



Anxiety and Fear Caused by the COVID-19 Pandemic During the Intervention of Emergency Surgical Cases in Surgical Physicians in Türkiye

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Abstract

Aim: We aimed to determine the anxiety and fear of surgical physicians regarding COVID-19, their fears in emergency surgical cases and their views on the precautions taken.

Material and Methods: Anxiety and fear scales adapted to Turkish and a questionnaire with 20 questions prepared by ourselves were used. Online questionnaires were applied to 275 physicians using the Google forms application. Mann-Whitney U, Chi-square, Kruskal Wallis, linear and binary logistic regression tests were applied.

Results: A significant difference was found in total anxiety and fear score between gender, additional personal protective equipment (PPE) use or not, COVID-19 effect in medical decisions or not and having total anxiety and total fear or not. Surgeons who thought they were infected with COVID-19 infection from the hospital had higher fear score means than those who did not. Surgeons with two children had higher anxiety scores. In binary logistic regression, having female gender increased fear of COVID-19, using additional PPE increased COVID-19 anxiety and fear of COVID-19, having COVID-19 fear-anxiety increased fear of COVID-19. In linear regression the fear of COVID-19 explained the level of COVID-19 anxiety as much as 39% of the variance.

Conclusion: Anxiety and fears may be more common in surgical branches. While hospitals are performing their duties, physicians and healthcare professionals should absolutely obey the rules and not show the slightest negligence.

Keywords: Anxiety, fear, surgical branches, gender, COVID-19

INTRODUCTION

Pandemic declared on March 11.2020 by the World Health Organization (WHO). Physicians working in the most risky units in Turkey have also been affected by the COVID-19 pandemic, which has devastating effects all over the world. They experience intense anxiety and fear due to the pandemic (1). Surgical physicians come first among the groups of physicians at risk (2). Although the Ministry of Health has postponed emergency surgical cases other than elective cases, there are many cases that fall under the definition of emergency surgery cases. All surgical physicians continue to perform emergency operations related to their specialty. In emergency surgical cases, it is necessary to be fast because the life of the patient is in question and some very important security procedures can be ignored (3).

Medical treatment should be preferred if possible. If urgent treatment is needed (haemodynamic instability, life-threatening complications etc...), the surgeon should check whether the operating room and the technical team are adequately equipped and suitable. In this case, the golden rule is to work with the least number of personnel who have taken security measures (4). Cancer cases if not operated the stage will jump, benign diseases, who are urgent need for surgery and patients, who are life threatening if not operated, should be evaluated within the framework of a multidisciplinary approach by anesthesia, related surgery and internal branches (4). Patients who do not show COVID-19 symptoms, have no radiological findings, and have a negative PCR test can be taken into the operating room with standard precautions. COVID-19 testing and risk assessment should be performed at regular intervals by the entire team (5). The names of everyone in the surgical

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team participating in the surgery should be recorded to facilitate contact follow-up (6-7).

Unfortunately, from the beginning of the pandemic, many surgeons have been infected with COVID-19 infection. Not only are they at risk, they also put their immediate environment and families at risk in terms of infection. They fear that the infection will be transmitted to them and to their relatives and loved ones (8).

In this study, we aimed to determine the anxiety and fear of surgical physicians in intervening emergency surgical cases related to COVID-19 infection, whether they make medical treatment decisions because of COVID-19 and their opinions about the precautions to be taken.

MATERIAL AND METHOD

Design

This study was a descriptive study. The sample account was made through the open epi info website. We calculated the sample account at 90% confidence interval, $p=0.05$, $q=0.05$. When we searched the Ministry of Health Statistics, we found 55000 surgical specialists and emergency medicine specialists in Turkey. We found that when the 55000 number was taken as the population, we need to survey at least 270 physicians. Online questionnaires were applied to 275 physicians using the Google forms application. Consent was obtained from people online while applying the survey. Permission was obtained from the Non-Invasive Ethics Committee of Cumhuriyet University Faculty of Medicine. Decision No: 2021-2/25 Date: 10.02.2021

Statistic

The sociodemographic data form created by us, the COVID-19 Anxiety Scale (CAS) and the COVID-19 Fear Scale were applied to the participants by the researchers. The necessary permissions for the scales were obtained from their authors. The cronbach alpha value of the CAS was 0.889 and the cronbach alpha value of the COVID-19 Fear Scale was 0.893.

Sociodemographic data form; It consists of a total of 20 questions questioning age, gender, marital status, number of children, living place, presence of chronic disease, occupation year, specialty, hospital and physicians' status during the pandemic process.

CAS is a reliable scale with robust factorial (single-factor; invariance between sociodemographics) and structural (correlate with anxiety, depression, suicidal ideation, and substance /alcohol coping) validity (>0.90). Each item is rated on a 5-point scale from 0 (not at all) to 4 (almost daily) based on experience over the past two weeks. CAS total score ≥ 9 indicates dysfunctional anxiety associated with coronavirus. High scores on a particular item or a high total scale score (≥ 9) may indicate an individual's problematic symptoms that may require further evaluation and /or treatment (9). It was adapted to Turkish by Evren et al (10).

The COVID-19 Fear Scale was developed by Ahorsu et al.

(11) to measure the fear levels of individuals during the COVID-19 pandemic. The adaptation of the scale to Turkish was carried out by Haktanır et al. (12) The Turkish version of the scale was used in our study. The answer to each question in the COVID-19 Fear Scale, which is a Likert-type scale consisting of 7 questions, consists of five scores ranging from 1 (strongly disagree) to 5 (strongly agree). The minimum score on the scale is 7, the maximum score is 35, and high scores indicate that individuals have more fear associated with coronavirus. In our study participants were divided into two groups (0-15 as low, ≥ 16 as high) based on the median (was calculated as 15) fear value.

Spss 21 program (IBM SPSS Corp.; Armonk, NY, USA) was used for analysis. Whether the data was normally distributed or not was determined by the Kolmogorov-Smirnov test. The differences between the two groups in terms of anxiety and fear levels were analyzed using the Mann-Whitney U test. The nonparametric conditions between the means of more than two groups were determined using the Kruskal Wallis test. Binary and simple linear logistic regression tests were applied. While conducting the logistic regression models, COVID-19 anxiety and fear scores were accepted as two groups as low (reference category) and high. To determine the relationship between the COVID-19 anxiety, fear levels and sociodemographic characteristics of surgical physicians; age, gender, marital status, number of children, occupation year, living place and having chronic disease were included in the model. To determine the relationship between the COVID-19 anxiety, fear levels of surgical physicians and categories related to pandemic process; overcoming COVID-19 disease, COVID-19 hospital contagion, COVID-19 fear-anxiety, creating COVID-19 algorithm for hospital surgeries, measures taken are sufficient, pre-operative analysis test, PPE provided in the hospital, use of additional PPE and medical treatment decision making were included in the model. $p<0.05$ was considered statistically significant.

RESULTS

To this survey 59 general surgery (21.5%), 45 orthopedics and traumatology (16.4%), 32 gynecology and obstetrics (11.6%), 23 eye diseases (8.4%), 21 ear-nose-throat diseases (7.6%), 19 urology (6.9%) physicians, 3 jaw surgeons (1.1%) participated.

Of the participating physicians, 85 were in a training and research hospital (30.9%), 83 were in a state hospital (30.2%), 51 were in a private hospital (18.5%), 24 were in a city hospital (8.7%), 23 of them were working in university hospitals (8.4%), 3 were in numune hospitals (1.1%), 3 were in branch hospitals (1.1%), 3 were in office (1.1%).

Of the physicians participating in the study, 234 (85.1%) thought that patients did not experience victimization due to COVID-19, and 41 (14.9%) of them thought that they suffered from COVID-19.

Of the physicians participating in the study, 209 (76%) stated that the rules that should normally be followed in operating rooms began to be followed more strictly due to

COVID-19, it had a good effect, and 69 (24%) stated the opposite.

Table 1 shows the distribution of surgical physicians' sociodemographic characteristics according to total COVID-19 anxiety and total COVID-19 fear score means. Total anxiety ($p=0.003$) and fear ($p=0.005$) score means of female surgeons were higher than male surgeons. The anxiety score means of surgeons with two children were higher than surgeons with one ($p=0.028$) or three and more children ($p=0.009$).

Table 2 shows the distribution of surgical physicians' characteristics related to COVID-19 pandemic according

to total COVID-19 anxiety and total COVID-19 fear score means. Surgeons who thought they were infected with COVID-19 infection from the hospital had higher fear score means than those who did not think of hospital contagion ($p=0.033$). Surgeons who stated that they experienced anxiety and fear due to COVID-19 while intervening in emergency surgical cases, who stated that they obtained and used additional PPE other than PPE provided by the hospital, and who stated that they applied postponement or medical treatment due to the anxiety and fear of COVID-19 in cases where they could not postpone surgery or apply medical treatment before the pandemic had higher COVID-19 anxiety and fear score means ($p=0.001$).

Table 1. Distribution of surgical physicians' sociodemographic characteristics according to total COVID-19 anxiety and total COVID-19 fear score means

Characteristic	n	%	Total Anxiety (X ± SD)	Total Fear (X ± SD)
Total	275	100.0	2.5±3.6	16.9±6.4
Age				
20-30	22	8.0	2.4±3.7	17.4±6.6
31-50	226	82.2	2.4±3.5	16.8±6.3
51 and Over	27	9.8	3.1±4.5	17.9±6.7
			KW=1.317 p=0.518	KW=0.529 p=0.768
Gender				
Male	232	84.4	2.2±3.5	16.5±6.1
Female	43	15.6	3.7±4.1	19.8±7.2
			U=6330.5 p=0.003	U=6326.5 p=0.005
Marriage				
Married	239	86.9	2.4±3.5	16.8±6.1
Widow / Divorced	36	13.1	3.1±4.2	18.3±7.7
			U=4629.0 p=0.441	U=4645.0 p=0.440
Number of children				
0	44	16.0	2.9±4.5	17.4±7.1
1	89	32.4	1.9±2.9	16.3±6.0
2	111	40.4	2.9±3.6	17.7±6.3
3 and over	31	11.3	1.9±3.7	15.9±6.4
			KW=8.947 p=0.030*	KW=3.511 p=0.319
*Significant difference (U; p)= 3 and over-2 (40.255; 0.009), 1-2 (-23.691; 0.028)				
Living place	189	68.7	2.8±3.9	17.4±6.4
Metropolis	63	22.9	1.7±3.0	16.1±6.4
City	23	8.4	2.2±2.3	15.5±5.9
District			KW=5.795 p=0.055	KW=3.451 p=0.178
Chronic disease				
Yes	57	20.7	2.9±3.6	18.2±6.1
No	218	79.3	2.4±3.6	16.6±6.4
			U=5361.5 p=0.095	U=5248.0 p=0.071
Occupation year				
0-5	22	8.0	3.0±4.9	17.5±5.9
6-10	76	27.6	1.9±2.8	15.7±5.4
11-15	82	29.8	2.2±3.1	16.7±5.6
16 and over	95	34.5	2.9±4.2	18.1±7.5
			KW=1.502 p=0.682	KW=4.703 p=0.195

X mean, SD standard deviation, U Mann-Whitney U Test, KW Kruskal-Wallis Test

Table 2. Distribution of surgical physicians' characteristics related to COVID-19 pandemic according to total COVID-19 anxiety and total COVID-19 fear score means

Characteristic	n	%	Total Anxiety (X ± SD)	Total Fear (X ± SD)
Overcoming COVID-19 disease				
Yes	121	44.0	2.2±3.2	16.9±5.7
No	154	56.0	2.8±3.9	16.9±6.8
			U=9896.5 p=0.353	U=9091.0 p=0.730
COVID-19 hospital contagion				
Yes	65	23.6	2.7±3.3	18.3±5.2
No	26	9.5	2.4±4.7	15.0±5.1
Keep up with COVID-19	184	66.9	2.4±3.6	16.8±6.8
			KW=2.619 p=0.270	KW=8.280 p=0.016*
*Significant difference (U; p)= No- Yes (46.827; 0.033)				
COVID-19 fear-anxiety				
Yes	207	75.3	2.9±3.7	18.2±6.3
No	68	24.7	1.2±3.1	13.3±4.9
			U=4555.5 p=0.001	U=3787.0 p=0.001
Creating COVID-19 algorithm for hospital surgeries				
Yes	224	81.5	2.5±3.7	16.9±6.5
No	51	18.5	2.3±3.5	17.3±5.9
			U=5435.5 p=0.571	U=5996.5 p=0.578
Measures taken are sufficient				
Yes	146	53.1	1.9±3.1	16.3±6.2
No	129	46.9	3.0±4.1	17.2±6.5
			U=10602.0 p=0.059	U=10663.5 p=0.058
Pre-operative analysis test				
Yes	169	61.5	2.2±3.3	17.0±6.3
No	106	38.5	2.9±4.0	16.9±6.5
			U=9519.5 p=0.358	U=8866.0 p=0.887
Is PPE provided in the hospital?				
Yes	219	79.6	2.2±3.4	16.9±6.4
No	56	20.4	3.4±4.4	17.5±6.3
			U=6927.0 p=0.116	U=6558.0 p=0.422
Use of additional PPE				
Yes	138	50.2	3.4±4.1	19.1±6.5
No	137	49.8	1.6±2.8	14.8±5.4
			U=6600.5 p=0.001	U=5720.5 p=0.001
Medical treatment decision making				
Yes	129	46.9	2.9±3.8	17.9±6.7
No	146	53.1	2.0±3.4	16.1±5.9
			U=7692.5 p=0.006	U=7901.5 p=0.021

X mean, SD standard deviation, U Mann-Whitney U Test, KW Kruskal-Wallis Test, PPE personal protective equipment

Table 3 shows the total COVID-19 anxiety and fear scores distribution of surgical physicians. Most of the surgeons involved in our study had a low COVID-19 anxiety level (90.9%), but most had a high COVID-19 fear level (53.8%).

Table 4 shows the odds ratio between the COVID-19 anxiety, fear levels and sociodemographic characteristics of surgical physicians. No significant relationship was found between COVID-19 anxiety levels and sociodemographic characteristics. But having a female gender increased the COVID-19 fear 2.27 times ($p=0.040$).

Table 5 shows the odds ratio between the COVID-19 anxiety, fear levels of surgical physicians and categories related to

pandemic process. Using additional PPE increased the COVID-19 anxiety 5.04 times ($p=0.006$) and increased the COVID-19 fear 2.97 times ($p=0.001$). Having COVID-19 fear-anxiety increased the COVID-19 fear 2.34 times ($p=0.008$).

Table 6 shows simple linear regression analysis results of the predictive effect of COVID-19 fear on COVID-19 anxiety level. It was observed that COVID-19 fear significantly affected COVID-19 anxiety ($\beta=0.628$; $t=13.320$; $p=0.001$). Fear of COVID-19 explains the level of COVID-19 anxiety up to 39% of the variance ($R^2=0.394$, $F=177.423$, $p=0.001$). In other words, it was found that as the COVID-19 fear levels of surgeons increased, COVID-19 anxiety levels increased.

Table 3. Total COVID-19 anxiety and fear scores distribution of surgical physicians

	Total Anxiety Scores*			Total Fear Scores**		
	Scores	n	%	Scores	n	%
Low	8 and less	250	90.9	15 and less	127	46.2
High	≥ 9	25	9.1	≥ 16	148	53.8
	Total	275	100.0	Total	275	100.0

* According to the scale, if the total anxiety score is 9 and above, it means that anxiety is significant

** The higher the total score according to the scale, the higher the fear. Participants were divided into two groups based on the median (was calculated as 15) fear value

Table 4. The odds ratio between COVID-19 anxiety, fear levels and sociodemographic characteristics of surgical physicians (n= 275)

	Total Anxiety ¹ OR(95%CI)	Total Fear ¹ OR(95%CI)
Gender²		
Female	1.92(0.64-5.82)	2.27(1.04-4.98)*
Age³		
20-30	1.26(0.12-13.17)	1.81(0.41-7.99)
31-50	1.15(0.26-5.18)	1.22(0.46-3.22)
Marital status⁴		
Married	1.17(0.25-5.48)	1.31(0.47-3.63)
Number of children⁵		
1	0.85(0.17-4.34)	1.18(0.43-3.23)
2	0.82(0.15-4.54)	1.17(0.40-3.43)
≥ 3	1.05(0.13-8.28)	0.93(0.26-3.26)
Occupation year⁶		
6-10	0.31(0.06-1.63)	0.70(0.25-1.94)
11-15	0.34(0.06-2.04)	1.14(0.38-3.38)
≥ 16	0.83(0.15-4.64)	1.44(0.47-4.42)
Chronic disease⁵		
Yes	0.56(0.17-1.88)	1.15(0.59-2.21)

n Number of participants, OR Odds ratio, CI Confidence interval, * $p<0.05$. Reference categories; ¹=Low, ²=Female, ³ ≥ 51 , ⁴=Single + Widow, ⁵=None, ⁶ ≤ 5

Table 5. The odds ratio between the COVID-19 anxiety, fear levels of surgical physicians and categories related to pandemic process (n= 275)

	Total Anxiety ¹ OR (95% CI)	Total Fear ¹ OR (95% CI)
Overcoming COVID-19 disease²		
Yes	0.35 (0.09-1.36)	0.80 (0.39-1.65)
COVID-19 hospital contagion³		
Yes	2.59 (0.59-11.32)	2.02 (0.87-4.70)
No	3.09 (0.53-18.02)	0.72 (0.25-2.10)
COVID-19 fear-anxiety²		
Yes	1.54 (0.39-6.03)	2.34 (1.24-4.42)*
Creating COVID-19 algorithm for hospital surgeries²		
Yes	3.10 (0.81-11.89)	1.18 (0.58-2.43)
Measures taken are sufficient²		
Yes	0.38 (0.14-1.01)	0.72 (0.40-1.31)
Pre-operative analysis test²		
Yes	0.76 (0.31-1.90)	1.18 (0.68-2.05)
Is PPE provided in the hospital?²		
Yes	0.84 (0.29-2.46)	0.94 (0.44-2.02)
Use of additional PPE²		
Yes	5.04 (1.58-16.06)*	2.97 (1.72-5.11)**
Medical treatment decision making²		
Yes	0.98 (0.40-2.44)	1.09 (0.64-1.85)

n Number of participants, OR Odds ratio, CI Confidence interval, PPE personal protective equipment, *p<0.05, **p<0.001
Reference categories; ¹=Low, ²=No, ³=Keep up with COVID-19

Table 6. Simple linear regression analysis results of the predictive effect of COVID-19 fear on COVID-19 anxiety level

Model	B	Ss	β	t	p
Total fear	0.358	0.027	0.628	13.320	0.001

R²=0.394; F=177.423; p=0.001

DISCUSSION

The unexpected results were that the fear scores were 15 and less in 127 physician (46.2%) and the anxiety scores were 8 and less in 250 physician (90.9%). A study conducted with the 451 participants in Turkey, during COVID-19 pandemic, it was concluded that about 40% of individuals generally had high level of anxiety (13). This was a finding inconsistent with the finding in this study. In this study, anxiety levels were found to be extremely low. It can be expected that COVID-19 will not increase their anxiety levels, especially since it was a study performed by surgical physicians and they are routinely busy with an alarming job. There were no significant difference between total anxiety and total fear scores by age, by marital status, by place of life, by profession year, by specialty branch, total anxiety and fear scores according to the hospital studied, the total anxiety and fear scores due to overcoming COVID-19, between the total anxiety and fear scores according to the algorithm creation in hospitals, according to the situation

of taking adequate precautions. There were no significant difference between total anxiety and total fear scores according to preoperative analysis and examination ability, and between procurement of PPE. In a study conducted in healthcare professionals, no significant difference was found between overcoming COVID-19 and insomnia and anxiety. This was a parallel finding with this study (14). In a study conducted with emergency healthcare workers, no significant difference was found between marital status, title, having a chronic disease, overcoming COVID-19 or not, and anxiety score. Similar results were found in this study. There are also studies with significant differences in terms of marital status. When looking at the effect of the marital status of the participants on the scales in a study conducted with 371 participants; the single group average was found to be significantly different and greater than the married group average (15). There are studies in the literature where there was no difference between title (16), having a chronic disease (17) and anxiety score. No

significant difference was found between PPE supply and anxiety and fear scores. However, in some studies, it was stated that when there was a problem in PPE supply, this increased anxiety and fear (18). In this study there was no significant difference because Turkey provided protective equipment. Already, 79.6% of the participants stated that PPE was given in the hospital. In a study conducted with emergency health care workers, a significant difference was found between the professional year and the level of anxiety. Anxiety level was found to be higher in those with at least 11 years of experience. In this study, a significant effect of the professional year was not observed. It can be thought that the experience decreases the level of anxiety, since the study was conducted with surgeons predominantly in surgery (19). In a study conducted on anesthesiologists in Bursa, the fear of COVID-19 was found to be significantly different according to gender, occupational experience, title, hospitals, and having a chronic disease. In this study total anxiety and total fear scores of Covid-19 was statistically different between gender, additional PPE use, COVID-19 effect in medical treatment decision and total anxiety and fear scores (20). In this study total anxiety score was statistically different between number of children. (KW=8.947 $p=0.030$, Significant difference (U;p)= 3 and over-2 (40.255;0.009), 1-2 (-23.691;0.028), total fear score was statistically different between COVID-19 hospital contagion (KW=8.280 $p=0.016^*$, Significant difference (U;p)= No- Yes (46.827; 0.033). Significantly high anxiety and fear scores of those who have more children and think that they are infected by hospital are expected findings. In a study with anesthesiologists, fear of COVID-19 was statistically significantly higher in women, specialist physicians, and participants with chronic diseases ($p=0.003$, $p=0.024$ and $p=0.014$, respectively). The study conducted on anesthesiologists consisted of 65.2% female participants (20). When evaluated in terms of gender variable in a study conducted on 371 participants; COVID-19 fear mean scores of women were found to be significantly different and higher than men. A significant difference was found between the levels of anxiety in favor of female employees in a study conducted with emergency health care workers (15). There are studies in the literature that support this study's finding in favor of men in the study (21). This study found a difference in favor of men. A significance in linear regression was found between total anxiety and total fear scores.

A modeling has been established that the fear of COVID-19 affects COVID-19 anxiety by 39%. The relationship between the COVID-19 anxiety, fear levels and sociodemographic characteristics of surgical physicians. In a binary logistic regression model, having a female gender increased the COVID-19 fear 2.27 times ($p=0.040$), using additional PPE increased the COVID-19 anxiety 5.04 times ($p=0.006$) and increased the COVID-19 fear 2.97 times ($p=0.001$), having COVID-19 fear-anxiety increased the COVID-19 fear 2.34 times ($p=0.008$). The effects within the model are consistent with the Mann Whitney U and Kruskal Wallis

test results.

Of the physicians participating in the study, 234 (85.1%) thought that patients did not experience victimization due to COVID-19, and 41 (14.9%) of them thought that they suffered from COVID-19. In a study conducted on neurosurgery patients, it was found that patients experienced moderate fear due to pandemic and 16.1% of the patients postponed their follow-up dates at least once due to this fear. In this study, physicians stated that 14.9% of patients experienced victimization due to COVID-19. Findings that support each other can be called. Due to COVID-19, the majority of the healthcare organization deals with pandemic patients, so routine follow-ups and surgeries are disrupted (22).

The rate of those who stated in the study that COVID-19 was effective in making medical treatment decisions is 46.9%. They also stated that 14.9% of the patients were victims. The total anxiety and total fear scores of those who said COVID-19 effective while making a medical treatment decision were also found to be significantly higher. Due to COVID-19, some of the patients may lose the chance of surgical treatment or their disease may progress. If patients who can be treated with surgery at an early stage due to COVID-19 are directed to medical treatment, poor results in terms of mortality and morbidity occur. According to COVID-19, when making a decision on surgical treatment and medical treatment, by creating guidelines, making decisions will reduce patients. In addition, it is necessary not to put the surgeons and the operating room team at risk while evaluating the patients sensitively.

53.1% of those participating in the study stated that adequate precautions were taken in their hospitals, 81.5% of them that algorithms were created for operating rooms, and 76% of the rules in operating rooms were followed more strictly after COVID-19. In a study conducted in Jordan, only 28.2% of the doctors were satisfied with the infection control policy in their institutions and only 19.8% felt safe in the workplace (23). This difference may be due to the fact that this study was carried out close to the first year of COVID-19 and the time required for taking adequate measures has passed.

The rate of those who purchased PPE other than PPE provided by their hospitals and used additional PPE themselves is 50.2%. It also made a significant difference in terms of fear and anxiety scores. In a survey study conducted on anesthesiologists, approximately one fourth of anesthesiologists stated that they did not have difficulty in procuring any PPE and only 18% stated that they did not buy any materials themselves. In the study, it was determined that PPEs such as respirator masks, glasses and visors were purchased by themselves (24). In this study, the rate of additional PPE procurement was found to be much lower. However, anxiety and fear were found to be significantly higher in those who provided additional PPE. The reason for this difference may be that this study was conducted in March 2021 and the other study was

conducted in August 2020.

CONCLUSION

In this study, anxiety and fear scores were found to be lower than expected. The low level of anxiety and fear is a great advantage when performing surgeries, especially in surgical branches. In order to sustain this situation and reduce anxiety and fears, hospitals must obey the algorithms created for COVID-19, provide complete PPEs, and make all necessary arrangements in operating rooms. While hospitals are performing their duties, physicians and healthcare professionals should absolutely obey the rules and not show the slightest negligence.

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Conflict of Interest: *The authors declare that they have no competing interest.*

Ethical approval: *Permission was obtained from the Non-Invasive Ethics Committee of Cumhuriyet University Faculty of Medicine. Decision No: 2021-2/25 Date: 10.02.2021*

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