ORIGINAL RESEARCH / *ÖZGÜN ARAŞTIRMA*

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Assessment of Anxiety and Stress Levels of Health Care Workers Who Serve in Frontlines in Anesthesia and Intensive Care Units During the Pandemic

Pandemi Süresince Anestezi ve Yoğun Bakım Ünitelerinde Çalışanların Anksiyete ve Stres Düzeylerinin Değerlendirilmesi

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ABSTRACT *Objective:* The spread of coronavirus disease (COVID-19) worldwide has caused sudden and dramatic changes in our daily routines and work lives. Healthcare workers tried to adapt to the pandemic process, protecting patients, themselves, and their families from COVID-19 infection. Our studyexplainsn the early psychological effects of the COVID-19 pandemic on healthcare professionals working in the front line in intensive care units and operating rooms.
Materials and Methods: This cross-sectional type of study was conducted face-to-face with 125 medical personnel working on the front line in the COVID-19 intensive care unit during the pandemic. The Beck depression inventory and perceived stress scale were used in our study to measure the depression and stress levels of worker healthcare care.
Results: 73.6% of the participants were female, 52.8% were nurses, and 28% were working in a pandemic ICU. The mean age was 34.17 ± 7.72. Compared to the low-stress group, the high-stress group consisted of females with a statistically significantly higher frequency.
Conclusion: Unfortunately, history indicates that pandemics are inevitable and that we must help each other in these difficult times. Understanding early signs of the stress factors of healthcare workers can be helpful in protecting them from posttraumatic disorder. During this period, social distancing was the key to slowing down the transmission of the virus, but it led to increased health sector employees' increased anxiety. Understanding the early signs of healthcare workers' signs of anxiety and depression can protect them from serious health problems such as burnout syndrome and posttraumatic stress disorder.
Keywords: COVID-19, health workers, stress, anxiety

ÖZ *Amaç:* Koronavirüs hastalığının (COVID-19) dünya çapında yayılması, günlük rutinlerimizde ve iş hayatımızda ani ve dramatik değişikliklere neden oldu. Sağlık çalışanları pandemi sürecine uyum sağlamaya çalışarak hastaları, kendilerini ve ailelerini COVID-19 enfeksiyonundan korumaya çalıştı. Çalışmamız, COVID-19 pandemisinin yoğun bakım ünitelerinde ve ameliyathanelerde ön saflarda görev yapan sağlık çalışanları üzerindeki erken dönem psikolojik etkilerini anamayı amaçlamaktadır.
Gereç ve Yöntem: Bu kesitsel tipteki çalışma, pandemi sırasında COVID-19 yoğun bakım ünitesinde ön saflarda görev yapan 125 sağlık personeli ile yüz yüze gerçekleştirilmiştir. Çalışmamızda sağlık çalışanlarının depresyon ve stres düzeylerini ölçmek için Beck depresyon envanteri ve algılanan stres ölçeği kullanılmıştır.
Bulgular: Katılımcıların %73,6'sı kadın, %52.8'i hemşire ve %28'i pandemi yoğun bakım ünitesinde çalışmaktadır. Ortalama yaş 34.17 ± 7.72 idi. Düşük stresli grupla karşılaştırıldığında, yüksek stresli grup, istatistiksel olarak anlamlı derecede daha yüksek sıklıkta kadınlardan oluşuyordu.
Sonuç: Ne yazık ki tarih, pandemilerin kaçınılmaz olduğunu ve bu zor zamanlarda birbirimize yardım etmemiz gerektiğini gösteriyor. Sağlık çalışanlarının stres faktörlerinin erken belirtilerini anlamak, onları travma sonrası bozukluktan korumaya yardımcı olabilir. Bu dönemde sosyal mesafe, virüsün bulaşmasını yavaşlatmanın anahtarıydı, ancak sağlık sektörü çalışanlarının artan kaygısına yol açtı. Sağlık çalışanlarının anksiyete ve depresyon belirtilerinin erken belirtilerini anlamak, onları tükenmişlik sendromu ve travma sonrası stres bozukluğu gibi ciddi sağlık sorunlarından koruyabilir.
Anahtar Kelimeler: COVID-19, sağlık çalışanı, stres, anksiyete

Introduction

The world faces an unprecedented health crisis caused by the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). COVID-19 infection, also known as SARS-CoV-2, continues to cause concern worldwide, with a total number of 92,506,811 confirmed cases, including 2.001.773 deaths in more than 200 countries, as of January 16, 2021 (1). Among confirmed cases with COVID-19, the case mortality rate is estimated to be between 0.2% and 9.5% (2). In Turkey, the total number of patients as of January 16, 2021, is 2.380.665, while the number of patients who died is 23.882 (3). The COVID-19 disease is predominantly viral pneumonia and highly contagious (4) Approved viral infection routes mainly contact contaminated environmental surfaces and aerosolization (5). Procedures for COVID-19 patients in the intensive care unit (ICU) and operating room, especially air management, can produce aerosols that increase the risk of infection and are high-risk for medical personnel (6). Personnel involved in air management of COVID-19 patients and health employees treating the disease have a higher risk of infection by the disease (7). In a Washington Post article, anesthesiologist Cory Deburghgraeve described his work during the outbreak as "basically you are next to the nuclear reactor' (8).

In addition to these causes, the world's unpreparedness for the Coronavirus outbreak has created a sense of fear and anxiety. As the number of cases has increased rapidly, these feelings have increased. COVID-19 has brought severe burdens to the health system worldwide, and doctors' and nurses' efforts to recognize and prevent anxiety and stress levels, which are among the short-and long-term harmful effects, have been significant.

Because the main goal in health policy is to prevent disease, fight against infection, ensure the development of treatment and vaccines, and focus on saving lives, doctors' and nurses' anxiety is at risk of being ignored. In this process, if health employees' stress and anxiety are not treated sufficiently, we can observe adverse effects such as fatigue, depression, mood disorders, drug abuse, suicide, low quality of patient care, unexpected resignations, and early retirements (9).

Our research aims to understand the mental health consequences of the COVID-19 pandemic on health employees working on the front line in our hospital's intensive care units and operating rooms and reveal the consequences of its psycho-physical impact.

Material and Method

This cross-sectional type of study was conducted face-to-face with 125 medical personnel working on the front line in the Covid intensive care unit during the pandemic, with written permission from the Ministry of Health and the Ethics Board Dokuz Eylül University Faculty of Medicine (acceptance no: 2021/02-38). COVID-19 first case in Turkey was announced by the health ministry on 11 March 2020. The first death due to the virus in the country occurred on March 15, 2020. Our study was completed in February 2021.

Beck depression inventory and perceived stress scale were used in our study to measure the depression and stress levels of workers health.

Beck Depression Inventory (BDI) was developed by Beck et al. in 1961 to measure behavioral signs of depression in adolescents and adults (10). In 1978, the full scale was revised, and duplications defining violence were extracted, and patients were asked to mark their status for the last week, including today. With respect to severity scoring is interpreted as follows; 0-9= Minimal, 10-16= light, 17-29= moderate, 30-63= severe. The scale was converted into Turkish as BDI and Beck Depression Scale (BDS) in two separate forms, and a validity and reliability study was conducted (11). A high level of correlation has been found between the original and revised versions. Cross-cultural validity and reliability were also found to be high. The internal reliability of BDE has been tested at different times with an average value of 0.86 between 0.73 - 0.92 (12).

Perceived Stress Scale (PSS) was developed by Cohen et al. (13). PSS, consisting of 14 articles, is designed to measure how several situations in a person's life are perceived as stressful. PSS-14's scores range from 0 to 56, while PSS-10's scores range from 0 to 40, and PSS's scores range from 0 to 16. A high score indicates an excess of a person's perception of stress.

Statistical Analysis

All analyses were performed on SPSS v21 (SPSS Inc., Chicago, IL, USA). Data are given as mean ± standard deviation or median (minimum - maximum) for continuous variables according to normality of distribution and frequency (percentage) for categorical variables. Normally distributed variables (height, weight and blood glucose) were analyzed with independent samples t test and ANOVA test. Non-normally distributed variables were analyzed with the Mann Whitney U test. Categorical variables evaluated using the

Chi-square tests or Fisher's exact tests. p<0.05 values accepted as statistically significant results.

Results

73.6% of the participants were female, 52.8% were nurses, and 28% were working in pandemic ICU. The mean age was 34.17 ± 7.72. 67.8% of those with low stress levels and 88.6% of those with high stress levels were female. Compared to the low-stress group, the high-stress group consisted of females with a statistically significantly higher frequency (p = 0.018) (Figure 1). 25.6% of the group with low-stress level and 48.6% of the group with high-stress level stated that they did sports. Compared with the group with high stress level, the group with low stress level was doing sports with a statistically significantly higher frequency (p = 0.013). Summary of individuals characteristics with regard to stress level were shown in Table 1.

Among the groups determined according to the anxiety level, the frequency of insomnia and concentration disorder, forgetfulness and mental complaints was determined at a statistically significant level (p, 0.026, 0.017, 0.015, respectively). 94.1% of the minimal anxiety group and 12.5% of the severe anxiety group stated that they felt stressed. The frequency of feeling stress was statistically significantly different among the groups determined

according to the anxiety level (p <0.001). Summary of individuals characteristics with regard to anxiety level were shown in Table 2.

Discussion

Our research revealed the psychological effects of the COVID-19 pandemic on medical staff working on the front line in intensive care units and the operating rooms. 73.6% of participants were women, and 52.8% were nurses. Compared to the low-stress group, the high-stress group consisted statistically significantly of female health employees. The prevalence of insomnia and concentration disorder, forgetfulness, and mental reactions (easy irritability, depressive emotion, inability to enjoy life, feeling helpless, pessimism) were high among the groups determined by the anxiety level of health professionals who were directly involved in the care of patients infected by COVID-19.

During the COVID-19 pandemic, anxiety was detected by 23.2% in a meta-analysis that included 13 studies with 33,062 participants to understand and analyze factors that had the potential to affect medical personnel's mental health in critical areas (14). In this meta-analysis, nurses and doctors were compared for anxiety, and mental symptoms were shown in nurses with a higher prevalence, unlike in our study. When gender and occupation analysis was
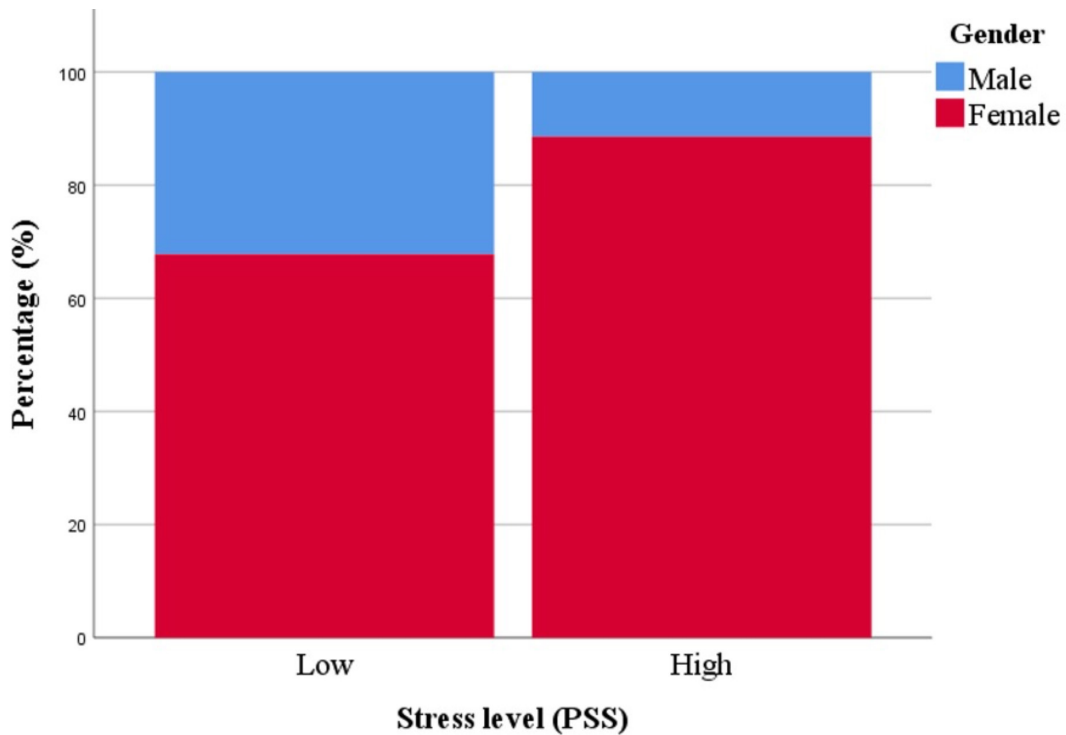

Figure 1. Gender distribution with regard to stress level
*PSS: Perceived Stress Scale

Table 1. Summary of individuals characteristics with regard to stress level			
	Level of stress (PSS)		
	Low (n=90)	High (n=35)	Total (n=125)	p
Age	33.0 (29.0-38.0)	34.0 (29.0-43.0)	33.0 (29.0-40.0)	0.496*
Gender				
Female	61 (67,78%)	31 (88,57%)	92 (73,60%)	0.018[a]
Male	29 (32,22%)	4 (11,43%)	33 (26,40%)	
Duty				
Specialist physician	12 (13,33%)	3 (8,57%)	15 (12.00%)	0.763[b]
Nurse	47 (52,22%)	19 (54,29%)	66 (52,80%)	
Stuff	10 (11,11%)	3 (8,57%)	13 (10,40%)	
Assistant	13 (14,44%)	4 (11,43%)	17 (13,60%)	
Anesthesia technician	6 (6,67%)	5 (14,29%)	11 (8,80%)	
Secretary	1 (1,11%)	0 (0%)	1 (0,80%)	
Lecturer	1 (1,11%)	1 (2,86%)	2 (1,60%)	
Unit				
Pandemic ICU	27 (30.00%)	8 (22,86%)	35 (28.00%)	0.638[b]
CVS ICU	9 (10.00%)	1 (2,86%)	10 (8.00%)	
PACU	10 (11,11%)	6 (17,14%)	16 (12,80%)	
Operating room	19 (21,11%)	10 (28,57%)	29 (23,20%)	
Internal Medicine ICU	17 (18,89%)	7 (20.00%)	24 (19,20%)	
Other	8 (8,89%)	3 (8,57%)	11 (8,80%)	
Symptoms				
Tiredness	75 (83,33%)	32 (91,43%)	107 (85,60%)	0.247[b]
Insomnia and concentration disorder	55 (61,11%)	25 (71,43%)	80 (64.00%)	0.281[b]
Forgetfulnes	51 (56,67%)	18 (51,43%)	69 (55,20%)	0.597[b]
Somatic complaints	50 (55,56%)	17 (48,57%)	67 (53,60%)	0.482[b]
Mental complaints	57 (63,33%)	25 (71,43%)	82 (65,60%)	0.392[b]
Sleep	69 (76,67%)	26 (74,29%)	95 (76.00%)	0.780[b]
Spor	23 (25,56%)	17 (48,57%)	40 (32.00%)	0.013[b]
Psychological support	12 (13,33%)	1 (2,86%)	13 (10,40%)	0.085[a]
Eating				
Decreased	25 (27,78%)	13 (37,14%)	38 (30,40%)	0.540[b]
Same	26 (28,89%)	10 (28,57%)	36 (28,80%)	
Increased	39 (43,33%)	12 (34,29%)	51 (40,80%)	
Separation from familiy	45 (50%)	16 (45,71%)	61 (48,80%)	0.667[b]
Smoking				
Never smoked	44 (48,89%)	19 (54,29%)	63 (50,40%)	0.234[b]
Still smoking	38 (42,22%)	10 (28,57%)	48 (38,40%)	
Quit smoking	8 (8,89%)	6 (17,14%)	14 (11,20%)	
Stress				
No	29 (32,22%)	16 (45,71%)	45 (36.00%)	0.158[b]

Table 1. Continued

	Level of stress (PSS)			
	Low (n=90)	High (n=35)	Total (n=125)	p
Yes	61 (67,78%)	19 (54,29%)	80 (64.00%)	
Media				
More than ever	58 (64,44%)	24 (68,57%)	82 (65,60%)	0.846[b]
Less than usual	25 (27,78%)	8 (22,86%)	33 (26,40%)	
More than ever	4 (4,44%)	1 (2,86%)	5 (4.00%)	
Less than usual	3 (3,33%)	2 (5,71%)	5 (4.00%)	
Level of anxiety (BAI)	15.91 ± 9.21	18.60 ± 8.34	16.66 ± 9.02	0.135[c]
Minimal	15 (16,67%)	2 (5,71%)	17 (13,60%)	0.107[b]
Mild	35 (38,89%)	13 (37,14%)	48 (38,40%)	
Moderate	32 (35,56%)	12 (34,29%)	44 (35,20%)	
Severe	8 (8,89%)	8 (22,86%)	16 (12,80%)	

BAI: beck anxiety inventory, CVS: cardiovascular surgery, ICU: intensive care unit, PACU: post-anesthesia care unit, PSS: perceived stress scale, data are given as mean ± standard deviation or median (1st quartile-3rd quartile) for continuous variables according to normality of distribution and as frequency (percentage) for categorical variables, *Mann-Whitney U test, [a]Fischer Exact test, [b]Pearson chi-square test [c]independent t-test

performed, it was noted that female health employees and nurses showed higher levels of emotional symptoms than male health personnel. Our study also found that the vast majority of staff with high-stress levels were female health employees. Again, a study investigating the anxiety and stress levels of 1830 health employees in Wuhan found that emotional burden was more significant in female employees and nurses (15). In another analysis made for health professionals, it was found that depression and anxiety symptoms for women employees were higher for those less prepared psychologically, self-competence, and those who lacked family support and who have a low quality of sleep (16). A web-based survey of 7236 people in China, which was participated voluntarily, found that anxiety symptoms were significantly higher in health employees, for women and youth (age<35) (17). The high proportion of nurses participating in our survey and the fact that nurses were engaged in closer and longer working hours with COVID-19 patients may have increased the level of anxiety and stress (18).

It was found that high anxiety levels of healthy employees can cause harmful cognitive interference in making task-related goals, negatively affecting their decision-making ability and performance (14). Higher anxiety may also increase burnout; it can invite depression and similar diseases (17). Since previous studies have shown that emotional distress is often associated with inadequate patient care and professional inefficiencies, and a long-term

low effect on healthcare professionals' health status, these results require special attention (19).

The COVID-19 pandemic is complicated due to infection caused by those infected but asymptomatic. It causes additional risk for people they live with and increases the emotional burden of medical personnel (20). A survey found that 48% of anesthesiologists said they were most likely to get COVID-19 at work but thought they would heal after the disease with mild symptoms (21). Among the causes of anxiety and stress of medical staff; in addition to the fear of being infected with COVID-19, the uncertainty of personal protective equipment or other essential equipment, difficulties with child care, witnessing critical illness or death of co-employees, irregular work hours, and high workload can be specified (22). Maintaining health employees' mental well-being is imperative for the health workforce's long-term capacity for caring for COVID-19 patients (21).

On the other hand, health employees' satisfaction with their work and personal satisfaction can be considered a protective factor against anxiety (21-22). It is possible to define personal satisfaction as a sense of professional recognition and self-sufficiency (21). In particular, providing psychological support to front-line employees seems to retain its importance over the coming weeks and months (19).

Besides, in our study, insomnia and concentration disorders were detected by 75% in the severe anxiety group. In a study conducted during the pandemic, health

Table 2. Summary of individuals characteristics with regard to anxiety level					
	Level of anxiety (BAI)				
	Minimal (n=17)	Mild (n=48)	Moderate (n=44)	Severe (n=16)	p
Age	32.18 ± 6.37	33.54 ± 7.51	34.73 ± 8.01	36.63 ± 8.75	0.429[c]
Gender					
Female	9 (52,94%)	38 (79,17%)	34 (77,27%)	11 (68,75%)	0.172[b]
Male	8 (47,06%)	10 (20,83%)	10 (22,73%)	5 (31,25%)	
Duty					
Specialist	2 (11,76%)	7 (14,58%)	4 (9,09%)	2 (12,50%)	0.596[b]
Nurse	7 (41,18%)	27 (56,25%)	24 (54,55%)	8 (50.00%)	
Stuff	1 (5,88%)	3 (6,25%)	5 (11,36%)	4 (25.00%)	
Assistant docto	4 (23,53%)	6 (12,5%)	6 (13,64%)	1 (6,25%)	
Technician	3 (17,65%)	3 (6,25%)	5 (11,36%)	0 (0%)	
Secretary	0 (0%)	1 (2,08%)	0 (0%)	0 (0%)	
Lecturer	0 (0%)	1 (2,08%)	0 (0%)	1 (6,25%)	
Unit					
Pandemic ICU	4 (23,53%)	15 (31,25%)	13 (29,55%)	3 (18,75%)	0.495[b]
CVS ICU	0 (0%)	3 (6,25%)	5 (11,36%)	2 (12,50%)	
PACU	2 (11,76%)	6 (12,50%)	6 (13,64%)	2 (12,50%)	
Operating room	2 (11,76%)	10 (20,83%)	13 (29,55%)	4 (25.00%)	
IM ICU	6 (35,29%)	9 (18,75%)	4 (9,09%)	5 (31,25%)	
Other	3 (17,65%)	5 (10,42%)	3 (6,82%)	0 (0%)	
Symptoms					
Tiredness	13 (76,47%)	42 (87,50%)	38 (86,36%)	14 (87,50%)	0.715[b]
Insomnia and concentration disorder	6 (35,29%)	34 (70,83%)	27 (61,36%)	13 (81,25%)	0.026[b]
Forgetfulnes	5 (29,41%)	23 (47,92%)	29 (65,91%)	12 (75.00%)	0.017[b]
Somatic complaints	7 (41,18%)	23 (47,92%)	24 (54,55%)	13 (81,25%)	0.085[b]
Mental complaints	6 (35,29%)	30 (62,5%)	34 (77,27%)	12 (75.00%)	0.015[b]
Sleep	9 (52,94%)	39 (81,25%)	33 (75.00%)	14 (87,50%)	0.076[b]
Spor	7 (41,18%)	19 (39,58%)	10 (22,73%)	4 (25.00%)	0.259[b]
Psychological support	0 (0%)	7 (14,58%)	5 (11,36%)	1 (6,25%)	0.360[b]
Eating					
Decreased	4 (23,53%)	14 (29,17%)	16 (36,36%)	4 (25.00%)	0.924[b]
Same	6 (35,29%)	15 (31,25%)	10 (22,73%)	5 (31,25%)	
Increased	7 (41,18%)	19 (39,58%)	18 (40,91%)	7 (43,75%)	
Separation from family	7 (41,18%)	23 (47,92%)	23 (52,27%)	8 (50.00%)	0.889[b]
Smoking					
Never smoked	8 (47,06%)	29 (60,42%)	20 (45,45%)	6 (37,50%)	0.358[b]
Still smoking	5 (29,41%)	16 (33,33%)	19 (43,18%)	8 (50.00%)	
Quit smoking	4 (23,53%)	3 (6,25%)	5 (11,36%)	2 (12,50%)	

Table 2. Continued					
	Level of anxiety (BAI)				
	Minimal (n=17)	Mild (n=48)	Moderate (n=44)	Severe (n=16)	p
Stress					
No	1 (5,88%)	9 (18,75%)	21 (47,73%)	14 (87,50%)	<0.001[b]
Yes	16 (94,12%)	39 (81,25%)	23 (52,27%)	2 (12,50%)	
Media					
More than ever	13 (76,47%)	30 (62,50%)	29 (65,91%)	10 (62,50%)	0.955[b]
Less than usual	4 (23,53%)	13 (27,08%)	12 (27,27%)	4 (25.00%)	
More than ever	0 (0%)	2 (4,17%)	2 (4,55%)	1 (6,25%)	
Less than usual	0 (0%)	3 (6,25%)	1 (2,27%)	1 (6,25%)	
PSS score	31.88 ± 3.72	33.48 ± 4.85	32.25 ± 6.80	34.31 ± 5.28	0.349[c]
BAI: beck anxiety inventory, CVS: cardiovascular surgery, ICU: intensive care unit, IM: Internal Medicine, PACU: post-anesthesia care unit, PSS: perceived stress scale, data are given as mean ± standard deviation or median (1st quartile-3rd quartile) for continuous variables according to normality of distribution and as frequency (percentage) for categorical variables, [b]Pearson chi-square test, [c]ANOVA test					

employees' anxiety was reported between 13% and 46.4%, and insomnia was reported between 20% and 89.7% (23). Another study conducted on health employees in Wuhan found a high prevalence of anxiety (44.6%) (Along with high depression, insomnia, and general distress) (24). In another study, the prevalence of insomnia was 32-34% (25). Surveys conducted during the COVID-19 outbreak found a significant relationship between anxiety and depression and sleep quality (26). In the study, which investigated the findings of Novitiate syndrome for health professionals in Italy, 45% of participants reported experiencing at least one physical symptom, including increased irritability, changes in eating habits, difficulty falling asleep, and muscle tension (19). In our study, somatic symptoms such as chest constriction sensation, palpitations, novelties, and gastrointestinal tenderness were observed in 81% of the severe anxiety group employees. Besides, all participants answered the open-ended questions of our survey in writing. It suggested that this reflected the desire of medical staff to express and share their feelings and concerns.

Our study found that compared to the group with high-stress levels, the group with low-stress levels regularly exercised at a statistically significantly higher rate. It has been known for many years that regular physical activity benefits individuals with depressive and anxiety symptoms (27). Studies have shown that individuals without psychiatric symptoms who exercise regularly experience better moods than those who do not (28). Also, it is believed that regular exercise can protect against the development of depression due to its healing effects, such as self-esteem,

fitness, general well-being, and satisfaction with physical appearance (27).

During the COVID-19 pandemic, it is suggested to spend as much time as possible with the family, regular exercise and good nutrition, methods such as therapy and meditation in order to help reduce the stress of health employees and reducing the use of social media can be considered to avoid stimuli that arouse anxiety (23).

In order to avoid the undesirable social, psychological, and economic burden like working factors (excessive workloads, irregular working hours, the uncertainty of personal protection equipment), personal characteristics (work-life imbalance, insufficient social support, sleep deprivation), and organizational factors (workload, expectations, rewards, and peer communication are insufficient, managers negative feedback) it is essential to determine the cause of the outbreak (19).

Our work has some limitations. First, the data from self-reported surveys were not compared with clinical data on healthcare professionals' health. Second, health workers were not asked if any of their relatives had COVID-19.

Conclusion

Because intensive care and operating room employees are healthy employees on the front lines responding to the COVID-19 outbreak, health care professionals' investment should be made to avoid short-and long-term distress caused by anxiety and stress. Essential measures should be taken to identify and manage employee anxiety and its consequences, especially in the early stages of COVID-19. Instead of reacting later when stress deepens, it is more

beneficial to start moving in advance in terms of employee health. Even though our study revealed the state of anxiety and stress, especially for staff working in the operating room and intensive care units, we think it might reflect front-line workers in hospitals.

Ethics

Ethics Committee Approval: This cross-sectional type of study was conducted face-to-face with 125 medical personnel working on the front line in the Covid intensive care unit during the pandemic, with written permission from the Ministry of Health and the Ethics Board Dokuz Eylül University Faculty of Medicine (decision no: 2021/02-38, date: 18.01.2021).

Peer-review: Externally peer-reviewed.

Authorship Contributions

Concept: Ö.Ö., S.B., A.N.G., Design: Ö.Ö., S.B., A.N.G., Data Collection or Processing: Ö.Ö., S.B., A.N.G., Analysis or Interpretation: Ö.Ö., S.B., A.N.G., Literature Search: Ö.Ö., S.B., A.N.G., Writing: Ö.Ö., S.B., A.N.G.

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