by propagating news of those actions mass media also shows their responsibilities towards the society.

Case Study: Report of women held by Kolkata Police for propagation of the fake news on social media.

The arrest of a woman of 29year old by Kolkata Police for the propagation of fake news on social media was a wonderful case study of action against fake news. Times of India which is well known media group of India published on its web portal on March 28th, 2020 with a headline “*Kolkata: Woman held for posting fake news on ID Hospital doctor*”. The news described the incident of a fake news propagated by a women where she say a doctor of ID Hospital turn Corona positive while treating the patients but it was found fake and the doctor was fine. Later Health Department lodge a FIR against her and she was arrested for posting fake news on social media (Yengkhom and Ghosh, 2020).

MASS MEDIA AS A MEDIUM TO CONVEY ANNOUNCEMENTS:

Mass media played a significant role in convey of various announcement. After the outbreak of the pandemic caused by COVID-19 Central Government of India, State Governments, various national and international organisations like ICMR, World Health Organisation (WHO), etc used mass media for the propagation of various announcements. Mass media act as a platform for these organisations through which they conveyed information for the welfare of the society.

In India, Honourable Prime Minister Shri. Narendra Modi and various government spoke person arrived several times in front of mass media during the crisis of COVID-19 to announce various declaration (Raid, 2020). In India COVID-19 first shows its existence in Thrissur district of Kerala. The first case was come to light on January30th as The Ministry of Health and Family Welfare issued a statement which highlight the first patient of India was an Indian student of Wuhan University of China. Prime Minister Shri. Narendra Modi on March 22, 2020 gave a clarion call for the citizen of India where he urged for a fourteen hours nationwide ‘Janta Curfew’. It was broadcasted in various television channels, radio and newspaper. On March24, 2020 Government of India took a vital decision of ‘Lockdown’. Honourable Prime Minister Shri Narendra Modi arrived again in mass media and announced 21 days lockdown that began from March 25, 2020 to April14, 2020. It was the first phase of lockdown. Later, on April14 honourable Prime Minister reappear on mass media and declared the second phase of lockdown from April15, 2020 to May3, 2020. In a similar way government spoke persons appeared on mass media and continued various announcement and declaration on COVID-19 crisis again and again for the well fare of the nation. Along with the Honourable Prime Minister Shri Narendra Modi, Finance Minister of India Smt. Nirmala Sitharaman was also conducted various press conferences for the announcement of various benefits during COVID-19 crisis.

Most of the Indian mass media also focused on World Health Organization's instruction and advice. World Health Organisation is an international organisation who declared COVID-19 a serious public health emergency and as a pandemic. The organisation conducted press briefing on a regular basis from its headquarter Geneva for briefing the global situation of the pandemic, important documents evolves from various research related to Sar-Cov-2 conducted by various organisations and nations, along with various suggestion related to treatment of COVID-19. The press briefings of World Health Organisation are highly valuable which indicate in which way the pandemic is moving.³ Several Indian mass media also revealed the press briefing of World Health Organisation to suggest the Indian what the international organisation highlighting.

Case Study: 'The Hindu Centre's' – COVID-19: Press releases and updates by the Government of India and WHO

'The Hindu Centre' a website of The Hindu group regularly updated information and press release on COVID-19 issued by government of India. It issued Government of India press releases under the caption "*Press Releases on COVID-19 issued by the Government of India*". These press releases are the written form of government announcement which are highly informative and necessary for the society⁴. Anyone can read those Press releases according to their needs. The case study of The Hindu Centre's Press release documented the role of media in saving and propagating government announcement.

MASS MEDIA AND COMMUNICATION

Mass media became the only source of communication during the pandemic and lockdown in India. The COVID-19 pandemic turn the Indian highly conscious, most of the time they stay within their house for their own safety and for the safety of the others. Mass media along with the social media was the only way of communication. However social media also played a significant role in the communication process. The communication system helps the Indian to remove mental stress which caused due to social distancing. The Chatting and talking through social media refresh most of the Indian and provide mental support during the pandemic crisis. Through chatting they shared several information and data which was necessary not only for COVID-19 awareness creation but also in various other fields.

In India, it was revealed by various researches that there was a sharp rise in the user of social media during the period of COVID-19 pandemic. During the pandemic it was seen that after the declaration of lockdown by Prime Minister of India the user of social media and mass media has rises to a wide level and in various social media website profile ID has also get increased. The Indian uses social media such as Facebook, WhatsApp, Twitters etc. mainly used for communication, news, and awareness creation where as mass media such as newspaper, television, and radio used for authentic news, information and data along with various government instructions (Shalvee and Sambhav, 2020).

Case Study: Report of FirstPost with headline 'Media Usage during COVID-19 Lockdown: Indian user flock to FB and WhatsApp; general news site sees number rise'.

Firstpost the Indian news and media website published a report on April09th, 2020 with headline '*Media Usage during COVID-19 Lockdown: Indian user flock to FB and WhatsApp; general news site*

sees number rise' (Staff, 2020). The news report clearly indicates that there was a sharp rise in the user of social media and the media were mainly used for news and communication.

MASS MEDIA AND THE INTERSTATE MIGRANT LABOURS

During the COVID-19 pandemic crisis, mass media not only provides information of COVID-19 or helped in the awareness creation among the public but also it has highlighted several problems faced by the Indian during the period of COVID-19. COVID-19 hampered the society in several ways, among them interstate migrant labour's problem is one of the major issue. Almost every Indian mass media highlighted their issues and problems.

Lockdown in India due to COVID-19 showed shut down of all factories, government office, schools, colleges, universities, and transportation system. However all essential services were excluded from the lockdown. The lockdown extended in several phases and continued for few months. It was true that the lockdown tried to save the public from the infection of COVID-19 but it also bring a drastic negative effect on the life of the interstate migrant labours of India. The pandemic and lockdown heavily affected on the livelihood of the interstate migrant labours and bring massacres to them.

Interstate migrant labours are the homeless, low wages, poor labours that moves from state to state in search of job and income for their livelihood. They were mainly working class that consist of mainly labours of various factories and construction site like mason, carpenter, marble and tiles workers, crafts-men etc. The pandemic and the various phases of lockdown have put negative effect on the livelihood of these interstate migrant labours. Nationwide lockdown in India during the pandemic caused by the COVID-19 has pushed the labours to dislocate from the migrated state. Most of them tried to moves to their native state as situation became critical for them during the lockdown. The lockdown has stopped their incomes which detruncate their financial support in the middle of the pandemic. Along with this, availability of ration, shelter and worry about their families and their loved one also played a significant role among the interstate migrant labours during the lockdown. These issues make them helpless and force them to dislocate from migrated state.

Indian mass media highlight all these issues of the interstate migrant labours continuously and they exposed how they were faced the challenges every day. Mass media become their mouthpiece and exposed their pain and suffering in front of the nation. Several supports from central governments and various state governments arrived immediately after the media exposure. Along with the governments various generous influential personalities also bring help to those interstate migrant labours. During the pandemic of COVID-19 Indian mass media played a major role in highlighting the issues of the interstate migrant labours and solved their problem with proper, fair and unbiased news presentation.

Case Study: Report of 'The Hindu' with headline 'COVID-19: The migrant worker from West Bengal and Bihar protest in Jaipur' highlight migrant labour issues.

The Indian news media 'The Hindu' published and posted a report on its website on May 12th 2020 with a headline "*COVID-19: Migrant workers from West Bengal and Bihar protest in Jaipur*". The report revealed Migrant workers of West Bengal and Bihar started a protest on road in Shastri Nagar demanding transport facilities for travel to their home state and the supply of adequate ration during

COVID-19. This news exposed how the interstate migrant labours are protesting for their rights and safe home return (Iqbal, 2020).

CONCLUSION

As the COVID-19 spread across the globe, fear, stress and confusion also spread all around. The scenario of the pandemic in India was not much different from the other countries. Almost every system was disrupted due to COVID-19 but within the pandemic crisis mass media has played a wonderful role. In India, mass media has performed various valuable roles during the pandemic crisis caused by COVID-19. Mass media served as a valuable source of information for the public as well as for the government. The information and data provided by the mass media has played several important roles in the Indian society. The information provided by mass media act as valuable records that highlight the situation of the pandemic, government's roles in the pandemic, several research works on corona virus, companies and organisation that working on vaccine etc which are highly valuable and precious. The role and importance of information provided by mass media was enormous and highly valuable. However the most important function of information and data provided by mass media was the awareness creation among the public against corona virus and the diseases caused by the corona virus called COVID-19. Maintaining social distance, use of mask, use of hand sanitizers for cleaning hands, washing hands with soap at regular interval were the main awareness created among the public with the help of mass media. Governments and various responsible organisations have also used the mass media as a platform to disseminate various messages among the public. It also tried to eliminate various fake news and propaganda through its random news presentation. Amid of the pandemic crisis, the roles played by the mass media are significant that support to combat and to overcome the situation.

Indian mass media support the Indian society from various dimensions during the pandemic caused by COVID-19. Indian mass media has desperately shown their responsibilities to tackle the crisis situation. The outbreak of COVID-19 and the dogmatic approaches of Indian mass media during the global pandemic situation have recalled the concept of media as fourth pillar of democracy. The importance of Indian mass media for the Indian citizen during the global pandemic caused by COVID-19 was enormous and extraordinary.

FUTURE RESEARCH AND DIRECTION:

This research article mainly focused on the role of media during the pandemic caused by COVID-19. The research highlight through various case studies how media disseminate information, help in communication system, creating awareness, eliminate fake news, how it serving as a platform for government announcements, and giving exposure of the interstate migrant labours. However, there are wide scopes for further research in the area specifically quality and quantity of news, Impact of media information on mental health of the Indian citizens, and migrant labours conditions, etc.

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KEY TERMS AND DEFINITIONS

Announcement: Declaration of a formal public statement about a fact.

COVID-19: Is an infectious disease caused by newly discovered corona virus.

Fake News: False and fabricated news.

Information: Is a fact or data about something.

Interstate Migrant Labour: Labour who move from state to state in search of jobs.

Mass Media: Media that disseminate information among the masses.

Pandemic: Outbreak of an epidemic or diseases globally or to a large area that affect heavily.

Precaution: Taking steps in advance to prevent something or to reduce chance of getting affected.

Public Awareness: Awareness at public level.

Symptom: Evidence or indication of disease or something.

ENDNOTES

- ¹ For more information see <http://ddnews.gov.in/videos/health/actor-amitabh-bachchan-shares-precautionary-measures-coronavirus>.
- ² For more information see UNESCO (2020); Journalism, press freedom and COVID-19; https://en.unesco.org/sites/default/files/unesco_covid_brief_en.pdf.
- ³ For more information see WHO (April 2020); Archived: WHO Timeline- COVID-19; <https://www.who.int/news-room/detail/27-04-2020-who-timeline---covid-19>.
- ⁴ For more information see The Hindu Centre; Press Releases on COVID-19 issued by the Government of India; <https://www.thehinducentre.com/resources/article31149551.ece>.

Chapter 32

Being Autistic in Turkey and the Representation of Autism in Media

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ABSTRACT

Autism is an innate or developmental difference that occurs in the first years of life. While the number of individuals with autism in the world is increasing day by day, the importance of what should be known about autism also increases. However, it is still not possible to say that this information is sufficient. The definition of individuals with autism and their health problems, what autistic individuals do to express themselves, and who the individuals with autism are and their representatives are important. Some basic points such as how to raise awareness about the lives of individuals with autism have still not been overcome. The main theme of this study is how the media addresses the issue of individuals with autism, their problems, and needs. The research question of the study is how to read the reflections on autism through the media.

INTRODUCTION

Health has been one of the most important agenda items in the world, especially as of 2020. The pandemic announced by the World Health Organization due to the virus called Covid 19 affecting the whole world undoubtedly caused many things to change in the world and even caused the world's other problems of high importance to be postponed. In 2020, the whole world has talked less about topics such as war, hunger, climate change, terrorism, politics, etc. because the most important issue has been the health issue due to the pandemic affecting the whole world. Based on the previous years, all the countries of the world focused more on health policies and took them very seriously. It has been strikingly noticed that the human factor, human life, and quality of life are also very important for the continuity of the world. Although many things make some differences between people for economic reasons, this distinction

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does not make a sharp difference when it comes to health because, in the fragile ecosystem of life, the lives of all living things are interconnected. Most people face health problems equally. Even the most fortunate group has had bad experiences that reveal that they cannot consider themselves away from possible problems that may be caused by the health issue.

This conjuncture has also created the necessity to talk about health issues a lot on the world agenda and to give health information. There is no doubt that the media plays an important and very active role in this regard. The media, in particular, expert journalists on health have passed a big test on how they can reflect health news. While the way the media reflects any subject has been a topic that has been discussed throughout the history of the media, the reflection of health-related issues in the media is again a quite up to date area of analysis. However, at this point, it is possible to state regarding the subject of this study that the subject of health is very comprehensive. It is only a topic that seriously focuses on epidemics, as the world is still in the pandemic process. But many issues that exist in the name of health are still very important.

The main theme of this study is autism. This study aims to give general information about autism and the lives of individuals diagnosed with autism. The reason for this aim is that this study on autism will undoubtedly support the aim of raising awareness about autism as a result of the inclusion of it in the book named “Representing Health and Medicine in Modern Media”. For individuals already concerned with autism, this section will bring forward important information for the reflection of autism in the media. Also, bringing forward information about autism in terms of media reflections will be informative for gaining a perspective. It is the greatest wish to create source information to increase the number of studies on the subject.

Autism Spectrum Disorders (ASDs) are included in the medical literature as a neurodevelopmental problem. However, among such disorders, it is a special area that is discussed the most, frequently researched, and studied. Despite this clinical picture, no precise information has been reached on it. Currently, there are differences of opinion among the findings obtained from studies conducted for the diagnosis, follow-up, and treatment of it. According to the literature information obtained from all the readings for this research, the symptoms of Autism Spectrum Disorders generally appear in the early years of life. Failure to achieve the expected development in terms of communication skills or delay in such skills compared to other children manifests itself with restrictive interests or more emphasis on specific issues. However, these statements are never sufficient to identify the situation; it is a very complex process to determine that an individual has autism, and, likely, the diagnosis is initially expressed as a developmental delay or disorder.

This may initially suggest that over time, the current situation may improve to a certain extent or the difference with others may gradually decrease. However, autism is a process of a lifetime. Many studies have been conducted on the education and development of various skills of individuals diagnosed with autism. While it is observed that learning skills are quite beneficial for some people, for some individuals with autism, it is very difficult or sometimes impossible to acquire certain skills. It is still unknown why autism occurs. However, like many diseases of which the cause is not yet known, autism is thought to be influenced by biological, genetic, and environmental factors that affect the formation of the individual.

In this study, the subject of autism, on which there is still much research, will be examined. How autism is expressed through media coverage will be categorized. How a particular media tool reflects the themes determined in various periods is the most used method of representation studies. However, instead of repeating the existing examples, this study examines how the effects of autism, which is the main theme of the study, on individuals are evaluated in terms of problems Autism is a subject that has

been researched a lot because the number is increasing in the world and yet not enough information has been obtained. In this case, individuals with autism and their families face various problems.

It is important to express these problems related to autism. From this point of view, media channels turn into an important medium where words can be expressed. While this constitutes one dimension, on the other hand, the transformation of individuals with autism into the news in the media is based on a reason and the fact that they have autism is emphasized. In some examples, individuals with autism are reflected in the media with an emphasis on “despite autism”, even if they are successful in some areas against the difficulties of autism. Another way of this reflection is the representation of autism in the Turkey-based media channels, either traditional or new media, which is in the form of informative content because the disease has still very low awareness in the society. These will be discussed in the last section. The media is always very good at taking credit for various victimizations. This popular method is tried from time to time in reflecting the individuals with autism in the media for dramatizing and reflecting some events.

It is not important to know which media channel reports on autism at various time intervals, but what a randomly selected publication, which addresses autism in particular, brings to the agenda about autism. This will bring a perspective to future studies about the functional representation created in the name of autism and the quality of the problems or the information given. To make this evaluation, the limitation stage of the study was subjected to a preliminary research process due to a large number of elements in the study population. For this reason, the fiction of the study has gained priority by giving general information about autism and giving general information about the lives of individuals with autism. This information is supportive in clarifying the issues of the media representation of autism that are emphasized more and how autism is represented in the media to reflect its problems. Observations as a result of these preliminary studies revealed that non-governmental organizations or their representatives working on autism, especially in new media channels, use social media channels very actively. Activism that develops in this area on autism is the subject of another study, but it is still important in terms of expressing autism and how it is represented in new media channels.

ABOUT AUTISM

Autism is a health problem that has become well-known all over the world in recent years. It is observed that children who are described as “autistic” generally have difficulties in establishing relationships with others, especially with their peers, have various fixations, cannot speak or speak in unusual ways, and have difficulty in maintaining daily life. However, although all of them are called “autistic” when observed closely, there are differences as well as similarities between these individuals. The term “autism” is a term that has been used for many years. Nevertheless, in recent years, the term Autism Spectrum Disorder (ASD: Autism Spectrum Disorder) has been preferred to emphasize that autism is a spectrum disorder. The first written documents about the behavioral characteristics evoking autism date back to the 18th century, with the statement of Kırcaali Iftar, which she summarized by quoting from the studies of Heflin, Alaimo, and Schreibman. However, the term “Autism” was first used by the Swiss psychiatrist Eugen Bleuler in the 1910s. The terms “autism” and “autistic” were derived from the Greek word “otos”, which means self and own. Bleuler used this term for an individual who has isolated himself/herself from the outside world (2015: p.4).

The first article on autism was published in 1943 by Leo Kanner, the first child psychiatrist in the USA, working at Johns Hopkins University in Baltimore, USA. Kanner, who published the first article about autism, established relationships with the cold, indifferent and intellectual mothers of the children with autism, based on his observations about the mothers of the children who were his patients, as cited in the study of Kircaali Iftar, who quoted from Schreibman. According to him, autism may stem from mothers who are cold, indifferent, and intellectual. He even introduced the concept of “the refrigerator mother” to describe these mothers. The traits that Kanner expressed as mere observations regarding mothers of autistic children were taken further by Bruno Bettelheim, a Viennese psychoanalyst who lived in the USA. According to him, autistic features originate entirely from “pathological” mothers. Unfortunately, these views had a great repercussion at that time and caused many mothers to hold themselves responsible for the problems of their children, feel guilty, and have extreme conscience troubles in this regard. However, by the 1960s, it was understood that these allegations were completely unfounded (2015: p.6).

In his article entitled “Autism”, Korkmaz defined autism as a developmental disorder of the brain, taking into account the definition used by Minshew and Rattan in their studies in 1992. In his study, he emphasized that it is especially defined by various behavioral symptoms that impair social communication. However, one detail expressed by Baron, Cohen, and other authors in their joint work in 2009 is very important. At one end of the spectrum are children with a very bad condition who cannot even fulfill their self-care skills, and at the other end, there are cases characterized by only a mild disorder and can be defined as “normal”. For this reason, some subgroups of autism are defined as “Autism Spectrum Condition” rather than a disorder. Many people who work with autistic people also describe them as “different” rather than “handicapped” or “disabled” (2016: p.83).

Another of the most important limitations of autism is the low number of experts with knowledge and experience in autism. In some countries such as the United States of America (USA), there are autism centers within the scope of children’s hospitals, where autism experts work. The main task of these centers is to comprehensively evaluate children who are referred to the center with the suspicion of autism, to provide early intervention services within the framework of scientific-based practices to children diagnosed with autism, and to provide information and resources on autism to families. But this does not have such a feasible system in every country of the world. In some places, people diagnosed with autism are even left to their fate. For autism, which is the most rapidly growing developmental disorder, the whole world should urgently focus on this issue (Rakap,2017: p.11).

In her book named “Success Stories in Autism”, Benli expresses the definition of autism according to the literature. She defines autism as “a developmental disorder of neurobiological origin” in its most classic definition, but makes a more promising opinion on this subject. According to her, people who have experienced the autism spectrum life more or less know what autism is now. Many autism definitions have been made from many sources that will eventually bore a reader who intends to read all of them. According to Benli, these definitions are a series of articles, each of which is not very different from the other in terms of content. Unfortunately, although none of them addresses a more positive issue than the other, they make the reader think that even if your child’s level is good, those articles can depress people. Despite this, none of the things written is wrong. That content is a part, even a big part of autism. However, it cannot be generalized for every child and autism itself. For this reason, the most important issue to be brought forward is that in early childhood, families who see something wrong with their child but have trouble understanding what has happened should go to a specialist to have the opportunity for early treatment of “autism” (2017:p.13).

As can be understood from this information, when it comes to autism, children are generally prioritized. Autism is not a fatal disease. A person can continue his/her life with the diagnosis of autism throughout his life. The problems of adults with autism are also extremely vital. However, it is a method that has been tried many times to improve the quality of life and adapt to life with various educational methods in the early diagnosis of autism. For this reason, the focus is on children rather than adults with autism. For the sake of not perceiving autism as a disease, most of the people working on the subject express autism as a kind of difference, and the reason behind that fact is their belief that children with autism can be educated and brought to life with special education methods.

AUTISTIC INDIVIDUALS AND THEIR PROBLEMS

Prioritizing autism specific to children, especially by associating it with children, is related to the possibility of including individuals with autism in certain educational programs if they are diagnosed at an early age. Children with autism can adapt to their social lives through education. However, it should be noted that autism is a condition that has degrees in itself. It may not always be possible that the given education advantages every child. In the face of this uncertainty, special education methods still carry an important glimmer of hope in this sense. While the subject of education is so important, every child in the world has never had equal access to these educational conditions. Since this study addresses the cases in Turkey, it is possible to indicate that the educational opportunities for children with autism in Turkey are never sufficient. Moreover, the awareness of the disease has a history that can be considered as new. In this case, the knowledge of autism, which is limited only to families with children with autism and their environment, also indicates the border of what is generally known about autism. The media is very important in raising awareness of any situation, despite the debatable results in positive or negative terms. At least, an intense awareness about autism has started to be raised with the efforts of non-governmental organizations working on this issue.

According to a study conducted in the USA, the prevalence of Autism Spectrum Disorder was reported as 1 in 166 at the beginning of the new millennium, and 1 in 68 in 2014. Worldwide prevalence is particularly considered by all of the relevant studies conducted after 2010 and they indicate a further increase with every passing year. According to the data, it is a known fact that Autism Spectrum Disorder is spreading rapidly. However, the reason for this increase has not yet been scientifically proven (Kırcalı İftar, 2015: p.11).

Autism Spectrum Disorders are used synonymously with Pervasive Developmental Disorders (PDD). PDD is a spectrum disorder that includes delays in the development of basic functions such as socialization and communication (Şahin, 2017: p.291). Children with autism and their communication skills are very important issues. The evaluation of the subject of communication in terms of children with autism generally includes the fields of study with educators from different disciplines such as psychologists, psychiatrists, and special education teachers. However, a communication skills development program for individuals with autism, who experience the most serious difficulties in communication skills, is not a topic that communication scientists generally deal with. Studies to be done on the issue in terms of communication sciences can contribute remarkably. Nevertheless, it is worth noting that communication problems in autistic children are evaluated individually. Not all autistic children experience the same problem to the same extent.

The most basic problems observed in children with Autism Spectrum Disorder can be listed as inadequacy in social interaction, the inability of verbal and nonverbal communication, and repetitive behaviors and movements. Also, these children have difficulty in establishing eye contact, for example, they constantly line up their play materials, seem not to know how to play with their toys, may be overly attached to a certain object, cannot use their gestures, do not laugh, and seem to have a hearing problem even if there is no problem with their hearing (2017:292). It is an important issue how children with autism or adults with autism, who are known to experience such problems, are perceived by other people. Children with autism can have extremely difficult times, especially among their peers. For other children to develop a high understanding of the behavior of children with autism, a different effort is required. However, it is highly likely that children with autism, who seem more abstaining in general child behaviors, will experience a much more difficult process due to the need to stay together with their peers more when they reach school age.

Especially when communication skills that involve interacting with other people are not very good, the general opinion about individuals with autism is the perception that they fail in many issues in life. This creates a link to the media coverage of any autism-related news and how autism is represented in the media. That is to say, the success of individuals with autism in any subject is set up to create a perception such as “although they have autism”. While a success within the normal range is reflected as the achievement of the impossible in the case of autism, the issue of the processes through which this success was achieved is generally kept in the background. Achievement, for example as a reflection of their early years with education and a correct approach, is not normalized within the story of the person with autism. This kind of representation does not argue in itself that educable autistic people can achieve many things and should be regarded as normal. For example, a medical doctor with autism will not be able to avoid being constantly referred to as a doctor with autism in many fields. While this may be a label he/she likes to hear, it can also cause him/her to constantly argue with him/her whether this particular emphasis is necessary or not. In a sense, this situation is like a person who has a disability in any part of his/her body, and this disability creating popularity that can get ahead of his/her professional success. It is a questionable form of discourse whether the particular emphasis that they consistently show extraordinary success against their ailments is ethical in terms of their representation in the media instead of just stating that success.

AUTISM AND REPRESENTATION IN THE MEDIA

Communicating in humans is a form of instinct behavior. The quality of communication can be at debatable levels in life, but communication and getting information are among the undeniable needs of human life. Media, which reflects a more systematic form of communication, is very important because it creates continuity in communication and news channels. What and how the media represent, how it reflects the information of events are important (Dinç&Dinçer,2019: p.92). In terms of word meaning, representation is the process of substituting signs for meanings. It is to take the place of something, to be its symbol or sign. It is to be an example of what is shown, to show something, and to reflect it with its distinctive features. Especially when mentioning media and representation, it may be more appropriate to define representation as “re-presentation of something”. Representation expresses a tripartite relationship. That is, the presentation of something or someone by something or someone to another person is the representation (Mutlu, 2017: p.315). People or objects presented in the media’s represen-

tation process find their places in the society or on the platform where they are represented in the way they are presented, in other words, represented. The relationship of media with reality is related to the constitution of the concept of reality with the reinterpretation of it. For this reason, it is important what to take as a basis and what to leave behind in the representation process. In short, everything presented in media representation is reconstructed, fictional products (Polat, 2018: p.49).

Situation definitions in the media are made within the framework of the dominant ideology. Akca, citing the summary of Van Dijk's analyses of discourse on the news in the print media, states that similar representation is often encountered in sensitive issues such as minorities, immigrants, and third world countries. According to this example, the media not only excludes the "other" with the language it creates and the form of discourse it implements, but it also alienates those outside the dominant ideology (2007: p.16).

Doing scientific studies on representation, Hall defined the concept of representation as "constructing meaning" and "the process of making sense". Language is one of the tools that enable the representation of the thoughts and feelings that exist in a particular culture. Therefore, language is the most important of these processes in producing meaning in mass media. Hall generally emphasized the constructivist approach in his works (2017: p.7)

The invention of writing has reduced the effect of words. The effect of writing on society, in general, is extremely striking. But much of the written language has historically been synonymous with reading and writing, and it has remained a faculty accessible to only a small segment of society. Although opportunities have increased in favor of education in the last hundred years, this has not increased to the same extent anywhere in the world (Goody, 2017: p.55).

The audience watching television can consist of groups that show a wide variety of extreme characteristics, including well-educated people as well as people who are illiterate and even people who cannot even fulfill their basic needs of life. Because of this mixed audience, television productions are created with simple elements that anyone can understand (Lawrence, 2002: p.112). Especially the most important and still quite influential medium of traditional media, television, is an actor of standardization and adaptation to the world. This is partly because it can perpetuate people's mechanisms of psychological compensation of some situations that make people dream and people are unable to experience in their own lives. On television, the meaning is left out, but the object remains there. For this reason, the language used while creating representation in traditional media is created by considering the rating of the general public. This situation has always caused controversial results in terms of the quality of the publications (Ellul, 1998: p.174).

The perspective of the media on the concept of representation also varies between the traditional and new media tools of the media tool. The new media is a place where the communication process is used interactively. The media's way of representation of the topic chosen is taken by the recipients as presented. As is known, the purpose of the subjects represented is to create public opinion. The target audience, who are the recipients of the messages transmitted through media channels, may show the ability to reinterpret and analyze the message when they receive it or accept it as presented to them without questioning it. However, a concept that has always been represented by the media, in the same way, is accepted by the recipients as represented, not with its real knowledge (Dinç&Dinçer, 2019: p.92).

The concept of representation takes place with three different approaches. These approaches are constructivist, reflective, and deliberate approaches. In a constructive approach, the basic concept is language. According to this approach, languages are made up of signs and they use those signs to express something. The meaning produced by the language used occurs through representation and is constructed

with signs. In the reflective approach, it is thought that meaning already exists in the concrete world, and language only serves to reflect these meanings. In the deliberate approach, on the other hand, it is possible to conclude that the meanings cannot be considered separately from the people who bring them up. It is argued that people who reveal the meaning consciously create these meanings (Varol,2014: p.303).

McQuail and Windahl draw attention to the existence of power in communication more generally by stating that communication originates from institutions that conform to dominant power structures and constitute typical and repetitive frames of meaning. According to this point of view, there is a superficial meaning in the way messages are encoded. This meaning may cause the recipients of the message to make the interpretation expected of them (Akca, 2007: p.15). This subject is essentially quite profound. For example, the senses take shape from the very beginning according to the direction in their environment. This situation, in which individuals are directed and concentrated, actually means that perception is purposeful and selective. In this sense, seeing and understanding compose a selective action. What to be seen and understood and how have been sent to our minds beforehand (Arnheim, 2004: p.35).

In contrast to traditional media, contents are created by users in new media. In this case, it is possible to think that the contents created with new media tools are more dependent on the individual and provide a democratic environment in terms of conveying the message by creating a more authentic space (Nakayama,2017: p.70). Representation in the new media creates a different situation as the messages created bear personal responsibility. For this reason, what is represented is built in an individualized way (Polat, 2018: p.49).

There may be a lot to be said about addressing the issue of representation about the autism issue that is the main theme of this study. However, first of all, it is necessary to analyze the representation in the media in terms of autism. Representation in the media is generally considered within the framework of an ideology in academic literature. According to this idea, the media has a manipulative feature that always tries to dictate certain ideologies, and there is always a direct or indirect link to the media channels of current politics. As stated in the literature regarding representation, any news in the media, including articles or visuals, is included in a deliberate fiction. Also seen in the very limited studies about the representation of autism in the media are the reflections of how certain media tools address autism at certain intervals. The issue of which deliberate idea about autism the media tries to cover should be handled differently because health literacy should be included as a separate area of expertise to perform the reading of health-related news. In this study regarding autism in the media, which is addressed specifically to Turkey with fairly general terms, when health is concerned, it should be noted that there are no high literacy levels in the media.

Bringing up the Autism issue to the agenda has a history that can be considered new in Turkey. While bringing up this issue to the agenda, it will be useful to mention what institutional studies have been carried out on autism. In terms of the limitation of the study, it does not seem possible to mention what the government and non-governmental organizations working in this field do about autism. However, in terms of expressing the seriousness of the issue once again, the statement of Besim Toker, a member of The Turkey Confederation of the Persons with Disabilities Board, is very important because he took into account the speed of the increase of the number of autism cases in the world. Toker stated that in 2030, one in four births will be diagnosed with autism (www.mynet.com). Accordingly, the current inadequate national efforts on autism should suggest how important will the subject become in the future considering the number of people diagnosed with autism, the level of prevalence, and the population of a large country such as Turkey. To exemplify the work of the leading states in this regard throughout

the country, it is vital to research how the issue is handled in the international arena. The media will undoubtedly be one of the best tools to draw attention to this issue.

It is possible to see the news made about what autism is in the media in terms of providing awareness about autism, which is primarily reflected as an important issue of the present and the future in Turkey and similar countries because due to the large number of people who are not aware of the disease, the news of the groups working with more sensitivity about the disease is, of course, has been for general promotion and to increase the awareness of the situation. Intensive studies on autism have come to this day, especially with the contribution of non-governmental organizations. The work of these organizations has been effective in taking some decisions on autism with the pressure they have provided on the governments that organize the process on behalf of the state administration. However, this was never enough because the decisions taken regarding autism and other special children have never met the need of the current potential and the struggle for the relevant rights continues. The reporting of such issues is mostly expressed with the contributions of pioneers in society. The lack of expected support for autism is brought up to the agenda when columnists or opinion leaders in the society express some deficiencies related to the support for autism verbally or in writing. Nevertheless, it should be noted that non-governmental organizations have been quite successful in representing autism in the media, through their ability to use the media effectively and the campaigns they have carried out. Important questions such as ‘what is autism?’, ‘why is it important to be noticed at an early age?’, ‘what difficulties families experience on the subject contribute to the knowledge of autism at a basic level?’ contribute to the basic public knowledge of autism. It is of great importance to announce the expectations of families and autism awareness studies. For this reason, institutions working on autism and their representations in the media are also important in terms of decisions to be taken for the future.

There is a sensitive issue in Turkey about the classification of individuals diagnosed with autism. Families of children with autism do not want their children with autism to be mentioned as ‘autistic’. It is more common to call them “with autism” in news texts. The best example of sensitivity in this matter emerged on 22.09.2019, with the reaction given by the families of children with autism to Hulki Cevizoğlu’s column entitled “Autistic Media” (The column can be accessed at www.yenicaggazetesi.com.tr).

Cevizoğlu, who criticized the media in the content of the article, received intense criticism, especially on social media. The sensitivity developed by the families of individuals with autism is important in the expressions used in news texts about individuals with autism because these families have a general opinion that in the use of the word “autistic”, there is no definition of “autistic” as disease detection, but that it contains “some kind of mental retardation” or “insult” content. Due to the emotional delusions created by this situation, mentioning an individual diagnosed with autism with the word choice “autistic” creates a risky situation, especially in news texts in the media. Therefore, pioneering civil society organizations in Turkey in the field of autism often prefer the expression of individuals “with autism”. It is striking that they do not refer to them as “autistic children”. For example, in the headline of news published on 02.08.2020, a child with autism was reported with the expression “Tarık with Autism Became Whirling Dervish in 1 Year” (www.hurriyet.com.tr).⁽¹⁾

Having carried out important studies in international medical literature, Associate Professor Oytun Erbaş is not only known for his success as a medical doctor but also popular for being a person with autism (www.medium.com). Individuals with autism are mentioned with high interest in the media about what they have achieved when they overcome the problems related to their lives or caused by the environment. For example pianist Buğra Çankır, who was diagnosed with autism as a child, was thought that he

could not even finish primary school and has achieved outstanding success in his music career and took a master's degree in the conservatory (<https://www.hurriyet.com.tr>) (2). Again, in the representation in the name of autism, instead of drawing attention to the problem experienced by individuals with autism especially in the field of education, the success of a person in overcoming this problem is praised and the miracle of reaching this level "despite autism" is reflected. However, due to the efforts to educate many children with autism, especially in the field of education, with traditional education methods, their possible success never emerges.

There were times when everyone had a lockdown in their homes due to the pandemic announced all over the world. Then, gradually normalization has started but this has a different meaning for families having children with autism in Turkey because they cannot keep their children, for whom they cannot provide a social environment and struggle in their education life, outside the home in the flow of life. Life is almost a constant quarantine for them. In this regard, the Strengthening of Autism Network in Turkey Project was initiated within the scope of a remarkable campaign. With this campaign called '#BizHepEvdeyiz' (we are always at home), reminiscences have been made for the lives of families with autism in the quarantine period due to Covid19. Attention was drawn to the fact that families with autism have lived a life of quarantine throughout their lives, and these reflections were featured in the media (www.hurriyet.com.tr) (3).

Shot in Turkey with the name "Miracle Doctor", the TV series (adapted from an American medical drama television series named "The Good Doctor" which was selected "the most popular TV series"), is about a doctor with autism who takes part in the world of medicine and the series addresses his difficulties and successes with the emphasis of autism. Also, in some TV series, especially in April (since it includes the "autism awareness" week), in the broadcast stream, dialogues or images containing autism awareness are presented which were included in their scenarios in real-time. It is possible to think that the scenes about autism in the series will increase the possibility of cinema and TV series lovers to be affected by the subject. But it should be noted that individual sensitivity and awareness will not turn into a permanent behavior because raising awareness of autism has become an important argument in terms of popularity today. Still, autism taking part in the broadcast stream is an invaluable effort in terms of reaching an extremely wide audience. But the critical point is that the actors that the audience admire take on that role or reach a new fanbase with that role is the possibility that the issue of autism remains on the agenda throughout the period that the series is presented. The increase in the awareness of such important health problems will only create real benefits with a continuous sensitivity at the point of solving the problems.

Considering that the way of coverage of the TV series that include autism also creates a new agenda, this will also give support for the representation of autism in the media in terms of awareness. Developing an intense interest in some social issues that the TV series try to attract attention to the audience will always include the possibility of not being permanent since there is not a very deep-rooted and real awareness. It does not create real benefits and its continuity is not provided. Autism issue is one of them. However, it is a valuable effort to be included in the flow of the TV series, which is one of the most important tools of the media. However, the question of whether the support it offers to real awareness can be measured by the high rating of the show should also be discussed.

The support of journalist Ayşe Arman, who is known for her important interviews in Turkey, for the publicity of The Tohum Autism Early Diagnosis and Education Foundation, which has very important works for the awareness of autism in Turkey, has turned into an opinion leader. Her coverage of this non-governmental organization from time to time in her articles and the interviews she made with its

founders have been very effective in terms of representing autism in the media. With the support she gave to the #autizmemavişıkayak (turn the blue light on autism) campaign, she has become one of the most important representatives of “informative” content in the form of media coverage on what autism is. (One of Arman’s interviews regarding the establishment of The Tohum Autism Early Diagnosis and Education Foundation can be accessed at www.hurriyet.com.tr) (4).

The problem regarding the employment of children with autism in business environments persists under all circumstances. However, minor developments are still encountered. Turkey Autism Foundation took the lead in the opening of “Spectrum Café”, a small boutique business, and Spectrum Café is run by children with autism. This situation has been newsworthy due to its privilege in terms of content and has found its way into the media. This news has the impression that people with autism can work. However, the news content reflects the existence of the cafe as a socialization area where various workshops, various interviews, and cultural activities are organized for the socialization of children with autism, and in this case, it is operated in a controlled manner. This representation establishes a ground for the representation of people with autism in the media to discuss their problems and bringing their business life to the agenda. Considering the opportunity problems of the limited number of schools giving special education or individuals with autism under much more severe conditions, it is possible to think that individuals with autism, who are on the agenda in the media, are still privileged. In such news, children with autism, who are known for their differences, are turned into “cute children with autism” and therefore, it is stated that great interest is shown to them (www.milliyet.com.tr).

In the international arena, especially science and technology-oriented companies consider neurodiversity as a new workforce advantage and see this area as a discovery. Neurodiversity is a concept introduced by sociologist Judy Singer, who is also an autistic person. The adoption of this diversity, which includes autistic people, by families and educational institutions, is beneficial for the development and psychology of children with different learning and thinking skills. At present, especially science and technology-focused companies consider neurodiversity as a new workforce advantage (www.hurriyet.com.tr). (5).

In Turkey, the educational opportunities of children with autism are categorized by the concept of “special education” in which individuals with various health problems are included. This situation may differ according to the degree of the child with autism. Even a situation such as not being able to benefit from education is possible. While some children with autism can be together with other children in integrated classrooms in the same classroom, some children can benefit from the institutional facilities, which exist in very limited numbers that provide education specific to children with autism. Although early diagnosis and early education on individuals with autism certainly provide an important path for the individual, children with autism and their right to be educated remain a fundamental problem. So much so that, news in the media on this issue reflected that a child with autism was not wanted by other students and their parents and even by the school administration. While reaching educational conditions is already a huge problem, children with autism who are excluded by other people experience serious victimization in this regard (www.haberturk.com).

In this news in the media, it is possible to observe that the news about the situation was written not with a very serious emphasis in terms of the victimization of children with autism, but rather on suggesting the injustice of the school administration on this issue. It was stated that the relevant person in the school administration was sentenced to dismissal and the school would be inspected by the authorities. In this regard, there was no emphasis on children with autism, who are the main victims of the incident, and the current status of their education rights, and it was not reflected too much why other individuals

demonstrated this kind of opposition with a hate-like feeling about these children with differences. The victimization of individuals with autism was reflected by making a news report, rather like a determination.

Such serious developments about autism, after the event is heard, create reactions on social media, especially on Twitter. Thanks to the new media opportunities, which allow the creation of a broadcast stream that includes more responses of the individual, people who develop sensitivity to the subject express their opinions under the relevant titles, especially through the hashtags opened on the subject. The agenda created in this way can be read again through the representation of autism in new media. It should be noted that children with autism, who are wanted to be deprived of the right to be educated reflected in the media and excluded, have been embraced through new media channels, albeit virtually. The reaction to the issue grew like an avalanche without delay. Especially on Twitter, activist actions about children with autism and their rights are more successful than traditional methods. In this way, the disclosure of persons or institutions, who/which openly violate rights, through these activists and raising awareness for the necessary penalties are possible with a quicker flow (for example, there has been a serious rebellion against the violence that children with autism sometimes experience from other individuals on the street or in places where they receive education). Nevertheless, it should be noted that the heat of the agenda created on social media channels does not always create the reactions of the real authorities. In other words, although the reactions are high from time to time, the solution to some problems with autism and its rights can go very slowly.

SOLUTIONS AND RECOMMENDATIONS

The potential of organizations working in the field of civil society to create mass awareness about social issues is very high. Non-governmental organizations that operate for the benefit of individuals with autism also exist in Turkey. These teams, which have carried out very successful campaigns and projects, especially need financial support. These organizations, which make important contributions to the representation of autism in the media, provide a more permanent and higher awareness than individuals with autism who come to the agenda individually. At this point, it is important to support non-governmental organizations for the autism issue to see the value it deserves in the media. In this way, the fact that institutions carrying out systematic studies on autism are brought to the agenda with newsworthy events can turn into a remarkable area for the media.

Individuals with autism are expected to attain their basic rights in their social life and especially regarding educational equality. Given the population of individuals with autism in Turkey, the lives of many citizens are needed to be improved to a level of international standards. The media can again be expected to bring such important problems to the agenda. However, the possibility of encountering certain obstacles in terms of whether they reflect the problems clearly or how realistically they handle the problems can also be resolved in terms of the relationship between media and politics. News about autism in media can be prepared with content that does not cause a perception of pity, exclusion, insults, etc. Specially trained people are needed on the subject. There are not many expert journalists trained in health journalism. These specializations need to be developed to take the issue out of the tabloid press and take it seriously. Also, it is very important to develop the awareness of health literacy in society to correctly interpret the news in the media about autism, especially in health news.

At the time when autism was treated as a disease and the first research was made of what it is and with which effects it emerges, the stereotypical information that especially children of intellectual

mothers had autism was scientifically very misleading. It has caused a waste of time to resolve autism. It is necessary to bring up the relevance of these ideas, which cannot be proven, to the issue of social gender. Doctors, who express the opinion that especially women with intellectual backgrounds give birth to children with autism, are a reflection of the fact that the equality of women and men is constantly deteriorating against women in the world. While women with intellectual accumulation and income are accused of having problematic births, they have supported the awareness of autism in the medical world, thanks to their awareness of taking the responsibility of taking their children to a doctor for treatment. For this reason, it is not a coincidence that when people with autism are mentioned in the media, they are usually mentioned with their mothers. Women take care of their children and engage in highly activist work on their children's rights and educational opportunities, even after their marriages end with divorce. When the media portrays these women with the "heroic mothers" praise, it is possible to read the situation behind it that women and men do not approach the issue with similar sensitivity. There is a need for awareness-raising and supportive media content about individuals with autism that everyone can have the same sensitivity.

FUTURE RESEARCH DIRECTIONS

This study, which deals with the representation of autism in the media, could not address the issue with every aspect of it due to certain limitations. For this reason, it is important to raise awareness on the subject and make some suggestions to inspire future studies. The fact that the issue of autism has been transformed into a popular argument and addressed by certain people, contributes to its awareness but does not create a real awareness of the continuity of interest. Therefore, especially the psychology in countries like Turkey, which includes and responds to the commitment and orientation to opinion leaders and popular identities due to the feelings of admiration, must also be analyzed. In this way, with the transformation of autism activists into loved and trusted people of the society, the issue can be transformed into a serious and long-term consciousness while creating representation in the media. As a result, the main purpose is not to call for campaigns like soap bubbles, but to have a permanent improvement reflected in the real lives of individuals with autism.

In line with the purpose of the study, the news in the media about what autism is, which is a major problem of today and the future, why it is important to be noticed at an early age, what difficulties families experience and their expectations, the announcement of training sessions and awareness studies, and the representation of autism in this context were discussed. It is expected that this subject will be discussed in different ways in terms of contributing to the literature and supporting social awareness without repeating the same issues in future studies. Important findings can be obtained especially in line with the expectations from the media and families with children with autism. Finding the expectations and needs of non-governmental organizations working on autism, families with autism, and individuals with autism is extremely important in terms of determining the place of the media in this equation.

CONCLUSION

Although autism is spreading rapidly all over the world, it is not known exactly what precautions can be taken because the reason for its spread is unknown. Medical studies are not in a development course

to find a solution to this situation in a short time. However, it seems possible to develop solutions to some behavioral problems caused by this health problem with appropriate education methods. It seems certain that the subject of autism will gain more place in the future of the world than today. Therefore, the way it appears in the media is an important issue. Today in Turkey, due to the low level of awareness of autism, it is possible to observe more informative and promotional content for autism in the media. However, this does not mean that the relevant news appears frequently in the media. This type of news is about autism and some problems arising from autism or some things can be solved with education in the early diagnosis of autism.

With the diagnosis of autism at an early age, the education to be given to children with autism may benefit in many ways. Studies in many areas should be carried out to increase the quality of life of individuals with autism and their families and to ensure that they can take part in all areas of social life. It is expected that non-governmental organizations working on autism, in particular, will raise awareness of the society on this issue and be in constant interaction with people at this stage. One dimension of this awareness-raising is about being visible in the media because although the media has many debates on it in its nature, it is still an important technical entity that meets the communication needs of people. The importance of the media cannot be denied. However, the new wave media tools, and especially the tools that have been introduced to the literature as a concept of social media, are a formation closer to today's and new generations' lifestyles.

The issue of representation in the media has often been handled with the assumption that any idea is imposed. It is thought that an opinion is represented behind a news story published in the media, especially in traditional media. This means the development of a skeptical approach to media neutrality. The concept of representation that emerges with the visibility of any subject in the media means to exist in the media by filtering from a certain politics and ideology behind it and turning it into a text or a visual. But is there any imposition behind the representation of a health-related issue in the media? Or about what issues should such a referral be addressed? Such questions can be addressed in different studies with more depth and with no limitation problem. However, in this study, which was evaluated with the border of autism, what is or might be in the representation of autism was discussed.

One might think that a particular ideological framework and autism issue are not relevant at first. It should be noted that health is handled by state forces within a policy. For this reason, it may not always be possible to indicate that it is handled objectively in terms of its representation in the media. For example, some of the reports submitted to the parliament by non-governmental organizations demanding certain rights from the state are heard as they mention their work through their social media accounts. For example, if the studies are rejected or do not turn into a decision in favor of children with autism, such negative news content is generally rare in the media.

Unless a bad event (disappearance, violence, exclusion, etc.) that happens to a child with autism turns into an activist action on autism on social media, no news will draw the attention it deserves because the issue of autism has many unsolved problems. Its representation in the media therefore does not constitute a majority. While the media is equipped to play a dominant role at the point of transmission of problems, being silent or neutral on some issues can sometimes be considered as a reflection of certain forces over it. Concerning autism, traditional media have not been a dominant force. Only news contents such as the general awareness of autism, the importance of education in autism, and the reflection of the campaigns on this issue were encountered. Also, the issue of autism, voiced under the leadership of popular identities, has made a tremendous impact. The achievements of children with autism have been reflected as an argument that made autism particularly popular. It is possible to examine the subject in

more detail through new media tools. However, within the framework of the limitation of this issue, it is possible to indicate that it seems more likely to create an agenda in the new media, thanks to autism activists, in the face of issues that need to be raised about autism. For example, Sedef Erkan, who is also the mother of a child with autism, uses her activist attitude towards autism consistently, especially via Twitter. Her leading actions that aim to ensure awareness about autism in Turkey and represent autism in media are very important.

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KEY TERMS AND DEFINITIONS

Activism: It includes actions dealing with the problems of certain socially important issues. It means taking action deliberately to bring about the desired changes.

Autism: It is a complex developmental disorder that manifests itself with a significant delay and restrictive interests compared to other children, especially in the field of interaction and communication.

Health Literacy: It is the development of awareness for reading and understanding the news on health issues in the media.

Media: Technically equipped communication tools that enable communication with a crowd.

News Expertise: It is the creation of news formed to meet the communication needs of people with special competence areas. Health news expertise about the news to be written in the field of health should be developed.

Non-Governmental Organizations: Other than official institutions representing the state and operating independently from them, they are the civic mobility centers working for different purposes such as political, social, cultural, legal, and environmental, etc.

Representation: It is the fictionalizing of how news is reflected in the media, which specific features of it are emphasized, and what aspect of it is symbolized.

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