RESEARCH ARTICLE

PUBLIC RELATIONS CAMPAIGNS AND PREGNANT WOMEN'S VACCINATION ATTITUDES DURING THE COVID-19 PANDEMIC IN TÜRKİYE*

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This study complies with research and publication ethics.

Abstract

Vaccines have been produced and released in different countries to prevent the risk of transmission of Covid-19, which is shown as the biggest global pandemic of the era, and to eliminate the pandemic situation. Public relations campaigns to promote vaccines to the global public is an issue that deserves academic scrutiny. The possible side effects of vaccines according to the age and health status of individuals and the fact that they have not been tried before have brought along doubts in the public opinion. The misinformation spread through communication tools about these doubts has also caused fear and panic in the society. The intensive production of content on social media during the pandemic period has made the dissemination of misinformation and distortion of information on the subject prominent. Although scientific data and findings have shown that vaccination is important, public panic has been tried to be dampened by public relations campaigns. Considering that vaccines are seen as a threat as much as the pandemic, especially for pregnant women, the importance of examining the role of public relations campaigns in accurate information and crisis management can be understood. For this purpose, we aim to reveal how public relations campaigns are perceived in individuals' decision-making and vaccination tendencies. In the study, data were collected through semi-structured in-depth interviews. For this purpose, the tendency of pregnant women to be vaccinated was questioned in interviews with 5 gynecologists from different districts of Ankara.

Keywords: Covid-19 vaccine, covid-19 pandemic, public relations, social identification.

^{*} This article is based on Esra ÖZTÜRK's PhD dissertation conducted under the supervision of Prof. Dr. Esra İlkay Keloğlu İşler.

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TÜRKİYE'DE COVID-19 SALGININDA HALKLA İLİŞKİLER KAMPANYALARI VE GEBELERİN AŞI OLMA TUTUMLARI*

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Bu calısma arastırma ve yayın etiğine uygun olarak gerceklestirilmistir.

Öz

Cağın en büyük küresel salgını olarak gösterilen Covid-19'un bulas riskini önlemek. pandemi durumunu ortadan kaldırmak için farklı ülkelerde aşılar üretilmiş ve piyasaya sürülmüştür. Aşıların küresel kamuoyuna tanıtılması için yapılan halkla iliskiler kampanyaları, akademik olarak incelemeyi hak eden bir konudur. Aşıların; bireylerin vasına, sağlık durumlarına göre olası van etkileri ve daha önce denenmemis olması kamuoyunda şüpheleri de beraberinde getirmiştir. Bu şüphelere dair iletişim araçlarından yayılan yanlış bilgi toplum içinde korku ve paniğe de sebep olmuştur. Pandemi döneminde sosyal medyada yoğun olarak içerik üretilmesi, konuya ilişkin yanlış bilgi yayılımını ve bilgi çarpıtılmasını belirgin hale gelmiştir. Bilimsel veriler ve bulgular aşının önemli olduğunu göstermiş olsa da halkın içinde bulunduğu panik durumu halkla ilişkiler kampanyalarıyla sönümlendirilmeye çalışılmıştır. Özellikle gebe olan kadınlar için salgın kadar, aşıların da bir tehdit unsuru olarak görüldüğü göz önünde bulundurulursa, halkla ilişkiler kampanyalarının doğru bilgilendirme ve kriz yönetimindeki rolünü incelemenin önemi anlasılabilir. Bu amaçla, bireylerin karar alma ve aşı olma eğilimlerinde halkla ilişkiler kampanyalarının nasıl algılandığını ortaya koymak hedeflenmektedir. Çalışmada, veriler yarı-yapılandırılmış derinlemesine mülakatla toplanmıştır. Çalışma, 2023 yılının Mart - Haziran ayları arasında gerçekleşmiştir. Çalışmada, iki aşamalı akış modelinin kanaat önderi kavramı üzerinde durularak, aşı hakkındaki fikirlerin kanaat önderlerinden, topluma nasıl yayıldığına odaklanılmaktadır. Ayrıca çalışmada, sosyal normların nasıl oluştuğunu, değiştiğini ve işlediğini anlamaya yönelik araştırmalar yapan sosyal özdeşlik kuramı kullanılmıştır.

Anahtar Kelimeler: Covid-19 aşı, covid-19 salgını, halkla ilişkiler, sosyal özdeşlik.

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Introduction

Epidemics are undoubtedly one of the most important topics in world history. Humanity has struggled with diseases that have caused great destruction throughout history. In the past, black plague, Spanish flu, and nowadays Covid-19 pandemic is an important fact that spreads rapidly over a wide area, showing similar effects at different times with the risk of easy transmission and dragging societies to great losses.

In a short period of time, vaccine trials have been initiated in many different countries in order to take serious measures against the outbreak caused by the Covid-19 virus, which has spread rapidly, affecting the whole world and causing a significant number of deaths every day. With the completion of the tests of these vaccines and their applicability, vaccine news and news content have led to the emergence of a new debate. The fact that individuals are seeking information about vaccines has caused vaccine news to be followed closely. There have been many opinions about Covid-19 vaccines in the media, and the possible consequences of Covid-19 vaccine administration have been discussed on many traditional and digital platforms.

In addition to the progression of the pandemic and vaccination efforts, the side effects of the various vaccines that have been marketed have been reported in the media, and untrue or distorted news content has frequently appeared in both traditional media and digital platforms. In fact, this situation has been called an infodemic by the World Health Organization (WHO, 2020a) due to the difficulty of distinguishing real information from false information in the abundance of information produced on the subject (WHO, 2020b). The belief in these unrealistic or distorted news can mislead individuals about the measures that can be taken against the disease (Sceri & Grech, 2020) and prevent them from taking the necessary precautions by complying with restrictions (Ülker, 2021). As a result of the news, some sanctions were imposed by the state on individuals who showed resistance to vaccination in society.

Significant risks and adverse effects have been reported in pregnant and lactating women and in all special populations. Regarding WHO (2024),

Although there is no evidence in the current literature that Covid-19 increases the risk of miscarriage or teratogenicity in pregnant women, it is noteworthy that there is an approximately three-fold increase in the likelihood of vertical transmission and the incidence of preterm birth in the third trimester.

The fact that women undergo significant physiological changes during pregnancy plays a role in the severe course of the disease during pregnancy and lactation. In addition, several immunologic changes are observed in these groups that increase the burden of disease.

In order to prevent the spread of the pandemic, ensure the healthy development of pregnant women and reduce the mortality rate, the Turkish Medicines and Medical Devices Agency (TİTCK) has approved the use of vaccines

developed against SARS-CoV2 infection (Turkish Medical Association, 2021). Vaccination of pregnant and lactating women has become one of the most controversial issues on the agenda. In the early stages of the outbreak, deaths of pregnant women, loss of newborns and miscarriages caused fear and panic among expectant mothers.

Pregnant women are more likely than other women to experience respiratory failure, require mechanical ventilation, and require intensive care. Increased stillbirths during the pandemic have also been linked to the situation. Vaccination, one of the measures considered necessary to prevent the spread of Covid-19, has prioritized people with chronic diseases, people over 65 years of age, and people with cancer. Although pregnant women are a high-risk group, they have not been prioritized for vaccine development and implementation. However, the Vaccine is recommended for all pregnant women and lactating mothers without any vaccine preference (Jamieson & Rasmussen, 2022). The Turkish Society of Gynecology and Obstetrics (TJOD) recommends vaccination for everyone before, during and after pregnancy (TJOD, 2022). American College of Obstetricians and Gynecologists (ACOG) also emphasizes the importance of vaccinating all pregnant women, including breastfeeding mothers (ACOG, 2022). Still, social media posts from these associations are very few in numbers. The total number of tweets posted in one year concerning vaccinations is ten (https://x.com/TJODOfficial accessed on 03.09.2024). This also goes to show that campaigns to inform pregnant and nursing mothers are fundamentally insufficient.

The Society for Maternal-Fetal Medicine (SMFM) emphasizes that the potential effects of the vaccine should be discussed with health care professionals, that the vaccine is appropriate for breastfeeding women, that lack of knowledge about vaccine safety should not be weighed against possible serious disease processes, that the risk of harm to the fetus should be explained in counseling, and that the potential benefits of the vaccine should be emphasized. The Academy of Breastfeeding Mothers (ABM) states that individuals vaccinated against Covid-19 should not discontinue breastfeeding, that the potential effects of the vaccine should be discussed with healthcare professionals, and that although there is an acceptable risk to the child, the biological benefit should not be ignored.

The Food and Drug Administration (FDA), on the other hand, emphasizes that there are insufficient data on the risks associated with Covid-19 vaccination during pregnancy and that the available data on the effects of Covid-19 vaccination on breastfed infants or milk production/excretion are inadequate (Garg et al., 2021). The conclusions of the study by Martins et al., (2021) also emphasize that all vaccination during pregnancy is voluntary and that health professionals should inform women about the risks of contracting Covid-19 infection during pregnancy and the limited evidence on the benefits and potential side effects of available vaccines.

It states that all pregnant women should be offered vaccination after being adequately informed of the benefits and risks. The European Board and College of Obstetrics and Gynecology (EBCOG) supports the recommendation of Covid-19 vaccination for all breastfeeding women in the absence of a specific contraindication (Martins et al., 2021).

Pregnant women's positive or negative attitudes toward vaccines are largely influenced by print and visual media. Social norms are rules or standards for behavior that serve as guides for people's actions, help create expectations about how others will act and promote greater coordination in social life (Smith, 2020). Therefore, it has been taken as a basic assumption that pregnant women's attitudes towards vaccination are formed by social norms and that these social norms are spread through digital media.

The increasing digitization of today's technology and the widespread use of social media have also influenced the news consumption habits of individuals in society. While the news that frequently appeared on social media during the process of vaccination studies was an important factor in pregnant women's opinions about vaccination, various factors such as individuals' education level, environmental factors, socioeconomic status are undoubtedly the most important discriminating factors.

In addition, public relations campaigns, public service announcements, persuasion teams working in the field, and interactions of coordination teams with individuals during the vaccination process are important factors on the vaccination attitudes of expectant and breastfeeding mothers. This study was designed on the assumption that individuals' tendency to be vaccinated is based on different reasons for opinion.

Infodemic and Opinion Leaders

According to the Health literacy level and related factors survey conducted by the Ministry of Health in Türkiye in 2018, 30.9% of Turkish society has inadequate health literacy, 38% has problematic-limited health literacy, 23.4% has adequate health literacy, and 7.7% has excellent health literacy. Accordingly, the sum of those with inadequate and problematic-limited health literacy is 68.9%. Therefore, it can be said that the problem of inadequate and problematic-limited health literacy is emerging as an important issue that affects seven out of ten people in the country (Republic of Turkiye Ministry of Health, 2018).

In the Health literacy survey European Union (HLS-EN) study, which included eight member countries of the European Union, it was found that 12.4% of the participants in the study had inadequate, 35.2% problematic, 36% adequate, and 16.5% excellent health literacy. In a health literacy study conducted in the United States, it was found that 12% of individuals had adequate health literacy, 53% had moderate health literacy, 22% had basic health literacy.

cy, and 14% had health literacy below the basic level (Sørensen et al., 2015, as cited in Akbal & Gökler, 2020, p. 149).

With 30.9% inadequate health literacy, Türkiye has almost double the level of inadequate health literacy compared to Europe and the United States. The Strategic Action Plan of the Ministry of Health of the Republic of Türkiye for 2019-2023 aims to "work towards the goal of creating a society that is aware of the importance of its own health, uses the health system effectively, and has high health literacy" (Ministry of Health, 2019).

The lack of health literacy in Türkiye is an important issue that can lead to a negative public health image, especially with the impact of fake news during the pandemic process. On March 11, 2020, with the announcement of the Covid-19 pandemic and the acceleration of fake news during this period, the World Health Organization introduced the new concept of "infodemic". Infodemic is a concept used to describe all false, inaccurate and conspiracy theories related to the Covid-19 pandemic (WHO, 2020a).

In his 2002 article "Infodemiology: Tthe epidemiology of (mis)information", Eysenbach defined "infodemiology" as the epidemiology of information. He explained the concept of infodemiology as a new research discipline that includes "the study of the determinants and distribution of health information and misinformation" (Eysenbach, 2002, p.113). At this point, it is extremely important to distinguish between information sharing, which includes the efforts of health professionals to control the pandemic, and non-professional messages that pose a risk to health (Allahverdipour, 2020). This also means that an effectively managed infodemic discipline can be useful in accessing quality health information.

Eysenbach (2020), described infodemic knowledge as a four-tiered "wedding cake" model. He defined these layers as science, policy and practice, news media, and social media from top to bottom in proportion to the amount of information they produce. According to this depiction, the largest and last piece of the wedding cake is social media. It contains the bulk of the unfiltered and unchecked information that society produces. Pulido et al., (2020) examined Covid-19 information on a social media platform and found that false information was shared more than science-based information. Another study found that awareness of the concept of infodemic is limited, and that false news is rapidly spread and normalized through social media (Ayaz, 2020). Individuals who use social media often do not think that the information they post can be the cause of an infodemic.

One of the most important themes that emerged from the public preference survey was "opinion leaders". Individuals are not alone in society, and they interact with others. They exchange views with each other and have relationships at various levels. Therefore, they also share the messages sent through the mass media. The most important reason for the state of panic

and fear during the pandemic is the active use of social media today. Posts and comments on TV channels and social media channels created fear and panic among the public. With the start of vaccination trials about a year after the outbreak, the agenda changed rapidly, and the side effects of the vaccine, its long-term effects, and its effects on people with chronic diseases quickly spread from ear to ear among the public. During the pandemic and the period of rapid vaccine trials, experts on TV channels and social media frequently gave scientific explanations about vaccines, emphasizing the positive and negative effects of the vaccine. An opinion leader shapes communication according to the group's worldview. A respected leader acts as a trusted source. An opinion leader can be considered as a group member who plays the most important role in communication (Erdoğan & Alemdar, 2005, p. 75).

The problem of "fake news", which has existed in the past in mass media such as newspapers, radio, and television, which are defined as traditional media, and which is one of the most important ethical problems, has moved to much more advanced dimensions with the development of Internet technologies and the possibility of individual sharing. While the easily accessible and interactive structure of the new media has led to a significant increase in content, the integrated structure of this environment also allows for easier and faster distribution of content (Akyüz et al., 2021, p. 218). A study conducted by Vosoughi et al., (2018, p. 1146) found that the spread rate of fake news is six times higher than that of true news, and that fake news reaches ten times more users.

The concept of "post-truth" (Keyes, 2019), which is used to describe the period in which both interpersonal and mass communication have undergone a serious transformation, and the definition of what truth is has changed, is an important definition used for this new era in which the truth is conveyed without relying on evidence. In his work, *The Post-Truth Age*, Keyes (2019, p. 9) argues that today "truth has been replaced by believability".

Social Norms and Social Identity Built by Opinion Leaders on Individuals' Tendencies to Be Vaccinated

Sherif (1936) demonstrated that groups spontaneously generate their own norms and frames of reference when making judgements about ambiguous stimuli (i.e., how much a point of light in a darkened room moves). Once established, this norm becomes adopted by individuals as their own personal frame of reference, maintained even when the person is no longer in the physical presence of other group members. With the first cases of Covid-19 worldwide, misleading information, conspiracy theories, and rumors shared on social media have made it difficult to understand developments related to the disease and to combat the pandemic (Groza, 2020; O'Connor & Murphy, 2020). As an example, given by Güler, fake news during the pandemic led to the deaths of around 800 people in Iran after they drank fake alcohol to protect themselves

from the virus (2020).

A dominant framework for understanding how social norms form, change and operate is the social identity approach (Reicher et al., 2010; Spears, 2021), developed in social identity theory (Tajfel & Turner, 1979) and self categorization theory (Turner et al., 1987; see Hornsey, 2008, for a review). Social identities built by public opinion on social media platforms, content in the form of unreal videos, photos, audio recordings, and articles about the Covid-19 pandemic can be shared among users in a short period of time. Fake news and misinformation, which spread faster than the virus on the Internet and especially on social media, have negatively affected the formation of awareness about the disease (Turkish Academy of Sciences, 2020, p. 47). From December 2020, with the start of Covid-19 vaccination studies in Türkiye, many infodemic information about the vaccine started to spread rapidly. Among this information, there have been many false, erroneous and conspiratorial messages and information that have no scientific basis such as the vaccine will cause facial paralysis, it will cause infertility, the enzymes used in the vaccination studies will change genes, the vaccine recipients will be implanted with chips, and so on.

In the work of Akyüz (2021), which examines the relationship between the communication practices and political identities of Internet and social media users in Türkiye during the pandemic period and their perceptions of vaccine attitudes and transparency of decision makers, it was found that in January 2020, participants were largely undecided and had negative attitudes toward coronavirus vaccination. Although Akyüz's (2021) study did not directly address the effect of infodemics on vaccination decisions, among its findings was that those who said they would not be vaccinated had a high level of belief in anti-vaccine claims, while those who said they would be vaccinated had a low level of belief in anti-vaccine claims.

Kesgin and Ünlü conducted a study with a questionnaire that was administered to 1092 participants between February 11 and 24, 2021, with the aim of determining individuals' awareness of news about vaccination and their tendency to follow, confirm, trust, and attach importance to the news in question (2021). As a result of the study, it was revealed that,

individuals do not find vaccine news in the media reliable and sufficiently informative, they think that there is too much fake news content on social media, although they attach importance to the statements of the Minister of Health about the vaccine, they follow the news about the vaccine by comparing it from different sources, and they think that the vaccine debates in the media do not influence their attitudes towards the Covid-19 vaccine.

Public Relations Activities in Vaccination

The importance of access to sound information on a global issue such as a

pandemic is once again being experienced in this information age. The spread of false or incomplete information about Covid-19, especially through the Internet, has been one of the most damaging issues in the process of combating the pandemic (Turkish Academy of Sciences, 2020, p. 47). The World Health Organization warned about the infodemic, stating that in the early days of the pandemic, there was a lot of information circulating, including a lot of inaccurate information (WHO, 2020a), Dr. Tedros, Director-General of the World Health Organization, defines the concept of infodemic as the excessive accumulation of information, some of which is true and some of which is not, that occurs during a crisis. He mentions that infodemics spread rapidly, making it difficult to access reliable information (WHO, 2020b). WHO defines the concept of an infodemic as the excessive accumulation of information, some of which is true and some of which is not, that occurs during a crisis and infodemics spread rapidly, making it difficult to access reliable information. Dr. Tedros, Director-General of the World Health Organization, agreed with The Guardian headline "Misinformation about coronavirus may be the most contagious thing about it," emphasized that the fight is not just in the health sector, and stated that they are talking to the media about this issue (WHO, 2020c).

Lasswell made a similar analogy and developed the hypodermic needle model by stating that the media has a direct and powerful influence on the masses (Lasswell & Harold, 1927). According to this model, the media can straightly direct the attitudes of the masses towards an issue, in other words, it can inject an attitude. In the Covid-19 pandemic, we encounter various manipulations in the media. Among these manipulations, misinformation and conspiracy theories seem to be more effective on the masses. According to the results of a study (Infodemi, 2020), false/unknown information or conspiracy theories about the Covid-19 pandemic seem to be quite common.

The confusion of information also affects trust in the factors influencing the issue. While trust in the World Health Organization is 45.1%, trust in the Ministry of Health is 57%. This mistrust is also reflected in vaccines, one of the most important tools to end the pandemic. While distrust of vaccines is generally high, the situation varies from country to country. The percentage of people who say they would use vaccines if they were produced in each country is as follows: Türkiye 58.2%, Germany 39.3%, USA 30.8%, Russia 29%, China 28.8%: China 71.2%, Russia 71%, USA 69.2%, Germany 60.7%, Türkiye 41.8%. In line with this information, it can be seen that there is a low level of trust in vaccines in general, while there is a clear negative attitude towards vaccines produced/to be produced by some countries.

Although not directly, the media have a role to play in these outcomes. However, it is clear that the media can also be effective in changing this negative result. During the pandemic process, the desire to follow the news increased by 75.8% (Karataş, 2020). At the same time, it is seen that every age group followed the news digitally at a high rate during this process (Kesgin

& Durak, 2021). All age groups indicated that they were aware of the developments related to Covid-19 (Kesgin & Durak, 2021). A study (Hayes & Clerk, 2020) showed that positive news about the vaccine increased people's intention to get vaccinated.

Approximately one year after March 13, 2020, when the outbreak was officially declared in Türkiye, the first vaccine was administered to Minister of Health Fahrettin Koca at Ankara City Hospital on January 13, 2021. Vaccination officially began on this date. The first administration of the coronavirus vaccine, which was approved for emergency use, and the fact that its possible side effects were not fully known, caused panic and fear in society and led to some confusion.

While the widespread use of social media, the ease of access to digital platforms and the point at which technology has reached where individuals can access information quickly, access to accurate information in potential crisis situations becomes even more problematic. With the introduction of the Covid-19 vaccine, different ideas and opinions have caused confusion among individuals. In order to increase vaccination rates and reduce anti-vaccination attitudes, the Ministry of Health's Public Relations Department began airing informative public service announcements on television channels. The "Vaccine Communication Guide" manual was printed and printed materials were used to raise awareness and create a positive attitude towards vaccination. Immediate vaccination rates, vaccination rates by provinces and districts, and daily data on the disease were also consistently posted on the Ministry's official website.

The features of social media, namely access, accessibility, usability, innovation and permanence, when deployed effectively in the context of information dissemination, information gathering, joint problem solving and decision making, disaster planning and training functions in crisis and/or disaster management, can facilitate more rapid and efficacious crisis or disaster management at the organizational level (Zincir & Yazıcı, 2013, p. 80).

It can be seen that the infographics prepared by the Ministry of Health largely meet the audience expectations mentioned in the literature and in this study. Preparing infographics according to the audience's expectations in terms of vertical and horizontal dimensions and what should be at the center of the design, creating designs with the use of remarkable elements and framing understandings will increase the likelihood of meeting the requirements for information dissemination and innovation in the fight against the current pandemic (Özpınar & Aydın, 2020, p. 257). According to Kaya and Yılmaz,

In the infographic designs of the Ministry of Health, it is evident that texts are generally used, information is repeated, and the use of visuals is kept to a minimum. In addition, it was found that some visuals were used in some visuals that could cause confusion (2021, p.783).

While the Ministry of Health's corporate website contains announcements about the measures to be taken for the public and health professionals, the steps to be taken in almost every aspect of social life are detailed. It can be seen that various studies are being carried out in terms of health communication, both with posters and written documents on the website, which also includes detailed measures to be taken by institutions and organizations in order to successfully maintain epidemic management in society (Utma, 2020, p. 1599). In this sense, it is very important for the Ministry of Health to create a separate information platform in the context of the Covid-19 pandemic and to share information such as the daily number of cases, number of recovered cases and such from this platform. Because what the public needs most in times of crisis is an immediate, regular and fast flow of information. In this context. the website prepared by the Ministry of Health, which provides regular information flow, can be considered as an important service.

It is possible to see that the website created by the Ministry of Health to inform the public about vaccination and convince the public to be vaccinated contains the most detailed and up-to-date information on the subject. Although the lack of promotion of this website and its contents is the subject of another study, it is believed that the awareness and communication of the website is insufficient due to the fact that it is only directed through hyperlinks in social media posts (Ekinci, 2021, p.448).

In addition to the Covid-19 information platform, the Ministry of Health prepared a "Covid-19 Vaccine Information Platform" to encourage people to get vaccinated. This platform provides detailed information about the Covid-19 vaccine (Covid Vaccine Information Platform, 2021). The main headings on the website say, "General Information", "Covid-19 Vaccine", "Publications", "Vaccine Dictionary", and "Frequently Asked Questions". It appears that this platform is a carefully prepared site for obtaining specific and detailed information about Covid-19 vaccines. Detailed and technical information on the subject is conveyed in a quite simple language and design.

Another vaccine promotion effort by the Ministry of Health was the establishment of "Vaccine Persuasion Teams". Minister of Health, Fahrettin Koca, who gave an interview to the press on this subject, used the following statements (Indyturk.com, 2021):

Under the leadership of family doctors, we will go to the homes of those who are eligible for vaccination but have not received their vaccinations, and we will advise and encourage them to get vaccinated. In this way, we will find out why those who have not been vaccinated have not been vaccinated. Persuasion teams led by family doctors will go to the homes of those who are eligible but have not been vaccinated and counsel them. Those who have not been vaccinated will be asked why they have not been vaccinated. Those who have reservations will be informed about the protection and importance of the vaccine. The goal is to increase the number of vaccinated people in the community.

Vaccine persuasion teams call people who have not been vaccinated even though it is their turn to be vaccinated on a provincial basis to find out the reasons for not being vaccinated and to convince citizens to be vaccinated. This work is the "research" step in the public relations process. The first step in public relations is to conduct research on a topic. To encourage people to be vaccinated, the Ministry of Health should first identify those who are not vaccinated and find out why. This is an appropriate public relations activity. It would be unethical to engage in public relations activities on this issue without first conducting thorough research to identify the root cause. Even if such activities were undertaken, it is unlikely that they would produce positive results.

These persuasion efforts were sometimes carried out through face-to-face interviews in the field, and sometimes attempts were made to persuade unvaccinated people by telephone through call centers established in provincial health departments. The establishment of vaccination persuasion teams is one of the most important and correct things that the Ministry of Health has done in this regard. It is the right step in terms of public relations to visit people individually to convince them to be vaccinated, to have health professionals explain the benefits of vaccination in detail, and thus contribute to reducing opposition to vaccination. In public relations, segmenting the target audience as much as possible and carrying out separate activities for each target audience is a situation that is believed to increase the success of the campaign.

And on the other hand, today, the poster is a widely used information tool all over the world. Beyond being a simple information tool, the poster is a communication tool that can and should tell people something different and new, sometimes making them laugh and entertain, sometimes warning, disturbing and even threatening (Boztas, 2017, pp. 25-24; Ertep, 2007).

Method

In the study, in-depth interviews were conducted with obstetricians working in different districts of Ankara province to investigate the main reasons for the positive or negative attitudes of pregnant women towards the vaccines that were rapidly introduced after the emergence of the Covid-19 pandemic, and semi-structured questions were asked to the respondents¹. The study covers vaccination studies during the Covid-19 pandemic. The scope of the study, which is limited to pro and anti-vaccination sentiments in Türkiye, includes public relations activities during the pandemic. The study was limited to Ankara, the capital of Türkiye, and all interviews were conducted face-to-face between January and June 2023. For this purpose, interviews with 5 obstetricians and gynecologists from different districts of Ankara examined the

¹ The ethics committee approval has been obtained with number 2023/104 from Ankara Hacı Bayram Veli Üniversity.

tendency of pregnant women to be vaccinated, taking into account regional differences.

The interviewees were selected using a snowball sampling technique and the following questions were asked of the participants: a) demographic characteristics such as (Name and last name, Sex, Occupation) b) Covid-19 vaccination statement questions such as (Did you assume any active roles during the Covid-19 pandemic? If yes, what did you do? Have you contracted the disease? If yes, how many times? Have you been vaccinated? Which vaccinations did you get? How many doses?, In your opinion, were the citizens informed sufficiently regarding the vaccines' entrance and availability in Türkiye? c) Questions related to identities adopted through public opinion leaders: Do you think the government's executions throughout the vaccination process are correct and informative enough?, What kind of an attitude did you observe in anti-vaccination groups and how did you manage it?, Did you find the public service announcements on vaccinations informative and effective?, Were you ever affected by anti-vaccination propaganda in social media? If you were, which arguments made you hesitate against vaccination? Do you have anyone in your close circles who refused to be vaccinated? If yes, what were their arguments? Have measures against anti-vaccination groups directed you to become vaccinated? d) Questions about attitudes of the pregnant woman; Do you believe in the preventative effects of the vaccination? What are the factors that led you to believe it? (Declining number of patients, information from the government, public service announcements, posters, billboards and so on), If a pandemic such as this one was to emerge again, what would be your recommendations?

Findings

In light of the available data, it was determined that, upon assessment of the discussions with pregnant women, some participants indicated that the pregnant women in question had been informed about the potential side effects of the vaccines. Facial paralysis and bruising were observed to be reactions that occurred in some cases. One of the participants stated that they encountered pregnant women with low levels of education and that despite the information provided, some of these women lost their pregnancies. She also stated that the side effects of the vaccine are not fully known.

The vaccine was recommended to pregnant women with some hesitation, but it also had side effects (P1).

Participants also stated that it is unethical to recommend vaccination to pregnant women based on their profession, while at the same time insisting on vaccination given its side effects.

As an obstetrician, I recommended vaccination to all pregnant women. Although there is hesitation about the side effects, I told all my patients that it has more

positive effects, that it is important and necessary for a healthy pregnancy and for babies to be born with antibodies (P2).

One of the frequently asked questions on the Covid-19 Vaccine Information Platform on the official website of the Ministry of Health of the Republic of Türkiye is as follows: "Can Covid-19 mRNA vaccine be administered to pregnant women?" The Ministry responded:

When the data on the application of Covid-19 mRNA vaccine during pregnancy are examined, it is recommended to vaccinate pregnant women. In the research conducted, information has been published that vaccination does not increase the risk of miscarriage of pregnant women (Official website of the Ministry of Health of the Republic of Türkiye, n.d.).

Some of the participants also mentioned the side effects that occur or can occur in pregnant women after vaccination and stated that pregnant women were vaccinated anyway.

Reactions like facial paralysis or facial bruising could be seen. But I still saw that most of the pregnant women were vaccinated (*P1*).

While stating that they conveyed all positive and negative situations to their patients, they emphasized that although they encountered all kinds of cases, the main purpose was to protect the mother and baby.

During the process of working with pregnant women, we encountered all kinds of cases. We gave examples, we emphasized the importance of vaccination, what is good for babies, and the importance of vaccination for their own health and the health of their babies (P4).

As an obstetrician, I recommended all pregnant women to be vaccinated. Although there is hesitation about the side effects, I told all patients that the positive effects are more, that it is important and necessary for a healthy pregnancy, for babies to be born with antibodies. Although the education rate is low in our region, I informed all pregnant women who came to the control as much as I could, and unfortunately, we also experienced deaths in pregnant women. I showed these examples and directed them to vaccination (*P2*).

The doctors who participated in the study were selected from different districts and said that they sometimes had difficulty explaining the importance of vaccination to pregnant women, especially in districts with low levels of education and welfare.

I recommended vaccination to all pregnant women. I worked at the Etlik Obstetrics and Gynecology Hospital (*P3*).

We encounter pregnant women with low levels of education and with all profiles. There were cases that led to death, we informed the patients as much as necessary, but since there were no sanctions, we did not insist too much. In general, we recommended after the first 3 months (*P3*).

They also noted that in regions with higher levels of education, doctors were more likely to use scientific data to make progress.

We expressed the importance of vaccination by giving examples of the studies conducted in case pregnant women are vaccinated, based on scientific data and considering the babies (P2).

The participant who, as an obstetrician, participated in the press as an example of vaccination, stated that this created an important awareness and that the birth of the first baby with antibodies was reflected in the press.

I was actively working at the time, and I was pregnant at the same time. I gave an example of myself. I stated that I was vaccinated and that I worked more comfortably in this process and that I gave birth to my baby in good health. In addition, it was stated in various studies that the baby was born with antibodies because the mother was vaccinated during pregnancy. Since this was important at the time. the press reported it as news. The first baby with congenital antibodies was born in Türkiye (*P5*).

When the participants encountered anti-vaccine groups, they stated that they made the necessary explanations to better explain the difference between vaccinated and unvaccinated pregnant women to their patients, but they did not insist too much.

I encountered anti-vaccine groups. I gave the necessary information. I showed examples to pregnant women. I pointed out the differences in the resting processes of pregnant women who were vaccinated and unvaccinated, who had the disease, and those who had to be hospitalized. But of course, I did not try to convince them (P5).

Of course, I have encountered anti-vaccine groups, but we do not have to convince or persuade anyone of anything. We are health professionals. We give the necessary information, make explanations, of course, the final decision is up to the person. We told examples, emphasized the importance of vaccination, what is good for babies, and the importance of vaccination for both their own health and the health of their babies (P4).

Participants generally stated that the tendency of pregnant women to be vaccinated differs according to their educational and socioeconomic levels.

I think education and socioeconomic level is an important factor for vaccination to differ in each region. I worked in Etlik Zübeyde Hanım. In general, the rate of vaccination was high, I did not see much opposition. My patients were easily convinced

I did not vaccinate in my district, I did not follow the data but considering that the education level of the profile in general is low, the cultural and socioeconomic level is low, I can say that the vaccination rates were low compared to a Cankaya region, compared to a private hospital pregnancy (P4).

I think that vaccination is related to sociocultural level and education. It is possible to say that just as the vaccination rate was different in all regions of Ankara and other provinces, this is due to the change in the demographic characteristics of the people. As you can appreciate, it is not easy to insist women coming from the provinces, who have a fixed opinion, who tell their husband's opinion as their own, to get vaccinated and to explain the reasons (P3).

While the participants stated that one of the biggest reasons for hesitation about vaccination was the emergence of different vaccines, they also underlined that this caused confusion among individuals.

I think it was confusing that there were two different vaccines. Later, people also had BioNTech. Its effect was longer. The contents were different. These were confusing (*P5*).

I think that the necessary information about the BioNTech vaccine was withheld from people. Although the content of the two vaccines was different, their protection and effects were different, these were hidden from the society (P3).

In addition, the participants stated that social media is extremely effective in influencing individuals and that people actively use social media to access information, which has a great impact on their tendency to be vaccinated. They also emphasized that more work should be done to draw attention to vaccination.

I think the public spot was missing, it could have been more. Different studies could have been carried out to inform the public and draw attention. I cannot follow social media much due to my profession, but of course I know that there is a segment that is very affected by social media. I also know that every message on social media reaches everyone differently and people interpret it differently. Therefore, there is a communication network that reaches a lot of people quickly. People look at social media instead of news, so they are immediately affected by misinformation (*P4*).

I am not anti-vaccine; I have encountered opponents of vaccination, and I find their arguments correct. I agree with them. I did not find the public service announcements sufficient. Not all users on social media have the same educational and cultural level, their ability to question, interpret, and reasoning skills are not developed at the same rate, and in this case, I think it causes a great deal of information pollution there. Expert opinions, scientific knowledge, and research results should be taken into consideration more, but this is not the case in our country. A lot of misinformation was circulated, and the necessary organization could not be done. Since there was no prevention in the social media, information was circulated falsely (*P3*).

Conclusion

The birth of healthy babies is significant, not only for the future of mothers but also for the future of societies. It is therefore evident that pregnant women represent a high-risk group in terms of vaccination during the pandemic. Pregnant women and breastfeeding mothers were therefore at risk during this extraordinary period that affected the whole world. Although health institutions and organizations around the world worked together to convince this group to be vaccinated, they could not insist on vaccination, as was the case in Türkiye.

Covid-19 is a recent global pandemic and an important process that deeply

affects societies in social, economic and political terms, the effects of which will continue to be researched and discussed for many years. At the end of the one-year period following the outbreak of the pandemic, different types of vaccines were introduced in Türkiye at different times, but their long-term effects are not fully known. One of the main reasons for this is that the testing phases of the vaccines licensed for emergency use were not very comprehensive.

In addition, the fact that the vaccines have been applied to different age groups of the society with the start of the vaccine trials and that the health status of individuals varies, causing different reactions in the people to whom the application is applied from time to time, has also caused fear and panic among the public. In today's world, where traditional media have been replaced by a digital and highly interactive structure, it is easier and quicker to spread distortions of information rather than the truth. The speed of technological development and the rapid and uncontrollable spread of information leads to both negative and positive situations. Covid-19, a global health crisis, has also led to disinformation.

The widespread use of social media has overtaken scientific information, and the pandemic process that created a state of fear and panic in society has continued in vaccination studies. While there is no doubt that the profiles of people in the regions where the vaccine was administered varied, one of the important issues that attracted attention was the situation of pregnant women, and pregnant women were not included in the priority groups for vaccination. Citizens with different health conditions, in different age groups and at different stages of pregnancy were concerned not only about their health, but also about the baby they were carrying. Until the vaccine was introduced, there were pregnant women, newborns and stillbirths in Türkiye who contracted the disease and died. However, the fact that this group was not included in the priority group with the start of vaccination efforts posed a danger to this disadvantaged group. The public relations campaigns conducted in Türkiye by the Ministry of Health, as well as by professional institutions and organizations, were based on the fundamental objective of public relations, namely, to disseminate accurate information to the public. However, as evidenced by the interviews conducted for this study, it can be concluded that the provision of clear and precise information was not sufficiently expeditious.

A further consequence of the research is the perceptions of professionals who interact with pregnant women regarding the dissemination of sufficient public information and social assistance. The interviews revealed that health professionals are aware of the emotional challenges faced by pregnant and breastfeeding women in their quest for accurate and adequate information. However, they responded with rational realism about the work of the Ministry of Health and the efficacy of communication management in this novel process. All participants stated that there is insufficient work on this issue and

that, even if there is, it does not reach all relevant parties equally.

Another important issue discussed was that pregnant women in the first and last stages of pregnancy are more reluctant to be vaccinated. Participants reported that they did not recommend vaccination to their patients during these two periods and did not insist, pressure or persuade them to be vaccinated. They provided the necessary medical information to their patients as required by their profession, but the final decision was again made by the expectant mothers. All participants agreed that the most important differences between pregnant women who are against vaccination and those who accept vaccination are the environment they live in, their education, and socioeconomic and cultural differences. In this study conducted in Ankara, the capital of Türkiye, it is thought that although the size and facilities of the city are sufficient, the rural districts do not have the same level of living as the more centralized districts, and therefore people are not equally informed, and even if they are, they are not adequately equipped in terms of health.

The differences in the Covid-19 vaccines were also one of the most common concerns of individuals. All participants stated that as healthcare workers they received the *Biontech* vaccine after the first *Sinovac* vaccine, and the main reason for this was that they showed serious differences in terms of protection. The same problem directly affected the attitudes and preferences of pregnant women to be vaccinated, because the different ingredients caused different reactions.

The most fundamental factor that guarantees the perpetuation of social structures is the presence of robust, healthy children. The current global pandemic represents the inaugural function of public relations. The initial function of public relations is to disseminate accurate information to the public. The challenging aspect of this test was that the modern media rapidly disseminated information that was either distorted or misinformation rather than accurate information. Consequently, during the initial stages of the vaccination program, those in positions of influence within the healthcare sector were confronted with a significant challenge, prompting expectant mothers to adopt a different outlook. Despite the efforts of health personnel to provide examples from sufficient scientific data and to communicate effectively with their patients, the transfer of information was not as effective as it could have been due to a lack of sufficient personnel and the presence of significant educational and social differences between individuals. Despite the implementation of public service announcements, posters, persuasion teams, and public information activities, no study has been conducted that prioritizes pregnancy status, except for those conducted with specialist gynecologists. This issue, which is significant for future study, has been interpreted in the context of public relations. This study has aimed to contribute to the advancement of knowledge in this field.

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