



Determination of the Relationship between Individuals' Attitudes towards the COVID-19 Vaccine and Their Level of Fear

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Abstract

Introduction: In order to achieve success in the fight against the pandemic, society's perception of the pandemic and its attitudes towards its control have gained importance. It is wondered whether the level of fear experienced during the pandemic affects individuals' attitudes towards the COVID-19 vaccine. The purpose of this study is to determine the relationship between individuals' attitudes towards the COVID-19 vaccine and their level of fear.

Methods: This study utilized a descriptive and correlational design. The sample of the study consisted of 400 individuals aged 18-70 years who lived in Erzurum city center in Turkey between May 2021 and January 2023 and agreed to participate in the study. Data were collected through the Personal Information Form, the Fear of COVID-19 Scale, and the Attitudes towards the COVID-19 Vaccine Scale. Ethics committee approval was obtained for the study. Data analysis was done in a computer environment using SPSS 20 package program and parametric tests were used.

Results: It was determined that the average age of the participants was 33.87 ± 14.93 , 66.3% were female, 34.7% had a bachelor's degree or higher, 53.2% were single, 71.8% were unemployed, 57% lived with their families, 71.8% did not smoke, and 84.3% did not have a chronic disease. The Attitudes towards the COVID-19 Vaccine Scale positive attitude sub-scale mean score was 3.41 ± 1.41 and the negative attitude sub-scale mean score was 3.28 ± 1.15 . It was determined that the total score average obtained from the Fear of COVID-19 Scale was 17.42 ± 8.70 , indicating above-average fear. A positive and moderate-level correlation was detected between the participants' Attitudes towards the COVID-19 Vaccine Scale positive and negative attitude sub-scales and the fear of COVID-19 scores ($r = 0.582$, $p < 0.001$).

Conclusions: The results obtained show that the participants' attitudes towards the COVID-19 vaccine are positive. Fear of COVID-19 positively affects attitudes towards vaccines.

INTRODUCTION

Lack of complete knowledge about the treatment of the COVID-19 pandemic caused an increase in the level of fear, worry, and anxiety in society due to uncertainty. The pandemic was an extraordinary condition encountered for the first time and extraordinary measures were implemented due to this condition, which were the reasons for the fear and stress caused by the COVID-19 pandemic [1]. It caused people to experience fear in different issues such as fear of losing their lives or their relatives, fear of not being able to access health institutions, fear of shortage of food, fear of being infected or infecting someone else at any time, and

fear of losing their job [2]. In the study conducted by Doğan and Düzel (2020), 94.5% of the participants stated that they were afraid of their families or acquaintances catching the virus, and 92.4% were afraid of being exposed to the virus in crowded places. [1]. The reason for the fear in society due to the COVID-19 pandemic is that the outbreak is an extraordinary situation encountered for the first time [1]. Fear is the most common emotion experienced by individuals during the pandemic period due to the size and effects of the outbreak. Fear experienced during the pandemic

period affects attitudes towards the virus, the measures taken, and the vaccines developed against the virus [3]. When the pandemic started, health professionals worked on vaccination and medication as long-term measures to be able to manage the crisis. The Turkey Report Survey conducted in our country indicated that 20% of individuals had been vaccinated against COVID-19, 53% considered getting vaccinated, and 25% did not consider getting vaccinated and 2% answered "I am not sure, I do not know." Not believing in the effectiveness of vaccines and not trusting the existing vaccines were among the most common reasons indicated by those who did not consider getting vaccinated [4]. The perception and trust of society towards vaccines were reported to affect the success of vaccination [5].

The community's perception of the pandemic and attitudes towards control has gained importance for achieving success in the fight against the pandemic [6]. Attitudes are one of the determinants of health-related behavior [7]. Yıldız et al. (2021) reported that men had more positive attitudes towards vaccination than women and that people who had been infected with COVID-19 had more positive attitudes towards vaccination. Developing different methods for groups with negative attitudes could help to make attitudes towards vaccines more positive [5]. Community immunity can be ensured by informing the public and making attitudes towards vaccination positive [8]. An analysis of the World Health Organization vaccination table, according to the data dated March 6, 2022, the rates of fully vaccinated people were reported to be 80.18% in Argentina, 79.75% in France, 78.46% in Italy, 75.15% in Germany, 76.05% in Spain and 71.83% in the United Kingdom, while this rate was reported to be 63.39% in Turkey [9]. According to the data provided by the Ministry of Health, as of October 19, 2022, the rate of receiving at least one dose of COVID-19 vaccine was 93.35% for people over the age of 18, and the vaccination rate in Erzurum city center, where the present study was conducted, was reported to be 74.1% [10].

In the Theory of Planned Behavior, attitudes are the determinants of health-related behavior. By informing the public, attitudes towards vaccination can be made positive and the immunity of the public can be ensured [8]. In order to increase vaccination rates in our country, it is important for public health nurses to encourage the public to get vaccinated. Public health nurses should be aware of the concerns and negative attitudes of the individuals or families they serve regarding vaccination, support their positive attitudes, and allow them to express their fears, concerns, and hesitations regarding vaccinations. Public health nurses should trust the content of the vaccine, believe in the effect of the vaccine, and provide information and counseling to individuals and families in light of evidence-based

information regarding the importance of vaccination and vaccination [11].

When the studies are examined, it is seen that there are very few studies that determine the attitudes and fear levels of individuals towards the COVID-19 vaccine. In the study conducted by Başkaya and Kaya (2023) in Turkey, it was found that the fear of COVID-19 positively affected the attitude of individuals towards the COVID-19 vaccine [12]. Therefore, it is thought that this study will contribute to the literature.

The purpose of this study is to determine the relationship between attitudes towards the COVID-19 vaccine and the level of fear in individuals aged 18-70 living in Erzurum city center (Since COVID-19 vaccines are administered to individuals between the ages of 18-70 in Turkey, this age group was included in the study).
METHODS

Study Design

This study utilized a descriptive and correlational design. It was conducted with individuals living in Erzurum in Turkey city center between 27.05.2021 and 12.01.2023.

Participant

The target population of the study consisted of individuals who lived in Erzurum city center and agreed to participate in the study. According to the formula $n = \frac{t^2 \cdot p \cdot q}{d^2}$ for sample calculation with an unknown population, it was determined that a minimum of 384 patients should be included. The sample consisted of 400 individuals who agreed to participate in the study and met the sampling criteria. Since the data of the study was collected during the pandemic period when there were restrictions, it was collected online via WhatsApp. Incomplete or incorrectly filled forms were not included in the study. Inclusion criteria were being literate, agreeing to participate in the study, being aged 18 years or over, and being able to use a smartphone or computer.

Data were collected through the Personal Information Form, the Attitudes towards the COVID-19 Vaccine Scale and the Fear of COVID-19 Scale. The scales used were tested for suitability for Turkish culture and no pilot testing was conducted. Cronbach alpha values are given, including this study

Attitudes towards the COVID-19 Vaccine Scale was developed by Geniş et al. in 2020 to assess the attitudes and perceptions of the Turkish population towards the COVID-19 vaccine [6]. The scale includes 9 items and two sub-scales (positive and negative attitudes). The items in the scale are responded as "Strongly disagree (1)", "Disagree (2)", "Not sure (3)", "Agree (4)", and "Strongly agree (5)". The items in the negative attitude sub-scale are scored reversely. A value in the range of 1-5 is obtained by dividing the total score obtained by summing the item scores in the sub-scale by the number of items in that sub-scale. Higher scores in the positive

attitude sub-scale indicate positive attitudes towards vaccination. The items in the negative attitude sub-scale are calculated after the items in the negative attitude sub-scale are scored reversely, and higher scores in this sub-scale indicate fewer negative attitudes towards vaccination. Reverse items are coded as "1→5; 2→4; 3→3; 4→2; 5→1". Cronbach's alpha coefficients of the Attitude towards the COVID-19 Vaccine Scale were reported as 0.96 for the positive sub-scale and 0.78 for the negative sub-scale. Cronbach's alpha coefficients in this study were found 0.95 for the positive attitude sub-scale and 0.85 for the negative attitude sub-scale.

Fear of COVID-19 Scale was developed by Ahorsu et al. (2020) to measure individuals' level of fear related to COVID-19 [13]. The Turkish validity and reliability of the scale were performed by Satıcı et al. (2020) [14]. The components in the scale were based on a detailed review of existing scales on fear, expert evaluations, and interviews with participants. The scale includes one factor and 7 items responded on a five-point Likert scale ("1 = Strongly disagree"; "5 = Strongly agree"). No items in the scale are scored reversely. Cronbach's alpha coefficient of the scale was reported to be 0.86 [14]. There is no cutoff point on the scale. A minimum of 7

and a maximum of 35 points can be obtained from the scale. Higher scores obtained from the scale indicate a high level of fear of COVID-19. Cronbach's alpha coefficient for the Fear of COVID-19 Scale was found to be 0.93 in this study.

Data collected from the study were analyzed on the computer using the SPSS 20 package program. The results were presented using numbers, percentages, means, and standard deviations. Data analysis included standard deviation, arithmetic mean, skewness and kurtosis coefficients, one-way analysis of variance (ANOVA), Welch ANOVA, t-test in independent groups, Bonferroni tests for Post Hoc analyses, Pearson correlation, and Linear Regression analysis. The Shapiro-Wilk test assessed the normality of the distribution of the variables.

RESULTS

The average age of the participants was 33.87±14.93, 66.3% were female, 34.7% had a bachelor's degree or above, 53.2% were single, 71.8% were unemployed, 57% lived with their families, 71.8% did not smoke, and 84.3% did not have chronic diseases.

Table 1. Distribution of participants' attitudes towards the COVID-19 vaccine scale and the fear of COVID-19 scale mean scores

	Number of Items	Distribution Range	X ± SD
Positive Attitude	4	1-5	3.41±1.41
Negative Attitude	5	1-5	3.28±1.15
Fear of COVID-19 Scale	7	7-35	17.42±8.70

Table 2. Distribution of participants' descriptive characteristics according to the attitudes towards the COVID-19 vaccine scale and the fear of COVID-19 scale mean scores

Characteristics	Attitudes towards the COVID-19 Vaccine Scale		Fear of COVID-19 Scale
	Positive Attitude	Negative Attitude	
Gender	t=1.525, p=0.128	t=0.984, p=0.326	t=0.089, p=0.929
Female	3.33±1.38	3.24±1.09	17.45±8.23
Male	3.56±1.47	3.36±1.25	17.37±9.59
Education Level	F(Welch)*=10.753, p=0.001, 1>3,4,5	F(Welch)*=4.868, p=0.001, 1>4,5	F(Welch)*=9.737, p=0.001, 1,2>3,4,5
Primary school (1)	4.28±1.02	3.76±1.29	23.55±9.82
Secondary school (2)	3.70±1.29	3.71±1.23	21.75±10.62
High school (3)	3.32±1.52	3.33±1.17	15.82±8.35
Associate degree (4)	3.21±1.42	3.09±1.05	16.35±7.63
Bachelor's degree and above (5)	3.17±1.38	3.07±1.03	15.51±6.95
Marital status	t=1.560, p=0.120	t=2.203, p=0.028	t=4.047, p=0.001
Married	3.51±1.47	3.41±1.21	19.28±9.99
Single	3.29±1.35	3.15±1.08	15.75±7.05
Employment status	t=2.560, p=0.011	t=1.406, p=0.160	t=5.035, p=0.001
Employed	3.20±1.45	3.19±1.19	14.98±7.48
Unemployed	3.56±1.36	3.35±1.18	19.28±9.11
Living with others	F=2.310, p=0.101	F=1.591, p=0.205	F(Welch)*=2.122, p=0.124
At home	3.39±1.40	3.28±1.07	16.32±7.40
With family	3.53±1.36	3.36±1.19	18.17±9.33
With spouse and children	3.19±1.50	3.13±1.10	16.46±7.85
Smoking status	t=0.013, p=0.989	t=0.072, p=0.943	t=1.303, p=0.193
Smoking	3.41±1.57	3.28±1.24	16.52±9.08
Not smoking	3.40±1.35	3.29±1.11	17.78±8.53
Presence of a chronic disease	t=1.716, p=0.087	t=3.041, p=0.003	t=5.005, p=0.001
Yes	3.69±1.35	3.68±1.15	22.31±10.45
No	3.35±1.42	3.21±1.13	16.51±8.02

* Welch ANOVA test values were taken in cases where group variances were not homogeneous.

Data in Table are as Mean ± SD

Table 3. Distribution of the participants' coronavirus -related characteristics according to the attitudes towards the COVID-19 vaccine scale and the fear of COVID-19 scale mean scores

Characteristics	Attitudes towards the COVID-19 Vaccine Scale		Fear of COVID-19 Scale
	Positive Attitude	Negative Attitude	
Presence of a family member who was infected with coronavirus	t=2.959, p=0.003	t=4.033, p=0.001	t=2.602, p=0.010
Yes	3.25±1.41	3.12±1.09	16.60±7.63
No	3.69±1.38	3.59±1.19	18.95±10.26
Presence of someone who died from coronavirus in the environment	t=1.984, p=0.056	t=1.832, p=0.068	t=1.286, p=0.199
Yes	3.30±1.41	3.20±1.13	17.86±8.68
No	3.58±1.41	3.42±1.16	16.71±8.71
Having received information about coronavirus	t=1.446, p=0.149	t=1.727, p=0.085	t=1.500, p=0.134
Yes	3.47±1.42	3.35±1.16	17.84±9.06
No	3.25±1.38	3.13±1.10	16.40±7.69
Having been vaccinated against COVID-19	t=9.417, p=0.001	t=7.805, p=0.001	t=3.053, p=0.002
Yes	3.66±1.31	3.46±1.07	17.98±8.88
No	2.00±1.06	2.30±1.04	14.35±6.94
Number of doses	F(Welch)*=6.574, p=0.002, 1<3	F=2.984, p=0.052, 1<3	F(Welch)*=5.084, p=0.008, 2>3
1	3.11±1.36	3.07±1.18	17.25±8.36
2	3.62±1.35	3.46±1.09	18.85±9.27
3	4.03±1.07	3.63±0.95	15.52±7.27
Having been infected with coronavirus before being vaccinated**	t=2.933, p=0.004	t=2.550, p=0.011	t=0.384, p=0.701
Yes	3.30±1.44	3.20±1.17	17.66±8.27
No	3.78±1.25	3.55±1.03	18.09±9.08
Having been infected with coronavirus after being vaccinated**	t=4.085, p=0.001	t=4.312, p=0.001	t=2.829, p=0.005
Yes	3.12±1.44	2.99±0.99	15.41±7.35
No	3.81±1.24	3.59±1.06	18.69±9.14

*Welch ANOVA test values were taken when group variances were not homogeneous.

**Only the mean scores of those who were vaccinated were taken.

Data in Table are as Mean ± SD

Table 4. Correlation of the attitudes towards the COVID-19 vaccine scale and the fear of COVID-19 scale mean scores (n=400)

		1	2	3
Attitudes Towards the COVID-19 Vaccine Scale	r	-	0.582	0.428
Positive Attitude	p	-	0.001	0.001
Attitudes Towards the COVID-19 Vaccine Scale	r	0.708	-	0.304
Negative Attitude	p	0.001	-	0.001
Fear of COVID-19 Scale	r	0.428	0.304	-
	p	0.001	0.001	-

When the distribution of the Fear of COVID-19 Scale mean scores was examined, it was found that the total mean score of the individuals from the scale was 17.42±8.70 and they had an above-average fear (A minimum of 7 and a maximum of 35 points can be obtained from the scale).

When the Attitudes towards the COVID-19 Vaccine Scale and the Fear of COVID-19 Scale mean scores were compared according to the participants' descriptive characteristics, a statistically significant difference was found only between education level, marital status, employment status, and chronic disease status (p<0.05).

Further analysis of the education level revealed that the difference originated from the primary school group. The participants who had primary and secondary school education were found to have higher Fear of COVID-19 Scale scores than other groups. Those who were married and had chronic diseases were found to have higher negative attitudes and Fear of COVID-19 Scale scores.

Unemployed participants were found to have higher positive attitudes and Fear of COVID-19 Scale scores than those who were employed (p<0.05).

Positive and negative attitudes scores and the Fear of COVID-19 Scale scores were found to be higher in those who did not have a family member who was infected with COVID-19 before, who had been vaccinated against COVID-19, and who were not infected with COVID-19 after being vaccinated against COVID-19 (p<0.05) (Table 3).

Positive and negative attitudes scores were higher in those who received three doses of the COVID-19 vaccine compared to other groups, and the difference was found to be statistically significant (p<0.05). In addition, those who received two doses of vaccines had higher Fear of COVID-19 Scale scores than those who received three doses, and the difference between them was found to be statistically significant (p<0.05). The positive and negative attitude scale scores were higher in

the participants who had not been infected with COVID-19 before vaccination ($p < 0.05$).

A positive and moderate level relationship was found between the participants' Attitude towards the COVID-19 Vaccine Scale positive and negative attitudes subscales and the Fear of COVID-19 Scores ($p < 0.001$) (Table 4).

DISCUSSION

This research, which was conducted to determine the relationship between individuals' attitudes towards the COVID-19 vaccine and their fear levels, was discussed in light of other research and literature.

In this study, it was determined that the participants' attitudes towards the COVID-19 vaccine were positive. High positive and negative attitude scores mean that the participants had a positive attitude towards COVID-19 Vaccine. It can also be said that the participants have a positive attitude due to the high vaccination rate (vaccination rate 84.5%). Similar to the present study, Yılmaz et al. (2021) found that the majority of the participants (41.2%) had positive attitudes towards having COVID-19 vaccine [15]. Another study also reported positive attitudes towards the COVID-19 vaccine (75.1% were vaccinated) [16]. The present study was conducted in a period when COVID-19 vaccine was still being administered, and the high rate of those who received COVID-19 vaccine (84.5%) shows that positive attitudes turned into behaviors. An analysis of the studies conducted in other countries showed that the participants had positive attitudes towards the COVID-19 vaccine in Italy [17]. In a study conducted in the USA, 69% of individuals had a positive attitude towards vaccination [18].

The participants were found to have an above-average level of fear of COVID-19. Considering the score range of 7 to 35 in the Fear of COVID-19 Scale, the participants' fear of COVID-19 was found to be above average in this study. Similar to the present study, Kalafatoğlu and Yam (2021) found that the Fear of COVID-19 Scale mean score was 20.01 ± 4.44 [19]. Çağatay et al. (2022) found that the score obtained from the Fear of COVID-19 scale was 19.91 ± 7.03 (moderate level of fear) [20]. Experience of a high level of fear of COVID-19 positively affects attitudes towards vaccination [20]. The fear of COVID-19 is considered to have a positive aspect that reduces transmission and prevents the spread of the disease and increases positive behaviors related to COVID-19 vaccine. In this study, the increase in positive attitudes towards COVID-19 vaccine with the increase in the level of fear of COVID-19 supports this finding.

When the participants were compared according to their education level, it was found that individuals with primary and secondary school education had higher levels of fear of COVID-19. Similar to our study, a study

conducted in China reported that the fear and anxiety symptoms of individuals with a low level of education were higher than those with a bachelor's degree and above [21]. In this study, it was determined that primary school graduates had more positive attitudes towards the COVID-19 vaccine than other groups. The findings of this study may be different from other studies since all of the participants had at least a primary school education. This study found that married people had positive attitudes towards the COVID-19 vaccine compared to single people. Similar to our study, Durduran et al. (2022) found that married people had more positive attitudes [16]. This study found that married people had higher levels of fear of COVID-19. Güngör and Atik (2022) reported that married people had a higher level of fear of COVID-19 [22]. The results of the present study are in line with the literature, but studies reporting just the opposite were also encountered. Therefore, further studies are needed to examine the effects of family roles in different societies on the fear of COVID-19. Married people have responsibilities in the family or have children, which could be the reason for the high level of fear of COVID-19 in the present study.

Unemployed participants in this study were found to have a higher level of fear of COVID-19. Similar to the present study, Çölgeçen et al. (2020) found that unemployed individuals had higher levels of fear of COVID-19 [23]. This study found that unemployed participants had more positive attitudes than employed ones. The participants who had a chronic disease were found to have positive attitudes towards vaccination in this study. Similar to the results in the present study, another study in the literature found that people with chronic diseases had more positive attitudes towards the COVID-19 vaccine [19]. A study conducted in Egypt also reported that people with chronic diseases had positive attitudes towards the COVID-19 vaccine [24]. This study found that the level of fear of COVID-19 was high in those who had a chronic disease. Similar to our study, Al-Rahimi et al. (2021) found that those who had chronic diseases had a higher level of fear of COVID-19 [25]. More positive attitudes toward vaccines among the participants who had chronic diseases could be caused by the fear of catching the disease immediately, having a severe illness process, or dying.

The participants who had no family members who were infected with coronavirus before were found to have positive attitudes. Similar to our study, Kalkan et al. (2022) found that the attitudes towards the COVID-19 vaccine were more positive in those who had no family members who were infected with coronavirus before [26]. This study found that the fear of COVID-19 was high in participants who had no family members who were infected with coronavirus before. These participants' positive attitudes towards the vaccine were

considered to be caused by the fear of being infected and infecting other members of the family.

This study found that people who received the vaccine had more positive attitudes and had higher levels of fear of COVID-19 compared to those who did not. According to the data of the Ministry of Health, while the rate of first-dose vaccination was 93.35%, the rate of second-dose vaccination was 85.68, and the rate of vaccination in Erzurum city center was 74.1% [27].

The results obtained from our study support this finding due to the high rate of vaccination (84.5%) as a result of the participants' positive attitudes. This study found that the participants who had been vaccinated had positive attitudes towards vaccination with the fear of not getting sick again or having a milder illness and transformed this into behavior by getting vaccinated.

The participants who received three doses of the vaccine were found to have more positive attitudes towards the COVID-19 vaccine, and those who received two doses of the vaccine had higher levels of fear of COVID-19 compared to those who received three doses of the vaccine. Those who received three doses of the vaccine seem to have more positive attitudes towards the COVID-19 vaccine. According to the data of the Ministry of Health, while 53 million people in our country received two doses of the vaccine, 28 million people received three doses [10]. In our study, 234 participants received two doses (69.2%), 73 participants received three doses (21.6%) and 31 participants (9.2%) received only one dose of the vaccine. The majority of the participants (69.2%) received two doses of the vaccine, which may have been effective in higher levels of fear. The participants who had not been infected with COVID-19 before vaccination were found to have more positive attitudes than those who had. Similar to our study, Korkut et al. (2022) found that people who had not been infected with COVID-19 disease before vaccination had more positive attitudes towards the COVID-19 vaccine than those who were infected with the disease [28]. Similarly, Kaya et al. (2022) concluded that there was no significant difference in the fear of COVID-19 levels of people who had or had not been infected with COVID-19 [29]. The participants who were not infected with COVID-19 after vaccination were found to have positive attitudes and higher levels of fear of COVID-19. The majority of the participants (78.4%) did not have COVID-19 after vaccination, which is considered to increase their trust in the COVID-19 vaccine, and their attitudes towards the vaccine were positively affected by the fear of not getting the disease again.

This study found although there were cultural and mediating variables, a positive and moderate level correlation between the positive attitude sub-scale of the Attitudes towards the COVID-19 Vaccine Scale and the Fear of COVID-19 Scale scores, and a positive and

moderate correlation between the negative attitude sub-scale and the Fear of COVID-19 Scale scores ($p < 0.001$). The increase in the negative attitude sub-scale scores indicates less negative attitudes towards vaccination, indicating a positive attitude. The results obtained from this study showed that attitudes towards vaccination were positively affected by the increase in the level of fear of COVID-19. An analysis of the studies conducted shows that experiencing a low level of fear of COVID-19 may cause hesitation towards vaccination [30]. In their study on the relationship between coronaphobia and attitudes towards the COVID-19 vaccine, Turan et al. (2022) similarly found that positive attitudes towards the vaccine increased with the increase in the participants' coronavirus phobia [31]. In the study conducted by Başkaya and Kaya (2023), it was found that the fear of COVID-19 positively affected the attitudes of individuals towards the COVID-19 vaccine [12].

The study is limited only to Erzurum city center. The data obtained cannot be generalized to all individuals. The study data were collected online during the period of restrictions. This constitutes the weakness of the study.

CONCLUSION

The results obtained from this study show that attitudes towards vaccination in Turkish society are positively and moderately related to the level of fear of COVID-19. In line with the study results, it is recommended to turn negative attitudes into positive attitudes by raising awareness about the COVID-19 vaccine in the community and to vaccinate individuals who are not fully vaccinated (3 doses) or who had not been vaccinated at all. Since the fear of COVID-19 is an effective factor in positive attitudes towards vaccination in Turkish society, primary care nurses can use this factor positively, especially in awareness-raising activities, to ensure positive attitudes of the community towards vaccination.

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AUTHOR'S CONTRIBUTIONS

HK: Concept, design, acquisition of data, interpretation of data. HYB: Administrative, technical, and material support, study supervision, critical revision of the manuscript for important intellectual content.

ETHICAL CONSIDERATION

Ethical committee approval was received from the Ethics Committee of Ataturk University (Date of approval: 27.05.2021 and Number: B.30.2.ATA.0.01.00/)

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

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