ORİJİNAL MAKALE / ORIGINAL ARTICLE

Balıkesir Sağlık Bilimleri Dergisi / BAUN Sağ Bil Derg
Balıkesir Health Sciences Journal / BAUN Health Sci J
ISSN: 2146-9601- e ISSN: 2147-2238
Doi: https://doi.org/10.53424/balikesirsbd.1221247

Determining Opinions of Individuals About Covid-19 Pandemic and Vaccines and Evaluation of Covid-19 Phobia

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Geliş Tarihi / Received: *19.12.2022****, Kabul Tarihi / Accepted:*** *28.04.2023*

ABSTRACT

Objective: To determine the opinions of individuals about the Covid-19 disease and vaccines and to evaluate the Covid-19 phobia. **Methods**: This is a cross-sectional and descriptive study. The data of the study were collected online using the snowball sampling technique between February and March 2021 (n=530). Data collections tools were Participant Information Form and Covid-19 Phobia Scale. **Results:** It was determined that 17% of the participants had Covid-19 disease, and 40.8% saw themselves at a moderate risk in terms of getting Covid-19. It was determined that 56.1% of those who were not diagnosed with Covid-19 and 52.2% of those who were diagnosed with Covid-19 were slightly afraid of getting Covid-19. It was determined that 44.7% of the participants were indecisive about being vaccinated and 50.2% of these people stated that they were indecisive because the side effects of the vaccines were unknown. There was no statistically significant difference between the total and sub-dimensions mean scores of the Covid-19 Phobia Scale among those who answered yes, no and indecisive about vaccination. A statistically significant difference was found between the fear of catching Covid-19 for the first time and the total and sub-dimension mean scores of the Covid-19 phobia scale ($p<0.05$). **Conclusion:** Our study showed that individuals were afraid of getting Covid-19 and most people were indecisive about being vaccineted due to the unknown side effects.

Keywords: Covid-19 Phobia, Covid-19 Disease, Covid-19 Vaccine.

Bireylerin Covid-19 Hastalığı ve Aşıları Hakkındaki Görüşlerinin Belirlenmesi ve Covid-19 Fobisinin Değerlendirilmesi

ÖZ

Amaç: Bu çalışmanın amacı, bireylerin Covid-19 hastalığı ve aşıları hakkındaki görüşlerinin belirlenmesi ve Covid-19 fobisinin değerlendirilmesidir. **Yöntem:** Bu çalışma, kesitsel ve tanımlayıcı bir araştırmadır. Araştırmanın verileri, Şubat-Mart 2021 tarihleri arasında kartopu örnekleme tekniği kullanılarak çevrimiçi olarak toplanmıştır (n=530). Veri toplama araçları Katılımcı Bilgi Formu ve Covid-19 Fobi Ölçeği'dir. **Bulgular:** Katılımcıların %17'sinin Covid-19 hastalığını geçirdiği, %40.8'inin Covid-19'a yakalanma açısından kendilerini orta dereceli riskli gördüğü belirlenmiştir. Covid-19 tanısı almayanların %56.1'inin; Covid-19 tanısı alanların ise %52.2'sinin covid-19'a yakalanmaktan biraz korktukları saptanmıştır. Katılımcıların %44.7'sinin aşı olma konusunda kararsız olduğu belirlenmiş olup; bu kişilerin %50.2'si aşıların yan etkileri bilinmediği için kararsız olduğunu ifade etmiştir. Aşı olma konusunda evet, hayır ve kararsızım yanıtlarını verenlerin Covid-19 Fobisi Ölçeği toplam ve alt boyutları puan ortalamaları arasında istatiksel olarak anlamlı bir fark bulunmamıştır. Covid-19'a ilk kez yakalanma korkusu ile Covid-19 fobi ölçeği toplam ve alt boyut puan ortalamaları arasında istatiksel olarak anlamlı fark bulunmuştur ($p<0.05$). **Sonuç:** Çalışmamız bireylerin Covid-19'a yakalanma korkusu yaşadıklarını ve çoğu kişinin aşıların yan etkilerinin bilinmemesinden dolayı aşı olmak konusunda kararsız olduklarını göstermiştir.

Anahtar Kelimeler: Covid-19 Fobisi, Covid-19 Hastalığı, Covid-19 Aşısı.

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Bu makaleye atıf yapmak için / Cite this article: Kaya, Ç., Başkaya, E. & Solmaz, P. (2023). Determining opinions of individuals about Covid-19 pandemic and vaccines and evaluation of Covid-19 phobia. BAUN Health Sci J, *12(3)*,525-532. https://doi.org/10.53424/balikesirsbd.1221247

INTRODUCTION

The Covid-19 epidemic, which was declared as a pandemic by the World Health Organization (WHO) on March 12, 2020, greatly affected the lives of all people (Hui et al., 2020). It has caused psychological, social, political and economic problems in the society due to the constant exposure of people to the news of the virus, the fear of catching the virus, the important effects of the virus on human life, as well as high mortality rates (Hui et al., 2020; Vindegaard and Benros 2020). In this process, individuals experienced feelings of fear, panic and anxiety, which are the most important psychological effects of the pandemic (Arpaci et al., 2020; Kim and Song 2017). In a study conducted in China (n=1210); while 53.8% of the participants evaluated the psychological impact of the pandemic as moderate or severe; 16.5% reported moderate to severe depressive symptoms, 28.8% moderate to severe anxiety, and 8.1% of the people stated as moderate to severe stress (Wang et al., 2020). Because of the seriousness and effects of the pandemic, the most common emotion is fear and phobia. When the fear of catching the virus and infecting others becomes uncontrollable, it turns into a phobia. Phobias are the state of extreme fear of something negatively affecting the daily life of the individual. The constant and extreme fear against the Covid-19 virus and the negative impact of this situation on the person's life are defined as Covid-19 phobia (Arpaci et al., 2020). Covid-19 phobia affects the attitudes of individuals towards the virus, precautions taken and vaccines developed against the virus. In controlling infectious diseases, which are the biggest cause of illness and death of people from past to present; improved environmental conditions as well as immunization services made the biggest contribution (Ketrez et al., 2020). Vaccines developed against the Covid-19 virus (Chinese vaccine, Biontech vaccine, etc.) have become the most important subject of our daily life. In this process, the society has been constantly exposed to news about Covid-19 disease and vaccines on television, newspapers and social media platforms. The fact that many of the social media posts contain false information has negatively affected the opinions of individuals, especially about the vaccine, and has increased their Covid-19 phobias. The success of the Covid-19 vaccination program depends on the public's willingness to be vaccinated.

The aim of this study; to determine the opinions of individuals about the Covid-19 disease and vaccines and to evaluate the Covid-19 phobia.

MATERIALS AND METHODS

Study type

This research was conducted as a cross-sectional.

Study group

This research was carried out with the participation of people living at various city in Turkey. The data of the study were collected online using the snowball sampling technique between February 1 and March 1, 2021. Inclusion criteria in the study were volunteering to participate in the research, using a smartphone and being over 18 years of age. The exclusion criteria from the sample were to have any psychological illness. The link of the questionnaire form prepared in Google Forms was shared on WhatsApp, Facebook and Instagram with the people and they were allowed to answer the questions after obtaining informed consent.

The G Power 3.1.9.6 program was used to calculate the sample size. Previous studies (Deniz et al., 2021) were reviewed and the expected confidence intervals of the "Covid-19 Phobia Scale" were determined, confidence interval α=0.05, power of the test (1-β) 0.80, effect size dz=0.2714367 while it was calculated as 338 people in total. 530 individuals who met the criteria for inclusion in the study constituted the sample of the study. As a result of the study, the power of the test was found to be 96%.

Dependent and independent variables

The independent variables of this research are gender, age, marital status, education status, employment status, occupation, cronic diseases presence, Covid-19 infection status, fear of getting infected with Covid-19, decision to get vaccinated, the dependent variable is Covid-19 phobia.

Procedures

Data collection tools were "Participant Information Form" and "Covid-19 Phobia Scale". In the Participant Information Form, there were 16 questions that determine the sociodemographic information of the individuals participating in the research, such as gender, age, occupation, marital status, education status, as well as the presence of chronic diseases, fear of contracting Covid-19, and their attitudes towards Covid-19 and vaccines.

Covid-19 Phobia Scale (C19P-S) is a 5-grade Likert-type self-assessment scale developed by Arpacı et al., to measure the phobia that can develop against coronavirus. There are 20 items in the scale. Scale items are evaluated between 1 "Strongly Disagree" and 5 "Strongly Agree". While Items 1st, 5th, 9th, 13th, 17th and 20th measure Psychological Sub-Dimension, Items 2nd, 6th, 10th, 14th, and 18th Somatic Sub-Dimension, Items 3rd, 7th, 11th, 15th, and 19th Social Sub-Dimension, 4th, 8th, 12th and 16th items measure the Economic Sub-Dimension. Sub-dimension scores are obtained by the total score of the answers given to the items of that sub-dimension, while the total corona-phobia score is obtained by the sum of the sub-dimension scores and varies between 20 and 100 points. High scores indicate the high sub-dimensions and high corona-phobia. The internal consistency coefficient of the scale was calculated as 0.925 Arpaci et al 2020. In this study, the internal consistency coefficient of the scale was calculated as 0.944.

Statistical analysis

The data of the study were analyzed in the SPSS 23.0 statistics software. Among the descriptive statistics, number, percentage, mean, standard deviation and one-way analysis of variance were used. Skewness and Kurtosis values (+1.500 and -1.500) were taken into account in the assumption of normality (Tabachnick and

Fidell 2013). The internal consistency coefficient (Cronbach Alpha) was calculated to evaluate the reliability of the scales. T-test, Kruskal Wallis, One Way Anowa and Mann Whitney-U test were used to determine whether there was a difference between participants' Covid-19 phobia scale total and sub-dimension mean scores in terms of sociodemographic characteristics, presence of chronic disease, and opinions on Covid-19 disease and vaccines.

Ethical considerations

Prior to the study, the ethical approvals were obtained from Usak University Clinical Research Ethics Committee (Date: 03.02.2021, Issue: E-38824465-020-7046, Decision No: 12). Participants were informed about the research and their approval for the Voluntary Information Form was obtained. Volunteer participants were included in the study.

RESULTS

Among the individuals participating in the study, 72.3% were women (n=383), 54.9% were between the ages of 18-30 (n=291), 43.8% were married (n=232), 39.4% had bachelor's degree (n=209), 49.2% were working (n=261) and 38.1% were public employees (n=202). Moreover, 11.9% of them had chronic diseases (n=63) (Table 1).

Table 1. Sociodemographic characteristics of participants and presence of chronic disease (n=530).

Variables	n	%
Gender		
Woman	383	72.3
Man	147	27.7
Age		
18-30 years old	291	54.9
30-49 years old	224	42.3
50 years and older	15	2.8
Marital status		
Married	232	43.8
Single	298	56.2
Education status		
Literate/elementary school	27	5.1
Secondary education/high school	78	14.7
Associate's degree	149	28.1
Bachelor's degree	209	39.4
Postgraduate	67	12.6
Employment status		
Yes	261	49.2
No	269	50.8
Occupation		
Health employee	45	8.5
Public employee	202	38.1
Self-employment	63	11.9
Student	168	31.7
Housewife	52	9.8
Chronic disease presence		
Yes	63	11.9
No	467	88.1

According to the data in Table 2, it was determined that 17% (n=90) of the individuals who participated in the study were infected with Covid-19 disease and that their fear of catching the virus for the second time was high in 34.4% (n=31) while a little in 52.2% (n=47). It was found that 83% of the participants (n=440) were not infected with Covid-19 before; and 23.4% (n=103) of these individuals were very afraid of Covid-19 and 56.1% (n=247) were a little afraid. It was also determined that 40.8% (n=216) of all participants were seeing themselves at a moderate risk in terms of infecting with Covid-19 (Table 2). Moreover, 24.3% (n=129) of the participants answered the question of would you like to be a Covid-19 vaccine as yes, 30.9% (n=164) of them as no, while 44.7% (n=237) of them said that they were indecisive. It was determined that while 59.4% (n=76) of those who answered yes, stated as "I think vaccines will control the pandemic", 67.3% of those who answered no (n=164), stated as "I do not find the vaccines safe because they are newly developed", and 50.2% (n=119) who answered as I am indecisive, stated as "I am indecisive, as I do not know about the side effects" (Table 2).

Table 2. The status of participants about Covid-19 with and their opinions on Covid-19 disease and vaccines (n=530).

Variables	n	%
Covid-19 infection status		
Yes	90	17
No	440	83
Risk of getting infected with Covid-19		
Yes, I think I am very risky.	89	16.8
Yes, I think I am at a moderate risk.	216	40.8
Yes, I think I am less risky.	140	26.4
No.	85	16
Fear of getting infected with Covid-19 for the first time (n=440)		
Yes, I am so scared.	103	23.4
Yes, I am a little scared.	247	56.1
No, I am not scared.	90	20.5
Fear of getting infected with Covid-19 for the second time (n=90)		
Yes, I am so scared.	31	34.4
Yes, I am a little scared.	47	52.2
No, I am not scared.	12	13.3
Decision to get vaccinated		
Yes	129	24.3
No	164	30.9
I am indecisive	237	44.7
If the decision to be vaccinated is "YES", the reason is;		
I believe vaccines will end the pandemic.	18	14.1
I think vaccines will control the pandemic.	76	59.4
I think vaccines will protect against the disease.	34	26.6
If the decision to be vaccinated is "NO", the reason is;		
I do not believe vaccines will end the pandemic.	6	3.7
I think vaccines will not be enough to control the pandemic.	6	3.7
I do not find vaccines safe as they are newly developed.	109	67.3
I think vaccines will not protect against the disease.	11	6.8
I am afraid of the side effects.	30	18.5
If the decision to be vaccinated is " I AM INDECISIVE", the reason is;		
I am indecisive because I am not in the risk group	10	4.2
Since I have had the disease before, I am not sure whether I will need to be vaccinated.	9	3.8
I am indecisive because of the negative news I heard about the vaccine on social media.	25	10.5
I am indecisive, as I do not know about the side effects.	119	50.2
I am indecisive as it is a newly developed vaccine.	74	31.2

The average scale score obtained for the Covid-19 phobia scale of the participants was found to be 47.87±16.46 (Table 3). Covid-19 phobia scale total and sub-dimensions mean scores of women were found to be higher than that of men ($p < 0.001$; Table 4).

Table 3. Participants' Covid-19 phobia scale total scores, standard deviations, minimum and maximum values.

Scale	Item number	Mean±SD	Values that can be taken from scales		Values of participants	
			Minimum	Maximum	Minimum	Maximum
Covid-19 Phobia Scale	20	47.87± 16.46	20	100	20	100

SD=Standard deviation.

It was determined that the average score of the psychological sub-dimension of the Covid-19 phobia scale of the self-employed people was statistically high. No statistically significant difference was found between the total and sub-dimension mean scores of the Covid-19 phobia scale according to marital status, age groups, employment status, education status and the presence of chronic disease ($p>0.05$; Table 4). It was determined that there was no statistically significant difference between the sub-dimensions of the Covid-19 phobia scale and the total score averages of individuals who decided to be vaccinated yes, no and indecisive ($p>0.05$; Table 4). Covid-19 phobia scale somatic ($p=0.005$) and economic sub-dimensions ($p=0.032$) mean scores of individuals infected with Covid-19 were determined to be statistically high ($p<0.05$). Covid-19 phobia scale total and sub-dimensions mean scores of individuals who had not had Covid-19 before and who stated that they were very afraid of getting Covid-19 were found to be statistically high ($p<0.05$).

Moreover, it was found that the Covid-19 phobia scale total and psychological, social, economic sub-dimensions (p=0.001, p=0.023, p=0.036, respectively) mean scores of the individuals who stated that they were very afraid of getting Covid-19 for the second time were statistically high (p<0.05). It was also observed that Covid-19 phobia scale total (p=0.000), psychological (p=0.000) and social (p=0.000) sub-dimensions mean scores of people who stated their risk perception of getting Covid-19 as "I think I am moderately risky" were statistically high (p<0.001; Table 4).

Table 4. Comparison of the mean scores of the Covid-19 phobia scale total and sub-dimensions according to the sociodemographic characteristics of the participants, their views on Covid-19 disease and vaccines.

Descriptive Characteristics		C19P-S (X±SD)				
		Psychological	**Somatic**	**Social**	**Economic**	**C19P-S total score**
Gender	Woman	18.33±6.57	9.93±4.22	13.57±5.15	8.43±3.52	50.28±16.76
	Man	14.88±5.97	8.46±3.60	11.07±4.17	7.16±2.97	41.58±13.85
	Test value and p	t=5.550 **p=0.000***	Z=-4.064 **p=0.000***	t=5.757 **p=0.000***	Z=-4.119 **p=0.000***	t=6.090 **p=0.000***
Marital status	Married	16.92±6.48	9.37±4.10	12.6±4.93	7.75±3.35	46.65±16.58
	Single	17.73±6.67	9.65±4.11	13.09±5.09	8.33±3.46	48.81±16.33
	Test value and p	Z=-1.463 p=0.143	Z=-0.991 p=0.322	Z-1.050 p=0.294	Z=-1.908 p=0.056	Z=-1.563 p=0.116
Age groups	18-30 years old	17.85±6.55	9.76±4.23	13.19±5.00	8.38±3.47	49.19±16.25
	30-49 years old	16.72±6.53	9.10±3.74	12.42±4.93	7.64±3.19	45.90±15.99
	50 years and older	18.00±7.74	11.33±6.00	13.53±6.39	8.80±5.04	51.66±24.10
	Test value and p	F=1.941 p=0.145	X^2=3.772 p=0.152	F=1.597 p=0.204	X^2=5.561 p=0.062	F=2.959 p=0.053
Employment status	Yes	16.86±6.49	9.45±3.86	12.69±5.03	7.86±3.29	46.88±16.26
	No	17.88±6.66	9.60±4.34	13.05±5.01	8.29±3.53	48.83±16.63
	Test value and p	Z=-1.683 p=0.092	Z=-0.073 p=0.942	Z=-0.830 p=0.406	Z=-1.401 p=0.161	Z=-1.359 p=0.174
Education status	Literate/Elementary School	17.88±6.53	8.92±2.14	12.66±4.18	7.77±2.04	47.25±13.02
	Secondary Education/High School	15.83±7.27	9.96±3.72	12.44±5.33	8.43±2.95	46.67±16.72
	Associate's degree	17.49±6.20	9.18±3.71	12.54±4.42	8.07±3.19	47.30±14.59
	Bachelor's degree	17.59±6.59	9.72±4.53	13.13±5.22	8.17±3.83	48.64±17.69
	Postgraduate	18.04±6.52	9.41±4.55	13.4±5.61	7.50±3.53	48.37±17.66
	Test value and p	F=1.355 p=0.248	X^2=3.058 p=0.548	F=0.641 p=0.634	X^2=5.806 p=0.214	F=0.284 p=0.888
Occupation	Health employee	15.75±5.96	9.15±2.29	11.8±3.83	7.44±1.65	44.15±10.92
	Public employee	17.04±6.44	9.17±4.05	12.90±5.28	7.82±3.54	46.95±17.00
	Self-employment	17.44±6.61	10.49±4.07	13.03±4.96	8.39±3.40	49.36±16.97
	Student	18.54±6.58	9.73±4.63	13.20±4.95	8.55±3.68	50.03±16.66
	Housewife	16.26±7.27	9.40±3.66	12.50±5.20	7.63±3.08	45.86±16.52
	Test value and p	F=2.515 **p=0.041***	X^2=8.704 p=0.069	F=0.781 p=0.538	X^2=7.118 p=0.13	F=1.789 p=0.13
Chronic disease presence	Yes	18.34±6.78	9.53±4.31	13.46±5.32	8.03±3.38	49.38±17.68
	No	17.25±6.56	9.52±4.08	12.8±4.98	8.08±3.43	47.66±16.30
	Test value and p	Z=-1.197 p=0.231	Z=-0.103 p=0.918	Z=-0.978 p=0.328	Z=-0.101 p=0.92	Z-0.801 p=0.423
Covid-19 infection status	Yes	17.45±5.97	10.31±3.85	12.71±4.31	8.5±3.15	48.97±14.79
	No	17.36±6.72	9.37±4.14	12.91±5.16	7.99±3.47	47.64±16.79
	Test value and p	Z=-0.204 p=0.838	Z=-2.830 **p=0.005***	Z=-0.072 p=0.943	Z=-2.139 **P=0.032***	Z=-1.101 p=0.271
Fear of getting infected with covid-19 for the first time	Yes, I am so scared	22.19±6.97	12.14±4.84	16.79±5.72	9.92±4.27	61.05±18.97
	Yes, I am a little scared	16.97±5.78	8.61±3.11	12.36±4.16	7.49±2.66	45.46±12.60
	No, I am not scared	12.90±5.18	8.25±4.39	9.97±4.34	7.15±3.64	38.28±15.16
	Test value and p	F=59.29 **p=0.000***	X^2=63.349 p=**0.000***	F=56.47 **p=0.000***	X^2=34.890 p=**0.000***	F=62.62 **p=0.000***
Fear of getting infected with covid-19 for the second time	Yes, I am so scared	19.51±6.51	11.41±4.68	14.06±5.35	9.48±3.67	54.48±17.83
	Yes, I am a little scared	17.46±5.43	9.82±3.19	12.46±3.48	8.17±2.92	47.93±12.23
	No, I am not scared	12.08±2.46	9.33±3.49	10.16±2.97	7.25±1.76	38.83±8.67
	Test value and p	F=7.705 **p=0.001***	X^2=2.183 p=0.336	F=3.930 **p=0.023***	X^2=6.632 p=**0.036***	F=5.610 **p=0.005***
Decision to get vaccinated	Yes	17.18±6.24	9.70±4.53	12.77±4.77	8.04±3.45	47.71±16.33
	No	17.14±6.67	9.33±4.16	12.53±5.11	8.23±3.65	42.25±17.30
	I am indecisive	17.65±6.74	9.56±3.82	13.17±5.09	7.99±3.25	48.38±15.99
	Test value and p	F=0.368 p=0.692	X^2=1.008 p=0.604	F= 0.813 p=0.444	X^2=0.181 p=0.914	F=0.239 p=0.788

DISCUSSION

In our study, it was determined that the fear of catching Covid-19 for the first time was very much in 23.4% of the participants, a little in 56.1%, and the fear of catching Covid-19 for the second time was very much in 34.4% and a little in 52.2% of the participants. Covid-19 has caused significant changes in work, school and social life in many countries after the WHO declared it as a pandemic. These sudden and major changes made to prevent the spread of the disease (social isolation, closure of schools and most businesses, lockdown, etc.) have caused feelings of fear and anxiety in people (Doğan and Düzel, 2020). Moreover, the fact that Covid-19 is a newly defined disease, the lack of precise information about its treatment, the increasing number of cases and mortality rates, the continuing uncertainty about the process has further increased the fear of getting Covid-19 in individuals and the psychological reactions to the disease (Bakioğlu et al., 2020; Mertens et al., 2020; Rodríguez-Hidalgo et al., 2020; Torales et al., 2020; Wang et al., 2020). In a study conducted with 1210 participants in China, 53.8% of the participants evaluated the psychological impact of the pandemic as moderate or severe, and 75.2% stated that they were afraid that their family members infect with Covid-19 (Wang et al., 2020).

In this study, 24.3% of the individuals who participated in the research answered to the question of would you like to be a Covid-19 vaccine as yes, 30.9% of them said no and 44.7% of them said that "I am indecisive". Most of the respondents who responded “I am indecisive” stated that they did not know the side effects of vaccines and that they were indecisive because the vaccines were newly developed. Vaccination is a reliable, effective and inexpensive method to gain community immunity in controlling Covid-19. It is stated that the vaccine should be accepted by at least 55% of the society in order to gain herd immunity in society, and it is thought that this rate may rise to 85% depending on the country and the course of the disease (Kwok et al., 2020; Sanche et al., 2020). In our study, 24.3% of the participants stated that they would accept vaccination; this value is quite lower than the vaccination rate that should be required to gain community immunity. Public acceptance of vaccines is important for the Covid-19 vaccination program to be successful. The situation that the vaccine was newly developed, lack of information about vaccines, misinformation on social media platforms about the disease and vaccines (the disease being a conspiracy, the vaccine has a chip inside of it, the vaccine is a biological weapon, etc.) negatively affects the vaccine decision of the society (Bell et al., 2020; Loomba et al., 2021; Sallam et al., 2021). In a study conducted with the participation of 1066 people in Poland, it has been shown that 28% of adults will not have the covid-19 vaccine. In addition, the majority of these people (51%) stated that they would not change their minds even if they were given information about vaccine safety and effectiveness or were threatened with heavy fines (Feleszko et al., 2020). In a study conducted in June 2020, 38% of the people surveyed in the United Kingdom and 34.2% in the United States (USA) stated that they would agree to have the COVID-19 vaccine (Mcandrew and Allington 2020). In a study conducted in September 2020 with 4000 participants in the UK and 4001 in the USA, it was predicted that 54.1% of the participants in the UK and 42.5% of the participants in the USA would definitely accept vaccination. The majority of the participants stated that they would accept vaccination to protect their family and close relatives (Loomba et al., 2021).

The average scale score obtained for the Covid-19 phobia scale of the participants was found to be 47.87 (SD: 16.46) below the midpoint. Covid-19 phobia is defined as the constant and excessive fear experienced by the individual against the virus negatively affecting the person's life (Arpaci et al., 2020). In a study, it was shown that individuals who did not leave the house except for essential needs during the three-month restriction period within the scope of Covid-19 measures had higher levels of Covid-19 phobia than individuals who had to go to work during this period. This has been associated with increased anxiety levels and social media exposure (Celenay et al., 2020).

It was found that there was no statistically significant difference between the sub-dimensions of the Covid-19 phobia scale and the total score averages of individuals who decided to be vaccinated yes, no and indecisive. However, in our study, it has been shown that women, who have not infected with Covid-19 before and who stated that they were very afraid of getting Covid-19 had high mean scores on the Covid-19 phobia scale total and sub-dimensions. The increased fear of Covid-19 turns into corona-phobia. Many studies have found that women have higher fear of covid-19 (Andrade et al., 2020; Bakioğlu et al., 2020; Rodríguez-Hidalgo et al., 2020). These findings support that corona-phobia levels may be higher in women. Continuous exposure to news about Covid-19, high mortality rates and severe cases of many patients may cause high corona-phobia levels of individuals who have not had Covid-19 before. It has been determined that as the exposure to social media increases, the psychological effects of the pandemic increase (Celenay et al., 2020; Mertens et al., 2020).

The mean score of the psychological sub-dimension of the self-employed people; somatic and economic sub-dimensions score means of individuals previously infected with Covid-19; total, psychological, social and economic sub-dimensions mean scores of individuals who were very afraid of getting Covid-19 for the second time, were found higher. In our study, most of the self-employed individuals work with the minimum wage and they continued to go to work even in times of restrictions. The thought that their economic problems will increase in the event of the disease may cause them to be more psychologically affected by the pandemic Both in individuals caught with Covid-19 and in individuals who express that they were very afraid of getting Covid-19 for the second time; the effects of the disease on their bodies,

the pathological symptoms they experienced, the economic difficulties during and after the disease were effective in high corona-phobia levels. One of the most negative effects of the pandemic is the economic problems experienced by individuals. During the pandemic period, a ban on dismissal was imposed in Turkey, but a large number of people, especially those working on the minimum wage, have not received their full salaries for a long time. The economic difficulty caused the psychological effects to be experienced more heavily. In a study conducted in India, the causes of 69 suicide cases were identified as fear of catching covid-19 (n=21), economic crisis (n=19), loneliness, quarantine pressure and social boycott, work stress due to the COVID-19, respectively (Dsouza et al., 2020).

CONCLUSION

Our study showed that individuals experienced fear of getting Covid-19 and covid-19 phobia, and most people were undecided about being vaccines due to the unknown side effects. Analyzing the effects of the pandemic on society and determining the opinions of individuals about covid-19 vaccines is very important in the Covid-19 pandemic crisis. The success of the vaccination program depends on increasing the population acceptance of vaccines. It is important to eliminate the concerns of society about vaccines and to inform them correctly in controlling the pandemic. Moreover, measures to reduce the psychological effects of the pandemic on individuals (phone counseling, economic support, etc.) should be increased.

Limitations of Study

The study has limitations. This study presents some new results about Covid-19 vaccines, as well as results that support previous studies. However, limitations of the study should be noted while interpreting the results of the study. The limitation of this study is the small sample size and the majority of the participants are likely to be female. Moreover, the participants are users of a network, which implies that the data obtained comes from a sample with internet access and social media users, not representing a population without these characteristics.

Acknowledgments

The authors would like to thank the participants who voluntarily participated in the study.

Conflicts of Interest

The author declare no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Author Contributions

Plan, design: ÇK, EB, PS; **Material, methods and data collection:** ÇK, EB, PS; **Data analysis and comments:** ÇK, EB; **Writing and corrections:** CK, EB, PS.

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