

## INVESTIGATION OF THE ANXIETY LEVEL DUE TO COVID-19 IN HEALTHCARE WORKERS WORKING IN THE OPERATING ROOM

### *Ameliyat Alanında Çalışan Sağlık Çalışanlarında COVID-19'a Bağlı Kaygı Düzeyinin İncelenmesi*

Erdoğan KOCA<sup>1</sup> 

<sup>1</sup> Malatya Training and Research Hospital, Department of Anesthesiology and Reanimation, MALATYA, TÜRKİYE

#### ABSTRACT

#### ÖZ

**Objective :** With the onset of the COVID-19 pandemic, healthcare professionals have been at the forefront of the fight against this disease. This infection, which affects the whole world, has created a situation that causes concern for healthcare workers. In this study, we aimed to examine the level of anxiety related to the COVID-19 pandemic in healthcare workers working in the operating room unit.

**Material and Methods:** Doctors, operating room nurses, anesthesia technicians and operating room cleaning staff working in the operating room units of various hospitals in Malatya were included in the study. By sending the survey link via Whatsapp, the survey was answered via <https://docs.google.com/forms>. The Fear of COVID-19 Scale, developed by Ahorsu et al. was used in our questionnaire.

**Results:** We found that the average of the COVID-19 anxiety level of the anesthesia technicians was statistically significantly higher than the nurses, operating room cleaning staff and doctors.

**Conclusion:** The provision of safe working conditions should be included in health policies in order to minimize the anxiety caused by the COVID-19 epidemic on healthcare workers.

**Keywords:** COVID-19, anxiety, operating rooms

**Amaç:** COVID-19 pandemisinin başlamasıyla birlikte sağlık çalışanları bu hastalıkla mücadelede ön saflarda yer almıştır. Tüm dünyayı etkisi altına alan bu enfeksiyon sağlık çalışanlarını endişeye sevk eden bir durum yarattı. Bu çalışmada ameliyathane ünitesinde görevli sağlık çalışanlarının COVID-19 pandemisi ile ilgili kaygı düzeylerini incelemeyi amaçladık.

**Gereç ve Yöntemler:** Malatya'da çeşitli hastanelerin ameliyathanelerine görev yapan doktorlar, ameliyathane hemşireleri, anestezi teknisyenleri ve ameliyathane temizlik personeli çalışmaya dahil edildi. Anket linki Whatsapp üzerinden gönderilerek anket <https://docs.google.com/forms> üzerinden cevaplanmıştır. Ahorsu ve diğerleri tarafından geliştirilen COVID-19 Korkusu Ölçeği anketimizde kullanılmıştır.

**Bulgular:** Anestezi teknisyenlerinin COVID-19 kaygı düzeyi ortalamasının hemşirelere, ameliyathane temizlik görevlilerine ve doktorlara göre istatistiksel olarak anlamlı derecede yüksek olduğunu bulduk.

**Sonuç:** COVID-19 salgınının sağlık çalışanları üzerinde yarattığı kaygıyı en aza indirmek için güvenli çalışma koşullarının sağlanması sağlık politikalarına dahil edilmelidir.

**Anahtar Kelimeler:** COVID-19, kaygı, ameliyathane



**Correspondence / Yazışma Adresi:**  
Malatya Training and Research Hospital, Department of Anesthesiology and Reanimation, MALATYA, TÜRKİYE  
**Phone / Tel:** +905302239625  
**Received / Geliş Tarihi:** 01.07.2022

**Dr. Erdoğan KOCA**  
of Anesthesiology and Reanimation, MALATYA, TÜRKİYE  
**E-mail / E-posta:** drerdinckoca@hotmail.com  
**Accepted / Kabul Tarihi:** 06.09.2022

## INTRODUCTION

It was detected in Wuhan, the administrative center and largest city of China's Hubei province, and the disease called coronavirus disease 2019 (COVID-19), caused by the corona virus, spread all over the world and caused a pandemic (1). By 31 March 2022, 6.132.461 people died due to COVID-19 and 483.556.595 infected individuals were detected all over the world (2). It is clear that increasing mortality rates in the world will cause negative psychological symptoms on people. The first COVID-19 case in Turkey was detected on March 11, 2020. By March 29, 2022, 97.977 people died due to COVID-19 in our country and a total of 14.846.224 people were infected (3). In addition to causing a respiratory tract infection, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) also has negative effects on mental health because it affects many organs and may be fatal (4). Anxiety can be described as the emotional state in which the individual feels as if something bad is going to happen (5). It has been observed that the increasing number of cases and the spread of the epidemic cause an increase in fear, stress and anxiety in individuals (6). Epidemics can have behavioral and psychological effects in both the infected and the healthy persons. Psychiatric symptoms such as sleep problems, health-related concerns, increased level of anxiety and anxiety about getting sick can be observed (7). In studies conducted during the epidemic related to acute respiratory tract insufficiency syndrome (SARS), it has been observed that severe infectious diseases increase the levels of fear, anxiety, stress and depression in individuals (8). In a study conducted on 159 people during the COVID-19 outbreak in Turkey, it was found that 23.6% of women scored above the cut-off point for depression and 45.1% for anxiety (9). The aim of our study was to investigate the anxiety levels related to COVID-19 of the operating room personnel working in the front line during the COVID-19 pandemic.

## MATERIALS AND METHODS

### *Study Participants*

Doctors, operating room nurses, anesthesia technicians and operating room cleaning staff working in the operating room unit in Malatya were included in our study. Those who accepted the study and filled out the questionnaire completely were included in the study. These participants were selected from people who were actively worked during the COVID-19 pandemic process. After obtaining permission from the Ministry of Health (2020-09-22T19\_49\_54), ethics committee approval was obtained from Malatya Clinical Research Ethics Committee (Ethics committee no: 2021/12). A survey was conducted by obtaining "informed consent" from health professionals who agreed to participate in the survey.

### *Study survey*

An internet connection link was sent to the survey participants via whatsapp, and the survey was answered via <https://docs.google.com/forms>. Participants were asked about their age, gender, educational status, occupation, marital status, years of employment, psychiatric treatment history, whether there was a psychiatric disease in their family, whether they had COVID-19 and whether they required inpatient treatment. The Fear of COVID-19 Scale, developed by Ahorsu et al. was used in our questionnaire (10). The Turkish adaptation, validity and reliability were carried out by Satici et al. In this scale consisting of 7 questions, it was scored from 1 to 5 (1- I strongly disagree...5- I strongly agree) using a 5-point Likert-type scaling. Scale scoring is between 7-35. The high score obtained from the scale indicates that the COVID-19 pandemic fear level is 'high'. The internal consistency (Cronbach's Alpha value) of the scale was 0.82 and the test-retest reliability was 0.72. The questions we used in our survey were, 'I am very afraid of COVID-19, it bothers me to think about COVID-19, my hands sweat when I think of COVID-19, I am afraid of losing my life because of COVID-19, News and stories about COVID-19 on social media I get nervous or worried when I watch it, I

can't sleep because I'm worried about catching COVID-19, my heart speeds up or I have palpitations when I think I have COVID-19. Answers were presented in the form of multiple choice options consisting of "strongly disagree, disagree, neither agree nor disagree, agree, strongly agree".

#### Statistical Analysis

Data analysis was performed using the IBM SPSS version 26.0 statistical program (Chicago, IL, USA). Kurtosis and skewness values were used to test the normality of the distribution of the data. Descriptive statistics were presented as mean ( $\bar{x}$ ), standard deviation (S), and percentile (%). The analysis of the significant differences between the groups that were determined to fit the normal distribution was performed using the independent sample t-test for those consisting of two groups, and one-way analysis of variance for those consisting of three or more groups. In the analysis of variance, one of the post hoc multiple comparison methods was Tukey's in order to determine between which groups the significant differences were. HSD test was used. A p value of  $<0.05$  was considered statistically significant.

## RESULTS

The ages of 210 individuals included in the study ranged from 20 to 61 years ( $\bar{x}=38.79$ ,  $N=7.624$ ). The professional experience of the participants varied between one year and forty years ( $\bar{x}=14.19$ ,  $N=7.123$ ). The distribution of weekly working hours in all occupations was between 35 hours and 80 hours ( $\bar{x}=46.06$ ,  $N=9.209$ ). The remaining sociodemographic characteristics of the individuals participating in the study are shown in Table 1.

Considering whether the COVID-19 fear scores differ significantly according to the genders of the participants, the female group ( $\bar{x}=3.3325$ ,  $S=0.78490$ , score=23.33) and the male group ( $\bar{x}=2.9726$ ,  $S=0.84224$ , score=20.81) in terms of fear levels, a statistically significant difference was found. Fear scores of women were found to be statistically

significantly higher than men ( $t(208)=3.197$ ;  $p=0.002$ ) (Table 2).

Considering whether the COVID-19 fear scores differ significantly according to the marital status of the participants, the married group ( $\bar{x}=3.1557$ ,  $S=0.83345$ , score=22.09) and the single group ( $\bar{x}=3.2589$ ,  $S=0.80929$ , score=22.81) fear scores of the married group were found to be approximately 0.5 points higher, but this difference was not statistically significant ( $t(208)=-0.648$ ;  $p=0.518$ ).

When it was examined whether the COVID-19 fear scores of the participants showed a significant difference between those with and without chronic disease, the group with chronic disease ( $\bar{x}=3.1629$ ,  $S=0.77559$ , score=22.14) and the group without ( $\bar{x}=3$ ,  $S=0.85199$ , score=22.22) no statistically significant difference was found ( $t(208)=-0.084$ ;  $p=0.933$ ).

Considering the statistically significant differences in COVID-19 fear scores, whether there is a psychiatric diagnosis in the families of the participants, the group with a psychiatric diagnosis in their family ( $\bar{x}=3.0748$ ,  $S=0.95364$ , score=21.52) and the group without ( $\bar{x}=3$ ,  $S=0.81586$ , score=22.28), no statistically significant difference was found ( $t(208)=-0.562$ ;  $p=0.575$ ).

Considering the statistically significant differences in COVID-19 fear scores, whether participants have a history of psychiatric treatment or not, those with a history of psychiatric treatment ( $\bar{x}=3.3684$ ,  $S=1.06938$ , score=23.58) compared to those without ( $\bar{x}=3.1518$ ,  $S=0.80180$ , score=22.06) fear levels were slightly higher, but this difference between them was not statistically significant ( $t(208)=1.087$ ;  $p=0.278$ ).

When examining whether the COVID-19 fear scores are related to whether the participants have had COVID-19 before or not, those who have been caught and survived COVID-19 ( $\bar{x}=3.0616$ ,  $S=0.80876$ , score=21.43) compared to those who have never been caught ( $\bar{x}=3.2066$ ,  $S=0.83449$ , score=22.45) fear levels were slightly lower, but this difference was not statistically significant ( $t(208)=-1.088$ ;  $p=0.278$ ).

Table 1. Demographics datas

		Doctor	Operating Room Nurse	Anesthesia Technician	Operating Room Cleaning Staff	Total
		n(%)	n(%)	n(%)	n(%)	n(%)
<b>Gender</b>	<b>Female</b>	12 (5.7)	44 (21)	50 (23.8)	10 (4.8)	116 (55.2)
	<b>Male</b>	40 (19)	12 (5.7)	23 (11)	19 (9)	94 (44.8)
<b>Marrital Status</b>						
	<b>Married</b>	49 (23,3)	42 (20)	59 (28.1)	28 (13.3)	178 (84.8)
	<b>Single</b>	3 (1.4)	14 (6.7)	14 (6.7)	1 (0.5)	32 (15.2)
<b>Education</b>						
	<b>Primary School</b>	-	-	-	6 (2.9)	6 (2.9)
	<b>High School</b>	-	12 (5.7)	3 (1.4)	17 (8.1)	32 (15.2)
	<b>University</b>	52 (24.8)	44 (21)	70 (33.3)	6 (2.9)	172 (81.9)
<b>Smoking</b>						
	<b>Yes</b>	15 (7,1)	34 (16.2)	27 (12.9)	17 (8.1)	93 (44.3)
	<b>No</b>	37 (17.6)	22 (10.5)	46 (21.9)	12 (5.7)	117 (55.7)
<b>Chronic Additional Disease</b>						
	<b>Yes</b>	14 (6.7)	11 (5.2)	20 (9.5)	5 (2.4)	50 (23.8)
	<b>No</b>	38 (18.1)	45 (21.4)	53 (25.2)	24 (11.4)	160 (76.2)
<b>Familial Psychiatric History</b>						
	<b>Yes</b>	4 (1,9)	7 (3.3)	8 (3.8)	2 (1)	21 (10)
	<b>No</b>	48 (22.9)	49 (23.3)	65 (31)	27 (12.9)	189 (90)
<b>Previous psychiatric history</b>						
	<b>Yes</b>	6 (2.9)	4 (1,9)	8 (3.8)	1 (0.5)	19 (9)
	<b>No</b>	46 (21.9)	52 (24.8)	65 (31)	28 (13.3)	191 (91)
<b>Have you had COVID-19?</b>						
	<b>Yes</b>	18 (8,6)	14 (6.7)	17 (8.1)	2 (1)	51 (24.3)
	<b>No</b>	34 (16.2)	42 (20)	56 (26.7)	27 (12.9)	159 (75.7)
<b>If you have had a COVID -19 infection, have you received inpatient treatment?</b>						
	<b>Yes</b>	6 (2.9)	2 (1)	5 (2.4)	-	13 (6.2)
	<b>No</b>	46 (21.9)	54 (25.7)	68 (32.4)	29 (13.8)	197 (93.8)
<b>Do you have direct contact with a COVID -19 positive patient?</b>						
	<b>Yes</b>	46 (21.9)	45 (21.4)	65 (31)	21 (10)	177 (84.3)
	<b>No</b>	6 (2.9)	11 (5.2)	8 (3.8)	8 (3.8)	33 (15.7)
<b>Has anyone in your family had a COVID-19 infection?</b>						
	<b>Yes</b>	35 (16.7)	39 (18.6)	54 (25.7)	13 (6.2)	141 (67.1)
	<b>No</b>	17 (8.1)	17 (8.1)	19 (9)	16 (7.6)	69 (32.9)

**Table 2.** Evaluation of COVID-19 fear scores according to participant variables

t Test		$\bar{x}\pm s$	t	p
Gender	Female	3.3325±0.78490	3.197	<b>0.002</b>
	Male	2.9726±0.84224		
Marrital Status	Married	3.1557±0.83345	-0.648	0.518
	Single	3.2589±0.80929		
Smoking	Yes	3.2673±0.84021	1.499	0.135
	No	3.0952±0.81506		
Chronic Additional Disease	Yes	3.1629±0.75759	-0.084	0.933
	No	3.1741±0.85199		
Familial Psychiatric History	Yes	3.0748±0.95364	-0.562	0.575
	No	3.1822±0.81586		
Previous Psychiatric History	Yes	3.3684±1.06938	1.087	0.278
	No	3.1518±0.80180		
Have You Had COVID-19?	Yes	3.0616±0.80876	-1.088	0.278
	No	3.2066±0.83449		
If you have had a COVID -19 infection, have you received inpatient treatment?	Yes	3.0879±0.69385	-0.374	0.709
	No	3.1769±0.83809		
Do you have direct contact with a COVID-19 positive patient?	Yes	3.1921±0.81924	0.836	0.404
	No	3.0606±0.88282		
Has anyone in your family had a COVID-19 infection?	Yes	3.1388±0.86290	-0.815	0.416
	No	3.2381±0.75580		
One-Way Analysis of Variance		$\bar{x}\pm s$	f	p
Education	Primary School	3.0000±1.12848	0.608	0.545
	High School	3.3080±0.80740		
	University	3.1520±0.82408		
Occupation	Doctor	2.9121±0.82389	3.060	0.029
	Operating Room Nurse	3.2372±0.87356		
	Anesthesia Technicians	3.3425±0.73105		
	Operating Room Cleaning Staff	3.0788±0.89344		
Post Hoc (Tukey HSD)	Doctor	Operating Room Nurse	Anesthesia Technicians	Operating Room Cleaning Staff
	p	p	p	p
Doctor		0.167	0.021	0.815
Operating Room Nurse	0.167		0.887	0.831
Anesthesia Technicians	0.021	0.887		0.457
Operating Room Cleaning Staff	0.815	0.831	0.457	

**Table 3.** Evaluation of COVID-19 fear scores according to occupational groups and gender variable

t Test		$\bar{x}\pm s$	t	p
<b>Doctor</b>	<b>Female</b>	3.3095±0.90726	1.957	0.056
	<b>Male</b>	2.7929±0.76962		
<b>Operating Room Nurse</b>	<b>Female</b>	3.1948±0.87906	-0.693	0.491
	<b>Male</b>	3.3929±0.87243		
<b>Anesthesia Technicians</b>	<b>Female</b>	3.4543±0.66987	1.965	0.053
	<b>Male</b>	3.0994±0.81206		
<b>Operating Room Cleaning Staff</b>	<b>Female</b>	3.3571±0.74460	1.228	0.230
	<b>Male</b>	2.9323±0.94805		

Considering whether the COVID-19 fear scores are related to whether the participants received inpatient treatment due to COVID-19 or not, among the participants who received inpatient treatment due to COVID-19 ( $\bar{x}$ =3.0879, S=0.69385, score=21.62) There was no statistically significant difference between those who did not receive treatment ( $\bar{x}$ =3.1769, S=0.83809, score=22.24) ( $t(208) = -0.374$ ;  $p=0.709$ ).

Considering whether the COVID-19 fear scores are related to the participants' previous contact or non-contact with the individuals who contacted COVID-19, the fear levels of the participants who had previous contact with the individuals caught COVID-19 ( $\bar{x}$ =3,1921, S=0.81924, score=22.34) was higher than the non-contact group ( $\bar{x}$ =3.0606, S=0.88282, score=21.42), but this difference between the groups was not statistically significant. ( $t(208)=0.836$ ;  $p=0.404$ ).

Considering whether the COVID-19 fear scores are related to the presence or absence of individuals caught COVID-19 in the vicinity of the participants, the fear level of the group with the individuals caught COVID-19 in their family ( $\bar{x}$ =3.1388, S=0.86290, score=21, 97) compared to the non-native group ( $\bar{x}$ =3.2381, S=0.75580, score=22.67), but this difference was not statistically significant ( $t(208)=-0.815$ ;  $p=0.416$ ).

When we look at whether the COVID-19 fear scores differ in terms of the educational status of the participants, primary education ( $\bar{x}$ =3.0000, S=1.12848, score=21), secondary education ( $\bar{x}$ =3.3080, S=0.80740, score=23.16) and higher education ( $\bar{x}$ =3.1520, S=0.82408, score=22.09) groups, no statistically significant difference was found ( $F=0.608$ ;  $p=0.545$ ).

In the study, when it was examined whether there was a significant difference between the COVID-19 fear levels of the occupational groups working in the operating room, a statistically significant difference was found between the COVID-19 fear levels of the occupational groups. ( $F=3.060$ ;  $p=0.029$ ).

The mean total fear score of the doctor group ( $\bar{x}$ =2.9121, S=0.82389, score=20.38) was the lowest score among the professions. Other groups fear scores were as follows; cleaning personnel group ( $\bar{x}$ =3.0788, S=0.89344, score=21.55), nurse group ( $\bar{x}$ =3.2372, S=0.87356, score=22.66) and technician group ( $\bar{x}$ =3.3425, S=0.73105, score=23.4. Tukey's HSD test was chosen from the post hoc multiple comparison methods and analyzed to determine which groups had significant differences between occupational groups. As a result of the analysis, there was a significant difference between the doctor group ( $\bar{x}$ =2.9121, S=0.82389, score=20.38) and the technician group ( $\bar{x}$ =3.3425, S=0.73105, score=23.4). was found to be ( $p=0.021$ ). There was no significant difference between other occupational groups ( $p>0.05$ ).

In order to see whether the significant differences in COVID-19 fear scores in occupational groups are due to gender, we performed an independent sample t-test for the gender variable within the occupational groups. As a result of the analysis, no statistically significant difference was found between the doctor group and the technician group in terms of gender variable (Doctor ( $t(50) = 1.957$ ) (Table 3).



## DISCUSSION

Our results suggest that fear scores of women were statistically significantly higher than men. Additionally, fear scores of the married group were found to be approximately 0.5 points higher, but this difference was not statistically significant. In the study, when it was examined whether there was a significant difference between the COVID-19 fear levels of the occupational groups working in the operating room, a statistically significant difference was found between the COVID-19 fear levels of the occupational groups. The mean total fear score of the doctor group was the lowest score among the professions.

COVID-19, unlike other flu factors, it is important because due to its much higher contagious and high mortality rate (between 0.5% and 3%) (11). Contact with the mouth, nose and eyes after hand contact with the droplets is important in terms of disease transmission (12). Aerosol-forming endotracheal intubation, bronchoscopy, upper gastrointestinal endoscopy, surgical interventions in the upper and lower airways, and tracheotomy carry a high risk of transmission (13). In our study, we examined the anxiety levels of health personnel working in the operating room unit due to COVID-19. The fact that both the surgery of COVID-19 infected patients in the operating room and the frequent interventions such as endotracheal intubation and respiratory surgery, which create aerosols and carry a high risk of transmission, increase the anxiety level of the healthcare professionals working in this field. This opinion may explain the reason why our study was conducted in an isolated unit. Healthcare workers working in the operating room carry a high risk of transmission in this state. This risk creates stress on employees and causes anxiety. The fact that epidemics create intense stress in people and may cause psychological symptoms (14). While healthcare workers strive for the continuation of human health, they are under stress due to the responsibility of their work. There are many studies showing that the prevalence of COVID-19 and deaths in healthcare workers increase

stress (15). Pandemic is a situation that increases this stress load. In addition, there are publications showing that its negative effects in terms of personal and patient safety (16). In a study conducted with healthcare professionals, various mental health problems such as depression, anxiety, and burnout are more common than in the general population (17). The fact that healthcare workers are at constant risk of contact with the virus and that the increase in viral load is an important factor in terms of the severity of the disease increases fear and anxiety levels (18). In the statements of the Turkish Medical Association, 556 health workers lost their lives (19). In a study conducted during the COVID-19 epidemic, it was found that 64 of the doctors had depressive symptoms, 51% had anxiety and 41% had stress-related symptoms. The increased amount of anxiety was associated with being young, female gender, lack of experience, and working on the front line (20). In our study, the fact that the operating room personnel work in a risky area in terms of contamination causes the emergence of stress-related symptoms. In a study conducted by Ocaktan et al. reported that state and/or trait anxiety scores of women were higher than men (21). Ertufan et al. in their study on health workers, they concluded that the level of education did not cause a significant difference on anxiety (22). Lai et al. in a study conducted by healthcare workers during the COVID-19 pandemic, found that 46.6% of the participants had anxiety and 34.0% had insomnia (23). In a study conducted in Saudi Arabia during the COVID-19 pandemic, it was reported that anxiety was observed in 31.8% of healthcare workers (24). Consolo et al found anxiety in 46.4% of the participants in their study among dentists during the COVID-19 pandemic. They found that 9.0% of individuals had severe anxiety (25). Sakaoğlu et al., in their study examining the anxiety level of healthcare workers in the COVID-19 pandemic, found that the level of anxiety in nurses was higher than that of other healthcare workers (26). In our study, it was observed that the level of anxiety in the anesthesia technician operating room during the

COVID-19 pandemic was higher than in other occupational groups. In a study conducted with 149 healthcare professionals working during the COVID-19 pandemic, it was found that 53.1% of individuals had insomnia and 52.3% had generalized anxiety disorder. In the same group, the rate of those with generalized anxiety disorder and insomnia is 36.9% (27). Erdogdu et al. in their study in which they investigated the levels of anxiety and hopelessness in the society during the COVID-19 pandemic, they stated that one of the 4 participants had symptoms of anxiety and one of the 3 participants had symptoms of hopelessness. When they evaluated the anxiety level according to gender, they found that the anxiety level was significantly higher in women (28). Erdogdu et al. In this study, the society was evaluated. However, the fear of the disease was more evident for healthcare workers, especially operating room personnel, who had a much higher risk of disease contact. Duman et al. in the study they conducted on students using the "COVID-19 Fear Scale" and "Intolerance of Uncertainty Scale-12", they found that they were moderately fearful and moderately intolerant (29). Koca et al. compared COVID-19 anxiety level of occupational groups working in the field of otolaryngology in their study and Ear Nose Throat of nurses' anxiety levels to other occupational groups found to be higher overall (30).

Studies on this subject showed that healthcare professionals are under stress during the COVID-19 pandemic. Providing the necessary psychological support to health workers, shortening the duration of the worked shift, taking care in the provision of personal protective equipment that is important for the transmission of the disease, providing personal protection and resting environments in the working area, especially the planning of the worked shift areas in a way that will allow protection in terms of disease transmission, is both protection and we also believe that it is important in terms of the psychological state of healthcare workers.

*Conflict of Interest:* The author has no conflict of interest to declare.

*Support and Acknowledgment:* No financial support was received from any source for this work.

*Ethics approval:* Ethics approval of Malatya Clinical Research Ethics Committee numbered 2021/12 was obtained and the study was started. Informed consent was obtained.

## REFERENCES

1. World Health Organization (WHO). Accessed date 01.07.2022. Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-COVID-19>.
2. World Health Organization (WHO). Accessed date: 31.03.2022. Available from: <https://COVID19.who.int/>.
3. Wikipedia. Accessed date: 31.03.2022. Available from: [https://tr.wikipedia.org/wiki/T%C3%BCrkiye\\_%27de\\_COVID-19\\_pandemisi](https://tr.wikipedia.org/wiki/T%C3%BCrkiye_%27de_COVID-19_pandemisi).
4. Almond, D, Mazumder B. The 1918 influenza pandemic and subsequent health outcomes: an analysis of SIPP data. *American Economic Review*. 2005;95(2):258-62.
5. McClure-Tone EB, Pine DS. Clinical Features of Anxiety Disorders. In: Sadock BJ, Virginia A, Ruiz P, ed(s). *Kaplan and Sadock's Comprehensive Textbook of Psychiatry*. 9<sup>th</sup> edition, Lippincott Williams and Wilkins, 2009;1844-55.
6. Rajkumar RP. COVID-19 and Mental Health: A Review of the Existing Literature. *Asian Journal of Psychiatry*. 2020;52:102066.
7. Banerjee D. The COVID-19 outbreak: Crucial role the psychiatrists can play. *Asian Journal of Psychiatry*. 2020;50:102014.
8. Wu KK, Chan SK, Ma TM. Posttraumatic Stress, Anxiety, and Depression in Survivors of Severe Acute Respiratory Syndrome (SARS). *Journal of Traumatic Stress*. 2005;18(1):39-42.



9. Özdin S, Bayrak ÖŞ. Levels and predictors of anxiety, depression and health anxiety during COVID-19 pandemic in Turkish society: The importance of gender. *Int J Soc Psychiatry*. 2020;66(5):504-11.
10. Ahorsu, DK, Lin CY, Imani V, Saffari M, Griffiths MD, Pakpour AH. The Fear of COVID- 19 Scale: development and initial validation. *International Journal of Mental Health and Addiction*. 2022;20(3):1537-45.
11. Murthy S, Gomersall CD, Fowler RA. Care for Critically Ill Patients With COVID-19. *JAMA*. 2020;323(15):1499-1500.
12. TR Ministry of Health, General Directorate of Public Health. COVID-19 (SARS-CoV-2 Infection) Guide. Ankara;14.04.2020 Available from: [https://COVID-19\\_bilgi.saglik.gov.tr/depo/rehberler/COVID-19\\_Rehberi.pdf?type=file](https://COVID-19_bilgi.saglik.gov.tr/depo/rehberler/COVID-19_Rehberi.pdf?type=file) Accessed 6 May 2020.
13. Heidemann CS, Garbe J, Damm M, Walter S, Michl P, Rosendahl J et al. German bronchoscopy unit readiness for the COVID-19 pandemic: a nation wide survey. *ERJ Open Res*. 2020;31(3):00396.
14. Bao Y, Sun Y, Meng S, Shi J, Lu L. 2019- nCoV epidemic: address mental health care to empower society. *Lancet*. 2020;22(395):37-8.
15. Yavuz Baskiran D, Bayir B, Pehlivan E. Determination of COVID-19 Phobia Level in Health Care Workers. *Soc Work Public Health*. 2022;37(8):719-28.
16. Gelfand MJ, Nishii LH, Raver JL. On the nature and importance of cultural tightness-looseness. *Journal of Applied Psychology*. 2006;91(6):1225-44.
17. Avidan AY. Sleep and fatigue counter measures for the neurology resident and physician. *Continuum (Minneapolis)*. 2013;19(1):204-22.
18. Khanna RC, Honavar SG, Metla AL, Bhattacharya A, Maulik PK. Psychological impact of COVID-19 on ophthalmologists-in-training and practising ophthalmologists in India. *BMC Ophthalmol*. 2020;68:994-8.
19. Turkish Medical Association (TTB). Accessed date: 01.07.2022. Available from: <https://siyahkurdele.com/>.
20. Elbay RY, Kurtulmuş A, Arpacıoğlu S, Karadere E. Depression, anxiety, stress levels of physicians and associated factors in COVID-19 pandemics *Psychiatry Res*. 2020;8290:113130.
21. Ocaktan ME, Keklik A, Çöl M. Spielberger state and trait anxiety level in health personnel working in health centers affiliated to Abidinpaşa health group presidency. *Ankara University Faculty of Medicine Journal*. 2002;55(1):21-8.
22. Ertufan H. The effect of frequent encounters with death on death anxiety in medical practice. *Ege University Institute of Social Sciences PhD Thesis, İstanbul*. 2008.
23. Lai J, Ma S, Wang Y, Cai Z, Hu J, Wei N et al. Factors Associated With Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019. *JAMA Netwopen*. 2020;3(3):203976.
24. Temsah MH, Al-Sohime F, Alamro N, Al-Eyadhy A, Al-Hasan K, Jamal A et al. The psychological impact of COVID-19 pandemic on healthcare workers in a MERSCoV endemic country. *J Infect Public Health*. 2020;13(6):877-82.
25. Consolo U, Bellini P, Bencivenni D, Iani C, Checchi V. Epidemiological aspects and psychological reactions to COVID-19 of dental practitioners in the Northern Italy districts of modena and reggioemilia. *Int J Environ Res Public Health*. 2020;17(10):1-17.
26. Sakaoğlu HH, Orbatu D, Emiroglu M, Çakır Ö. Spielberger State and Trait Anxiety Level in Health Workers During the COVID-19 Outbreak: The Case of Tepecik Hospital. *Tepecik Eğitim ve Araştırma Hastanesi Dergisi*. 2020;30(2):1-9.
27. Ataç Ö, Sezerol MA, Taşçı Y, Hayran O. Anxiety symptoms and insomnia in healthcare workers working in the COVID-19 pandemic. *Turk J Public Health*. 2020;18(Special issue):47-57.

28. Erdoğan Y, Koçođlu F, Sevim C. Investigation of anxiety and hopelessness levels according to psychosocial and demographic variables during the COVID-19 pandemic. *Klinik Psikiyatri*. 2020;23(Ek1):24-37.
29. Duman N. Fear of COVID-19 and Intolerance of Uncertainty. *The Journal of Social Science*. 2020;8:426-30.
30. Koca ÇF. Investigation of Anxiety Level Related to COVID-19 in Healthcare Employees Working in the Otorhinolaryngology Field. *Kırıkkale Üni Tıp Derg*. 2022; 24(1):34-40.