

HEALTH COMMUNICATION ON SOCIAL MEDIA: AN ANALYSIS ON THE TWITTER USE OF THE MINISTRY OF HEALTH IN TERMS OF PUBLIC RELATIONS MODELS¹

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ABSTRACT

Considering public institutions in Turkey, it is seen that "Ministry of Health" uses communication activities effectively and organizedly via Twitter. In addition to its announcements, the Ministry of Health also creates contents about health communication in their messages. In this context, within the scope of this study, the tweets published by the Ministry of Health from the official twitter account between September 1 and October 1 in 2019 are analyzed in historical order. Qualitative data-based quantitative coding is made on tweets published by the official account of the Ministry of Health. The aim of the study is to examine how the Ministry of Health uses social media as a public institution in the terms of public relations models and to determine their communication perspective with the principles that they reflect. Within the scope of the study, how the Ministry of Health uses the twitter account in terms of public relations models, how it benefits from twitter account from the perspective of health communication, and which information it provides people with the contents including health communication are sought to be answered. As a result of the analyzes conducted in the focus of health communication based on public relations models of Grunig and Hunt, it was found that the Ministry of Health generally shared its messages unilaterally, did not interact with its followers other than a tweet, and mostly used the public information model.

Keywords: Health Communication, Ministry of Health, Public Relations Models, Social Media, Twitter.

SOSYAL MEDYADA SAĞLIK İLETİŞİMİ: HALKLA İLİŞKİLER MODELLERİ TEMELİNDE SAĞLIK BAKANLIĞININ TWITTER KULLANIMI ÜZERİNE BİR İNCELEME

ÖZ

Türkiye'deki kamu kurumları ele alındığında, "Sağlık Bakanlığı'nın" twitter aracılığı ile iletişim faaliyetlerini etkili ve planlı bir şekilde kullandığı ve mecrayı yönettiği görülmektedir. Sağlık Bakanlığı mesajlarında, duyurularının yanında sağlık iletişimine yönelik içerikler de sunmaktadır. Bu doğrultuda, bu çalışma kapsamında Sağlık Bakanlığı'nın, 1 Eylül – 1 Ekim 2019 tarihleri arasında bir aylık dönemde resmi twitter hesabından

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yayınladığı tweetler tarihsel sıralamayla incelenmektedir. Bakanlığın resmi hesabından yayınladığı tweetler üzerinde niteliksel veriye dayalı niceliksel kodlama yapılmaktadır. Çalışmanın amacı; kamu kurumu olarak “Sağlık Bakanlığı’nın” sosyal medyayı halkla ilişkiler modelleri bağlamında nasıl kullandığını incelemek ve iletişim perspektifini hangi ilkeler doğrultusunda yansıttığını belirlemektir. Çalışma kapsamında, “Sağlık Bakanlığı twitter hesabını halkla ilişkiler modelleri açısından nasıl kullanmaktadır; twitter hesabından sağlık iletişimi perspektifinde nasıl yararlanmaktadır; topluma, sağlık iletişimine zemin hazırlayan içeriklerle hangi enformasyonu sağlamaktadır” sorularına cevaplar aranmaktadır. Grunig ve Hunt’ın halkla ilişkiler modelleri temel alınarak sağlık iletişimi odağında yapılan analizlerin sonucunda, Sağlık Bakanlığı’nın iletilerini genellikle tek taraflı paylaştığı, takipçileri ile bir tweet dışında herhangi bir etkileşimde bulunmadığı, çoğunlukla kamuoyu bilgilendirme modelini kullanarak sosyal medyada sağlık iletişimi gerçekleştirdiği saptanmıştır.

Anahtar Kelimeler: Sağlık İletişimi, Sağlık Bakanlığı, Halkla İlişkiler Modelleri, Sosyal Medya, Twitter.

INTRODUCTION

Communication studies and management of these studies are significant for all institutions. The communication, which institutions establish with their stakeholders and target group, provides information about their corporate structures. Institutions express themselves correctly with the perspective of positive communication and create a positive image.

Communication forms and management created by institutions are used in various ways. Recent developments in information communication technologies (ICT) provide an opportunity to shift the communication aspect to this platform and the communication presentations of each institution to shift to these channels besides face-to-face communication. Institutions present their contents and share them with their target group and stakeholders by using social media platforms such as Facebook, Twitter, and YouTube. Health institutions are also institutions that use and manage social media platforms effectively and effectively. Health institutions need to carry out communication activities in a standard way in order to convey the institutional values, identity standards and cultures to the related persons properly. In this process, implementing policies on the basis of transparency, which is a significant part of institutional management, is of great importance in terms of institutional perception and strengthens the reputation of the institution. With its features, social media networks, whose users increase gradually via information and communication technologies, make it easier for the related persons to reach the institution, to communicate quickly and to find a solution. The Ministry of Health is

one of the first known institutions because of its mission in Turkey. The shares of the Ministry of Health in the social network, which is an institution with high reputation in Turkey, is considered to be important for the related persons, and the analysis of its official Twitter account is focused on this study.

The Ministry of Health is an institution that uses and manages social media platform, Twitter, efficiently. It is an institution that shares various contents and communicates with its followers. In this context, it is aimed to analyze the contents shared from official twitter account of the Ministry of Health in terms of public relations models and management.

In this study, one-month posts from tweets shared from official twitter account of the Ministry of Health are examined and discussed on the basis of public relations models. The data are shown in the tables. In the light of these data, the study is supported by making suggestions about social media management and tweets of the health institutions in the conclusion.

1. Theoretical Framework

Social media is a general name given to digital social media that have web 2.0 based technical infrastructure offered by developing technologies, provides opportunities to mutual communication and interaction, and include social networks such as Facebook, Twitter, and Instagram. In other words, according to Akar (2010: 17) social media is “websites, which are based on Web 2.0 technologies, provide opportunities deeper social interaction, community formation, and the achievement of cooperation projects”. Social media, also called as the interaction of people and reflection of their communication to new media areas, has various possibilities to share the information produced in mass media with other people (Aydınoğlu, 2013: 5). In social media environment, people have the opportunity to introduce themselves to other people, to meet them, and to communicate with people from their own environment (Çalışır, 2015: 119). However, the efficient use of social media provides benefits in accessing information and creates time savings (Çetin and Toprak, 2016: 55). The process of providing information can also activate political and civil participation areas by enabling the features of social media by people

(Rainie et al., 2012: 2). In addition, the rapid progress in the development of social media technologies affects corporates and institutions, and reveals the importance of social media management (Saravanakumar and Suganthalakshmi, 2012: 4445).

The rapid development and progress of social media in recent years and being an ordinary part of life have changed the lifestyles of people (Selwyn, 2011: 1). The variety of contents produced on social media is constantly developing, and the subject of popularity becomes prominent. This is due to the radical change in the communication process (Eren, 2014: 230).

Platforms such as Twitter and Google, where the public transfer their data, show the systematic features which include the methods of sending and receiving information and effective co-channel communication (Sutton et al., 2008). Accordingly, social media platforms and shared contents represent a system. At this point, data analysts and numerical methodologists play an active role in carrying out appropriate analyzes and tests (Fan and Gordon, 2014: 5). This role is more significant for sites such as Facebook and Twitter whose number of participants increases gradually (Haciefendioğlu, 2014: 60).

In social media environments; personalization becomes prominent, cognitive processes of people can be reflected differently, and experiences can be transferred (Tess, 2013). In addition, people on social media platforms can create groups with people from different platforms and approach various issues with emphasis on unity although they seem to personalize themselves (Kırık and Karakuş, 2013: 63). With this structure, the use of social media can trigger the formation of a public opinion on privacy since the moment it appears to be the main activity of the day (Madden, 2012: 4). In this context, it is possible to say that social media presents a notable part of life in today's society and creates public opinion as a means of socialization for people (Oyman, 2016: 126).

In the light of the information mentioned above, the main features of social media are listed below (Mayfield, 2008: 5):

- **Participation:** The internet-supported social media platform affects the connection between mass media and the main audience by encouraging people to create something and get feedback.
- **Openness:** Social networks provide openness to the participation and messages of people.
- **Dialogue:** People can integrate into basic communication processes via social networks, provide feedback, and a two-way communication process can be created.
- **Community:** In social networks, people can accomplish consensus on mutual subjects more quickly, become a sharer in their interests and virtual unity can occur.
- **Connectedness:** Networks created on social media can connect with other networks, provide access to other types of information, and allow people to access quickly.

Twitter provides the opportunity to share something limited to 280 characters for people benefiting from the platform. “Reply” button for each tweet sent by people, “Retweet” button that the users’ tweets can be shared again, and “like” button are available on the platform (Albayrak et al., 2017: 1992). In addition, it has a global social feature that provides free online services to its users (Çevik et al., 2015). Also, it is a social media platform that has already completed its development compared to other networks, has a large number of active users and contains various data provided by these users (Karabulut and Küçüksille, 2018: 18). At the same time, it is a social network that allows people to see words, topics and phrases, which especially become trend, and supports them in specific hours, weeks and days (Benhardus and Kalita, 2013: 123).

Twitter is an indispensable part of social and corporate life as a platform that transforms the communication perspective in social life and the number of its users increases gradually (Doğru and Doğru: 2015). People can analyze different kinds of news via Twitter, open a hashtag about a subject to become united, share their personal opinions, and share their ideas with their followers in their accounts by instant sharing. In this way, sharing can spread among the accounts of different

people as well as options such as liking and getting followers are possible (Marwick and Danah, 2011). In addition, Twitter is a network that is particularly evaluated for institutions. According to Çetintaş (2019: 92), Twitter enables the model of dialogue communication that institutions establish with their stakeholders and communication forms that are planned to be used for their online communication.

Twitter is frequently used in researches, and it is used for data analysis in qualitative and quantitative scientific research methods. According to Ayan et al. (2019: 251), thanks to its possibilities, Twitter offers researchers a wide range of fields related to social media mining and presents a wide range of data for researches. In addition, Twitter is a platform that directly contributes to data science with the contents it offers to researchers (Gazioğlu and Şeker, 2017: 9). Accordingly, it is true to say that Twitter is a platform that can be observed and offers raw data. In this context, Twitter is a unique tool that presents measurable perspectives for unobservable human behaviors and strong viewpoints for researchers (Coppersmith et al., 2014: 51-52).

It is highly important to know the communication elements and to communicate correctly with people for doctors, physicians, nurses and midwives who work in health services that people go and communicate regarding their health problems in social life (Avcı et al., 2012: 162). Health communication studies in the focus of patient - health staff has begun to increase since 1970 and continued to develop as a field of science (Çobaner, 2013: 214-215). Health communication studies include preventing diseases, promoting to stay healthy, health policies, preparing guidelines for healthcare providers and improving the quality of life of people in the society (Feeley and Chen, 2013: 2). In this context, health communication is a tool for increasing public health and aiming at its high level. This feature of health communication allows marketing products in a planned way, training of patients and providing the necessary communication support to their relatives, and related researches obtaining necessary information about health services.

Studies on health communication include communication activities carried out to address the general perceptions of people, to raise awareness of the public's

general belief, behavior and views on this issue and to manage all of them (Becerikli, 2012: 163). These communication activities are mostly carried out to prevent communication difficulties among patients communicating with healthcare professionals in the hospital, and to be handled face to face and interpersonal dimensions, and due to socio-psychological reasons that patients tell themselves (Becerikli, 2013: 26). Observing the related studies, learning the necessary points and eliminating the conflicts about health communication studies are significant in this century in terms of the activities that will be organized in this field (Maibach and Holtgrave, 1995: 234).

With health communication, it is aimed to increase the quality of health service that is used individually, to create communicative awareness about possible health problems in social life and to carry out health communication management correctly (Koçak and Bulduklu, 2010: 8). Examples of these problems are lack of communication / misunderstandings of hospital staff and problems resulting from the current situation of patients. Akgün (2012: 52-54) lists the problems that constitute the main reason for creating goals in health communication and cause misunderstandings during communication as follows:

- Problems occurred during communication with elderly,
- Problems resulted from patients,
- Problems resulted from medical staff
- Problems occurred due to environmental noise problems
- Problems developed due to patients with visual impairment / disability
- Problems experienced with patients who have hearing problems
- Problems occurred due to voice, self-expression and communication difficulties in these expressions

In order to cope with health communication problems, it is possible to focus on scientific studies about the disease in terms of communication, to do a feasibility study and response immediately against emergencies, to prevent possible other problems, to ensure environmental health and workplace safety (Parrott, 2004: 751). However, two approaches can be mentioned at the basis of research in terms of the solutions of problems. These are interpersonal and mass communication approaches

that are handled in health communication (Ratzan et al., 1996: 28). Different researches are also conducted to expand the perspective of health communication based on the solutions of problems. The mutual aspect of these studies is obtained in seven main themes (Wright et al., 2013).

- The role of information communication technologies (ICT) in providing adequate information about health, communicating with authorized people about problems, strengthening communication with patients and relatives,
- The effect of mass media on reaching a sufficient level of knowledge about health,
- To create health communication contents, message transfer and campaign planning in order to change the attitudes in social life,
- To understand the information in different cultures, determine beliefs and evaluate their views on health communication,
- To strengthen the tie between the authorized units and health staff to ensure the quality of information flow in healthcare institutions,
- To check the communication of health staff with the patients and their relatives,
- To determine the perspectives of people on health communication, the effects on their beliefs and the reflections on their behaviors.

The mutual point of the researches is that the notion of health communication is a multidisciplinary field. For this reason, most of the healthcare institutions and staff develop themselves in time. In this context, the development of health communication is supported by considering bureaucratic decisions (Schiavo, 2013). Conducting health communication studies properly will reveal the success of health management. According to Avaner and Avaner (2018: 9), this success is made possible by the bureaucracy and human-oriented collective action, the unity in decision mechanisms and the general conditions in parallel with the health management index. However, effectiveness in health management and human-oriented structure depend on the effective use of social media in health services and the provision of accurate information and data flow (Avaner and Fedai: 2017). At this point, trainings in the field of health management are provided with a focus on

management and human, activities related to the field are carried out with various contents at national and international level and the functionality of the rational decision mechanism is enabled (Çimen, 2010, 138). In addition, a system approach is applied to maximize an effective communication system in health management (Çınaroğlu and Avcı, 2013: 84), in order to achieve a more qualified health communication management, inferences about the current situation, causal connections, dynamic formations, and planning system are determined, and implementations on the basis of learning are done (Maani and Cavana, 2007: 18).

The effect of information communication technologies on shaping social life is also seen in health communication. Applications in the development point of this field are supported with social media contents. Tosyalı and Sütçü (2016: 19) emphasize that healthcare staff and patients are positively affected by new communication technologies and social media in the subjects such as the speed of information flow, the presentations of new drug and treatment methods, and mention that health communication has occurred successfully in this environment.

2. Methodology

2.1. The Subject, Purpose and Research Questions of the Study

In this study, the tweets shared between the dates of September 1 - October 1, 2019 via official Twitter account that is the social media platform of Turkish Republic Ministry of Health (<https://twitter.com/saglikbakanligi>) are examined in the context of public relations models and in terms of health communication management. Public relations models were developed by Grunig and Hunt (1984: 8); and are listed as press agency, public information, bidirectional asymmetric and bidirectional symmetrical. The aim of the study is to make inferences about health communication management from the tweets that are shared based on these models. Research questions are listed below.

- How does the Ministry of Health use and manage its twitter account in terms of public relations models?
- How does the Ministry of Health benefit from the Twitter account for health communication?

- What information does the Ministry of Health provide to the community with the contents that lay the groundwork for health communication management?

2.2. Sample of the Study

Objective sampling was used in the selection of the study group for the analysis of the study. Objective sampling is a non-random sampling method. It defines the study group where the purpose of the study is effective in sampling selection, the situations that are rich in providing information are selected and included in the research content and in-depth analysis is carried out (Büyüköztürk et al., 2016: 90). In this context, within the scope of this study, the tweets posted by the Ministry of Health via the official twitter account between September 1 and October 1 in 2019 were analyzed.

2.3. Limitations of the Study

Blocking user comments to the shared tweets or the fact that all of them are not open for inspection scrutiny by twitter constitutes the limitation of the study. The date of the data obtained in the study was between September 1 and October 1, 2019 can be considered as another limitation of the study.

2.4. Data Collection Tools and Process

In the research, 103 tweets shared from the official Twitter account of the Ministry of Health between September 1 and October 1, 2019 was evaluated. The evaluation of the shared tweets in terms of the study was made within the coding of public relations models. The categories and codes of the coding tables constitute the variables in the model developed by Waters and Jamal (2011). While evaluating the tweets, the variables in the codes and categories were examined as “Available (1) and Unavailable (0)” and the total values and percentages were transferred as specific tables.

3. Findings

The tweets shared by the Ministry of Health between September 1 and October 1, 2019 were turned into a table taking into account the research questions

prepared in the context of public relations models. The numerical data in the tables are interpreted under the tables.

Table 1. Tweet Content in the Context of Public Relations Models of the Ministry of Health

Public Relations Models	Press Agency Model	Public Information Model	Bidirectional Asymmetric Model	Bidirectional Symmetric Model
Tweets	n= 86 (%33,99)	n= 148 (% 58,49)	n= 18 (% 7,11)	n= 1 (% 0,41)
TOTAL	n= 253 (% 100)			

In 103 tweets shared between September 1 and October 1, 2019 from the official Twitter account of the Ministry of Health, a total of 253 content were determined in the focus of the variables developed by Waters and Jamal (2011). These contents were determined as Press Agency 86, public information 148, bidirectional asymmetric 18 and bidirectional symmetrical 1 time. As shown in Table 1, The Ministry of Health shared the tweets mostly in variables within the public information model. Tweets shared in this context are mostly the tweets including information, blog sharing about the institution, news content, press release, research data, brochure sharing, event notification, annual report and sectoral information. In contrast, it is shown that the least tweet is shared towards the bidirectional symmetric model variable. It is also found that the Ministry of Health has had little direct response to its followers. In addition to this, the fact that there are more shares regarding the introduction of the institution, emotional content and notifications involving the activities of the institution are an indication that the press agency model is used more. In line with the bidirectional asymmetric model, tweets of the Ministry of Health include variables including receiving feedback, requesting to be contacted, participating in the campaign, feedback on the current situation and participation in social responsibility projects. There are also various studies in Turkey that analyze public relations models in terms of institutions. Bayram and Bayram (2018) examined the Directorate General of Security, which is a public

institution, and concluded that its social media posts focused on informing the public. Doğru and Doğru (2017) conducted a study about the two state universities and a foundation university that have the most likes among 181 universities in Turkey. They carried out a research in the context of public relations models for social media posts in the official accounts of the universities and found that these universities actively reflect the categories of the bidirectional symmetrical model. Durusoy (2018) examined the social media posts of Kadıköy and Datça Municipality in the context of public relations models and concluded that Datça Municipality sent posts within the scope of bidirectional asymmetric model and Kadıköy Municipality mostly sent posts in the focus of public information model. Tarhan (2012) conducted a study in the context of public relations models about the official social media accounts of 16 Metropolitan Municipalities and concluded that 62.7% of the messages on social media were posted to inform the public and 37.3% of them were posted in the focus of bidirectional symmetrical model.

The rate of public institutions to use public relations models has increased with the development of social media. In addition, institutions in the private sector have effectively sent their messages through social media and communicated with people quickly and easily. It is indicated in the studies that institutions use public information model more in social media posts. Moreover, it was determined that the posts were sent in the focus of the two-way symmetric model in universities particularly. It was determined that District Municipality and Metropolitan Municipalities, which are the subjects of the studies mentioned, use the public information model. Also, it was determined that the titles such as works, activities, projects, and expected activities are dominant in the posts of public institutions and these posts were created in this framework.

Table 2. Findings about the General Information of the Official Account of the Ministry of Health

Titles	Numeric Information
Number of Follower	n= 510 k.
Number of Followed	n= 16
Daily Number of Tweets	Average n= 3
Tweets Including Photo Sharing	n= 38

Tweets That Redirect to Their Own Website / Social Network Accounts	n= 14
Tweets That Redirect to Different Websites	n= 6
Citations	n= 4
Numbers of Retweets to Tweets	n= 15.635
Number of Likes to the Tweets	n= 305.526
Hashtags	n= 85
Tweets Including Video Sharing	n= 15
Tweets Including Questions to Followers	n= 9

Information from Table 2 was obtained on 1 October 2019. Considering that Turkey's population is 82,003,882 (<http://tuik.gov.tr/>), the ratio of the number of followers of the Ministry of Health to the population of the country is 0.6%. In other words, the official twitter account of the Health Ministry has fewer followers than 160 times the country's population. The number of users followed by the Ministry of Health is 16 of the followed accounts, one belongs to President Recep Tayyip Erdogan and all the others are official accounts belonging to ministries. In addition, the number of tweets posted daily varies, but the average is three. The Ministry of Health supported the tweet content with photos within the specified date range and shared 38 tweets with photos in total. It made 14 shares by redirecting the content it shared to its own website or social network accounts. It is also found that the six contents were directed to other web addresses. It is seen that there were four citations from other sites in the shared tweets. Users retweet of 15,535 tweets of Ministry of Health in their own accounts. The total number of likes for the content shared by the ministry was around 305 thousand. The number of hashtags used in the shares is seen as 85. The contents of the tweets were supported by video 15 times. In its official account, it directed questions to its followers nine times.

Table 3. The Ways in Which the Ministry of Health Conducts Health Communications Through Twitter

Share Title / Type	Numerical Indicators
Event	n= 18
Press Release	n=7
Sensitivity	n= 7

Celebration	n= 11
Implementation	n= 17
Information Exchange	n= 36
Success and Acknowledgment	n= 8
Important day / Celebration	n= 6
Warning Message About a Disease	n= 8

The Ministry of Health used its official twitter account between October 1 September and October 1, 2019 in 103 tweets with 9 types of titles. Among these titles, the most widely used title was information exchange (exchange of ideas about health with other institutions or individuals: 36). In addition, the Ministry of Health has repeated the important day or celebration sharing (specifying spirituality, remembering past gains and achievements) in the tweet content for at least six times. In the tweet titles posted by the Ministry of Health, it is seen that the event for the introduction of an organization is 18, press release for notification of an event or situation is 7, celebration for the success of an event, activity and formation is 11, transfer-implementation of the activities for the healthy life of the Ministry of Health is 17, statement of accomplishments and acknowledgements to honor the representation of activities or achievements is 8 and transmission of messages warning citizens about a particular disease is 8 times.

It is seen that the Ministry of Health presents the information that sets the ground for health communication to the community with different contents. These are stated below:

- To share content related to the introduction of the institution in large numbers, to provide emotional expressions, to convey the sorrows extracted from the situation, to inform the organizations that include promotional activities and types of activities in the form of tweets – Press Agency Model,
- Including information sharing content on any subject or health related posts, directing it to its own blog for information exchange, making a public press release about a situation, presenting the numerical information for researches to the public, conveying the events with colorful brochures and making a date notification, discloses reports on the activities carried out and publishes the developments in the sector based on the data - Public Information Model,

- Sharing tweets to get feedback from the public about an important issue, providing address information to communicate with the citizen, presenting numerical indicators about the health campaign, transmitting their messages directly and in plain language, clearly referring to the websites of official websites or other relevant institutions and social exhibiting the participant aspect in responsibility activities - Bidirectional Asymmetric Model,
- Direct response to the user (Demet Akalın's tweet) - Bidirectional Symmetrical Model

The tweets on the Ministry of Health's official Twitter page present the contents of Public Relations models in terms of Health Communication as above.

There are various studies in the literature on social media uses of the ministries and public institutions, particularly the Ministry of Health. According to Erkek (2016), a limited number of public institutions in Turkey use social media networks. Studies conducted at the end of 2010 demonstrate that public institutions, including the Ministry of Health and other ministries, have increased the rates of their social media use. 8883 tweets shared on the official Twitter accounts of the Ministries of the Republic of Turkey were analyzed in the study conducted by Göçoğlu's (2019), and it was concluded that the Ministry of Health is the most active ministry to consider the opinions of the citizens and to create surveys according to these opinions. The fact that only 7 tweets were suitable for the bidirectional symmetric model in 8883 tweets analyzed also indicated that ministries do not use Twitter as a means of "civic participation" and "feedback" (Göçoğlu, 2019). The Ministry of Health is more active in its posts and interactions compared to other ministries, and this demonstrates that the ministry uses the public relations models effectively. However, it is observed that most ministries are inadequate in the mutual communication with the citizens via social media. It is possible to say that there is an increase in the social media uses of the ministries at the end of 2010, but it should not be overlooked that these uses do not develop in accordance with the bidirectional symmetric model.

In Turkey, the private or public hospitals of the Ministry of Health can use social media platform, Twitter, for different purposes. Developing strategic processes, increasing the benefits that can be accomplished via social media and strengthening the communication are among these purposes. In addition, health communication provided via social media enables to gather qualified and linear information about people, to create positive health awareness, to raise awareness about health communication and to develop a positive mutual interaction during treatment processes (Avcı & Avşar, 2014). It is also a fact that social media accounts of official health institutions or the Ministry of Health are not the only criteria in terms of creating a positive health awareness or creating a risky environment by negatively affecting the health awareness of the society. In the study conducted by Çobaner and Köksoy (2014); it was revealed that the posts of unsupervised health information of Twitter account @SağlıkNotu, which was not affiliated with the Ministry of Health or any official health institution and had 64.947 followers (during the research period), posed a risk for public health and health awareness.

Yıldırım (2014) made an analysis about the official Twitter account of the Ministry of Health including the dates January 1, 2014 and January 31, 2014. As a result of this research, it was concluded that the ministry provided information to create positive health awareness among its followers. However, it was determined that the ministry's interaction with citizens on Twitter was inadequate. This determination was made by analyzing 145 tweets shared by the Ministry of Health within the specified dates. In addition, it was observed that the ministry did not respond in any way to the comments and questions asked by the citizens regarding the posts. Although the Ministry of Health had posts to create positive health awareness within the specified dates, its failure to respond to the citizens, in other words, to act with a public information model that was not suitable to the structure of the social media, caused that it did not establish a strong communication with the citizens. This demonstrated that the ministry should admit the bidirectional symmetric model in order to establish strong communication with the citizens on social media, rather than shared content or purpose of providing benefits.

CONCLUSION AND SUGGESTIONS

Rapid development in fields such as technology, communication, transportation in the 21st century has also affected health communication management and it has become an important field of study that is a focus of interest and scientific studies are conducted. In particular, the communication-oriented researches of health institutions, the communication of the health personnel with the patient and among themselves are the subjects that are focused on Information and Communication Technologies (ICT). Being in the virtual environment becomes a necessity for these institutions due to the developing technologies and the interest of the target group. Nowadays, institutions may use social networks more frequently to communicate with their target group and may have to produce creative and rich contents owing to the important flow of information via the virtual environment. Social networks such as Twitter, Facebook, and YouTube become prominent platforms that the business processes and values of institutions are reflected. For this reason, it becomes important that institutions should be more sensitive to their target group sharing information in social networks and they should act strategically in the framework of a detailed plan and program while creating contents.

The Ministry of Health is an institution that frequently shares contents and informs its followers with different contents by actively using its official twitter account in terms of health communication. It was determined that the Ministry of Health particularly used the public information model in the tweets that were taken as a sample. However, it was seen that the press agency model was also used. Shared messages are often one-sided and cannot respond adequately to the comments of the followers. While examining the messages shared by the Ministry of Health on Twitter, messages about press statement, raising awareness, celebrating, informing about the applications, explanations with success and thanks, reminding important days and warning about diseases are seen. In this context, the titles that can be presented as suggestions are listed below:

- The Ministry of Health can increase the utilization rate of its followers by increasing the interaction on its page.
- While giving importance to press agency and public information models, it can also produce contents particularly related to the bidirectional symmetric

model. This can increase the motivation of the followers to interact on the page.

- It can positively affect the perception of the follower by handling the promotion of the institution and the mentioned issues from the perspective of communication-oriented social network management.

As the Ministry of Health is a reputable institution with a high level of authority in health issues, the Ministry of Health is expected to use a formal language in its social networks and to share its messages by considering its followers with different demographic and socio-cultural characteristics. It is important for the mission of the institution to create the sharing based on the dialogue with the content that will respond to the wishes and expectations of the citizens, and to meet the interaction expectations of the target group. With this necessity, time and speed of digital platforms will be used, health communication in virtual environment will be managed in accordance with the expectations of the target group, and this will contribute to the reputation of the institution.

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