

EVALUATION OF MOOD, BURNOUT LEVELS AND ANXIETY OF PRIMARY HEALTH CARE WORKERS DURING THE COVID-19 PANDEMIC PERIOD

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ABSTRACT

Objective: In the fight against the COVID-19 pandemic, primary healthcare workers have played critical roles in filtration and other processes. This research aims to evaluate the burnout, anxiety and fears of the healthcare workers working in primary healthcare institutions in a district of Istanbul during the COVID-19 pandemic period, together with sociodemographic and working life data.

Material and Method: In this cross-sectional study, 191 people actively working in family health centers (FHC) and District Health Directorate (DHD) in a district of Istanbul were administered Spielberger State-Trait Anxiety Inventory (STAI), Coronavirus Fear Scale (CFS) and Maslach Burnout Scale (MBS) was applied. All data were collected with Google Forms between 25.05.2021 and 15.06.2021.

Results: The mean STAI state anxiety score was 45.38±10.25 and the mean trait anxiety score was 41.77±8.50. Maslach scale total score is 57.74±10.38. A statistically significant difference was observed in

the scores of state anxiety, trait anxiety, MBS and CFS according to gender and the mean score of women was higher than men ($p<0.05$). There was no significant difference between the scale scores according to the status of people having COVID-19 disease. The state anxiety and CFS mean scores of the married ones are significantly higher than the others. ($p:0.035$; $p:0.004$). Considering the scale scores according to the institution; The mean scores of FHC workers in the state anxiety, trait anxiety, MBS, and emotional exhaustion subscales of the MBS were found to be significantly higher than those of District Health Directorate employees ($p:0.001$; $p:0.001$; $p:0.001$; $p:0.001$). The anxiety score of the overtime workers was found to be higher than the shift workers ($p:0.028$).

Conclusion: In this study, it is seen that the anxiety and burnout levels of primary health care workers who took an active role during the pandemic period are high in line with the literature.

Keywords: Primary health care personnel, COVID-19, pandemic, burnout, anxiety, fear.

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COVID-19 PANDEMİSİ SÜRECİNDE BİRİNCİ BASAMAKTA ÇALIŞAN SAĞLIK ÇALIŞANLARININ RUH HALİ, TÜKENMİŞLİK VE KAYGI DÜZEYLERİNİN DEĞERLENDİRİLMESİ

ÖZET

Amaç: COVID-19 pandemisi ile mücadelede birinci basamak sağlık çalışanları filyasyon ve diğer süreçlerde kritik roller üstlenmiştir. Bu araştırmanın amacı, İstanbul'un bir ilçesinde COVID-19 pandemi döneminde birinci basamak sağlık kurumlarında çalışan sağlık çalışanlarının tükenmişlik, kaygı ve COVID-19'a ilişkin korkularının sosyodemografik ve çalışma hayatına ilişkin verilerle birlikte değerlendirilmesidir.

Materyal ve Metot: Kesitsel tipteki bu çalışmada İstanbul Eyüpsultan ilçesindeki aile sağlığı merkezleri (ASM) ve İlçe Sağlık Müdürlüğü (İSM)'nde aktif olarak çalışan 191 kişiye Spielberger Durumluk ve Sürekli Kaygı Ölçeği (State-Trait Anxiety Inventory-STAI), Koronavirüs Korkusu Ölçeği (KKÖ) ve Maslach Tükenmişlik Ölçeği (MTÖ) uygulanmıştır. Veriler 25.05.2021-15.06.2021 tarihleri arasında Google Forms ile toplanmıştır.

Bulgular: STAI durumluk kaygı puanı ortalaması $45,38 \pm 10,25$, sürekli kaygı puanı ortalaması $41,77 \pm 8,50$ 'dir. Maslach ölçeği toplam puanı $57,74 \pm 10,38$ 'dir. Cinsiyete göre durumluk kaygı, sürekli kaygı, MTÖ ve KKÖ puanlarında istatistiksel olarak anlamlı farklılık görülmüş olup kadınların puan ortalaması erkeklerden daha yüksektir ($p < 0,05$). Kişilerin COVID-19 hastalığını geçirme durumuna göre ölçek puanları arasında anlamlı farklılık görülmemiştir. Evli olanların durumluk kaygı ve KKÖ puan ortalamaları diğerlerinden anlamlı olarak yüksektir. ($p:0,035$; $p:0,004$) Çalışılan kuruma göre ölçek puanlarına bakıldığında; durumluk kaygı, sürekli kaygı, MTÖ ve MTÖ'nün duygusal tükenme alt boyutunda ASM çalışanlarının puan ortalamaları İSM çalışanlarından anlamlı olarak yüksek bulunmuştur ($p:0,001$; $p:0,001$; $p:0,001$; $p:0,001$). Mesai usulü çalışanların kaygı puanı nöbet usulü çalışanlara göre daha yüksek bulunmuştur ($p:0,028$).

Sonuç: Bu çalışmada pandemi döneminde aktif rol alan birinci basamak sağlık çalışanlarının kaygı ve tükenmişlik düzeylerinin literatürle uyumlu olarak yüksek olduğu görülmektedir.

Anahtar kelimeler: Birinci basamak sağlık çalışanı, COVID-19, pandemi, tükenmişlik, kaygı, korku.

INTRODUCTION

In addition to causing physical diseases, the pandemic affects individuals and societies in many ways. It can cause psychological effects in people.¹ Anxiety and various mental health problems can be seen more frequently in healthcare workers than in the general population. During the COVID-19 pandemic, many factors such as the content of the duties undertaken by healthcare professionals, working hours and conditions, and the risk of transmission of COVID-19 affected people's mental health.^{2,3} In a study conducted with healthcare professionals in Italy, 50% of healthcare professionals had post-traumatic stress disorder symptoms, 25% had depression symptoms and 20% had anxiety symptoms.⁴ In the fight against the COVID-19 pandemic, primary health care workers took active roles in affiliation and other processes. The aim of this study was to evaluate the burnout, anxiety, and fears, together with sociodemographic and working life data of the health care professionals working in primary health care institutions in a district of Istanbul during the COVID-19 pandemic.

MATERIAL AND METHOD:

The population of this cross-sectional study consists of 345 people who were actively working in family health centers (FHC) and District Health Directorate (DHD) in a district of Istanbul between 01.05.2021 and 15.06.2021.

The sample size of 345 individuals was determined using a power analysis with a desired power of 0.80 and a significance level (alpha) of 0.05, considering the total population of 345 active healthcare workers in family health centers (FHC) and District Health Directorate (DHD) within a specific district of Istanbul between May 1, 2021, and June 15, 2021. Aiming to achieve a response rate of at least 50%, 191 individuals (55.6%) participated in the study, meeting the calculated sample size for the desired statistical power and significance level.

Data were collected by electronic form between 25.05.2021 and 15.06.2021. Sociodemographic and occupational information, Spielberger State and Trait Anxiety Scale, Coronavirus Fear Scale and Maslach Burnout Scale were used as data collection tools.

Table 1. Descriptive characteristics of the study group			
Parameters		Mean±SD	Min-Max (Median)
Age, years		36.12±9.15	21- 59 (36)
		n	%
Gender	Female	126	66.0
	Male	65	34.0
Marital Status	Married	111	58.1
	Single	64	33.5
	Spouse Death-Divorced	16	8.4
Chronic Disease	No	151	79.1
	Yes	40	20.9
Smoking Status	Not Smoking	121	63.4
	Smoking	70	36.6
COVID-19 Status	No COVID-19	126	66.0
	Have/Had COVID-19	65	34.0
The COVID-19 Status of Family Members	No COVID-19	98	51.3
	Have/Had COVID-19	93	48.7
Status of Being Vaccinated Against COVID-19	Not Vaccinated	43	22.5
	Vaccinated	148	77.5

SD: Standard deviation, Min: minimum, Max: maximum.

- **Maslach Burnout Scale (MBS):** Maslach Burnout Scale consists of 22 items. Emotional exhaustion (EE), depersonalization (D), and personal achievement (PA) are the three characteristics used to quantify burnout. The responses were scaled on a 5-point Likert scale, with "never=0" being the lowest and "always=4" being the highest. Each subscale received a separate score. High burnout is indicated by high scores on the EE and D subscales and low scores on the PA subscales.⁵
- **Coronavirus (COVID-19) Fear Scale:** The COVID-19 fear scale was developed by Ahorsu *et al.* in 2020 and adapted into Turkish by Bakioglu *et al.* in 2020.^{6,7} It consists of 7 items, all of which are collected in a single dimension. The scale score ranges from 7-35, and higher scores on the scale suggest that participants more afraid about COVID-19.
- **Spielberger State-Trait Anxiety Inventory-STAI:** The scale was adapted into Turkish in 1974-77. The tests include both direct statements and control questions on the same scale. The 'state and trait anxiety' scale measures anxiety by subtracting the score from questions that do not reference worry or stress from the score of statements about worry or stress. Then, they add a predetermined value to both sections to create an overall anxiety level. A high score in the evaluation of the scale scores indicates a high level of anxiety.⁸

The Clinical Ethics Committee of Istanbul Yedikule Chest Diseases and Thoracic Surgery Training and Research Hospital approved our study (approval number: 2021-78, Date: 28.01.2021). Written informed consents were obtained from all participants or their legal representatives, given the prospective nature of this study. All research procedures were conducted in accordance with the principles of the Helsinki Declaration and National Research Committee Guidelines. Ethics committee and Ministry of Health permissions were obtained for the study.

Statistical Analysis

In our study, the normality of the scores obtained was examined using Shapiro-Wilk and Kolmogorov-Smirnov tests. Since the scale scores did not fit a normal distribution, nonparametric tests were employed for the analyses. Mann-Whitney U test was used for the comparisons between two groups, and Kruskal-Wallis test was used for comparisons between more than two groups. Spearman correlation analysis was used for comparing numerical variables, and the correlation coefficient was denoted as 'rs'. We also conducted univariate and multivariate logistic regression analyses to explore the relationships between the mood, burnout levels and anxiety of primary health care workers and predictor variables. The logistic regression models were employed to assess the impact of various factors on the mood, burnout levels and anxiety. The results of the logistic regression analyses are reported, including odds ratios and their associated confidence intervals. All tests were performed as two-tailed, and a significance level of 0.05 was considered. SPSS software package version 28.0 was used for all analyses.

RESULTS

A total of 191 healthcare workers included our study. 66.0% of the participants were women and 58.1% were married. The mean age was 36.12±9.15 (min-max: 21-59) years. 66.0% of the people did not have COVID-19, 51.32% of them did not have anyone in the family who had COVID-19. 77.5% received at least one dose of COVID-19 vaccine (Table 1).

87.4% of the health workers included in our study get information from the Ministry of Health, 51.8% from professional communication groups. 42.4% of participants were bachelor graduates, 38.7% were nurses, midwives, or health officers, 23.6% were physicians, 11.0% were dentists. 68.6% of our participants has been working in the District

Health Directorate (DHD) and 31.4% were in the Family Health Center (FHC). While 65.4% of the participants were working in their institution before the COVID-19 pandemic, 34.6% were assigned after the pandemic started. The working style of 60.2% of the participants was regular (daytime) and 39.7% of them have been working in shifts (Table 2).

The rate of those who received psychological support during the pandemic period was 13.6%. 60.7% of them stated that their sleep patterns were disturbed (Table 3).

Maslach scale total score was 57.74 ± 10.38 . Among the Maslach scale sub-dimensions, the mean score of Emotional Burnout was 23.74 ± 8.08 , the mean score of depersonalization was 9.84 ± 3.46 , and the mean score of Lack of Personal Achievement was 24.16 ± 4.20 . The mean score of Fear of Coronavirus scale was 16.74 ± 6.54 (Table 4).

The mean STAI state anxiety score was 45.38 ± 10.25 , and the mean trait anxiety score was 41.77 ± 8.50 . In our study, trait anxiety scores of 64.4% of the participants and state anxiety scores of 72.3% were determined as 40 points and above, and their anxiety levels were determined as 'high' (Table 5).

Upon conducting a one-way logistic regression analysis to investigate the determinants of the continuous anxiety score, significant effects were observed in relation to gender, working time in profession, and overall health status. Subsequently, in the multivariate logistic regression model, it was found that general health status exerted a statistically significant impact on the continuous anxiety score (OR: 5.814) (Table 6).

There was no significant difference between the scale score averages according to the fields in which the healthcare workers worked during the pandemic, and the anxiety and burnout score averages of the employees in the COVID-19 clinics were higher. State anxiety, trait anxiety, total anxiety, Maslach-emotional exhaustion dimension, depersonalization dimension and fear of coronavirus scale scores were significantly higher in females than males. ($p < 0.001$, $p < 0.001$, $p < 0.001$, $p < 0.001$, $p < 0.001$, and $p < 0.001$, respectively). In contrary, Lack of Personal Achievement score was higher in males than females ($p < 0.019$).

The mean scores of the state anxiety, trait anxiety, total anxiety and emotional exhaustion dimension were significantly higher in FHC workers than the DHD

Table 2. Professional characteristics of the study group (n: 191)			
		n	(%)
Educational Status	Primary Education	3	1.6
	Secondary Education	8	4.2
	High School	20	10.5
	College Degree	37	19.4
	Bachelor's degree	81	42.4
	Master's degree	35	18.3
	PhD or Specialization	7	3.7
Profession	Physician / Medical Doctor	45	23.6
	Dentist	21	11.0
	Nurse	31	16.2
	Midwife	25	13.1
	Pharmacist	1	0.5
	Health Officer	18	9.4
	Emergency Medical Technician	3	1.6
	Medical Data Recorder	11	5.8
	Cleaning Staff	6	3.1
	Driver	17	8.9
	Dental Clinical Support	10	5.2
	Social Worker	1	0.5
	Psychologist	1	0.5
	Nutritionist	1	0.5
Working Time in the Profession	0-1 Year	20	10.5
	2-6 Year	48	25.1
	7-11 Year	24	12.6
	12-16 Year	27	14.1
	17-21 Year	32	16.8
	22 Year and Above	40	20.9
Working Time in the Institution	0-1 Year	48	25.1
	2-6 Year	68	35.6
	7-11 Year	32	16.8
	12-16 Year	26	13.6
	17-21 Year	10	5.2
	22 Year and Above	7	3.7
Institution of Participant	District Health Directorate (DHD)	131	68.6
	Family Health Center (FHC)	60	31.4
Assignment Status	Working in the same institution before the pandemic	125	65.4
	Temporary assignment w/pandemic	62	32.5
	Starts work in the Institution after pandemic started	4	2.1
Working Order	Shift (Nighttime) workers	76	39.8
	Regular (Daytime) workers	115	60.2
Department of Working	Routine Works/Main Works of The Institution	90	47.1
	Field Studies (Affiliation-Vaccination)	64	33.5
	Coordination-Center (Affiliation-Vaccination)	12	6.3
	COVID-19 Outpatient/Inpatient Clinics	24	13.1

n: Number, FHC: Family Health Center, DHD: District Health Directorate.

Table 3. Evaluation of COVID-19's impacts (n: 191)			
		n	(%)
Situation of Living Apart from Family During the Pandemic	I've been living apart from my family since Beginning of the pandemic	31	16.2
	I lived apart for a while	55	28.8
	I continued to live w/my family	105	55
Status of Receiving Psychological Counseling (PC) and Support During The COVID-19 Pandemic	I did not receive any PC	165	86.4
	I have got PC from my institution.	3	1.6
	I have got PC with my own.	17	8.9
	I have got PC from other institution(s).	6	3.1
Change in Sleep Patterns in The Last 3 Months	My Sleep Pattern is Not Disturbed	75	39.3
	My Sleep Pattern is Disrupted	116	60.7
The State of Doing Activities That Feel Good Psychologically During The COVID-19 Pandemic	Not doing	70	36.6
	Doing	121	63.4
		Mean±SD	Min-Max (Median)
Average Daily Sleep Duration in The Last 3 Months, Hours		6.83±1.22	3- 12 (7)

n: Number, SD: standard deviation, Min: minimum, Max: maximum, PC: psychological counseling

Table 4. Maslach burnout scale (MBS) and coronavirus fear scale (CFS) scores of participants				
Scale	Sub-Dimension	Mean±SD	Median	Min-Max
Maslach Burnout Scale (MBS)	Emotional Exhaustion Sub-Dimension	14.84±8.15	15.0	0-36
	Desensitization	4.84±3.47	5.0	0-15
	Lack of Personal Achievement	16.18±4.19	16.0	8-28
	Total Score	35.84±9.89	35.0	15-63
Coronavirus Fear Scale (CFS)		16.74±6.54	16.0	7-35

SD: Standard deviation, Min: minimum, Max: maximum, CFS: coronavirus fear scale, MBS: Maslach burnout scale

Table 5. Evaluation of the participants according to the STATI trait and state anxiety scales			
		<40 points, n (%)	≥40 points, n (%)
STAI-Trait and State Anxiety Scale	Continuous Anxiety	68 (35.6%)	123 (64.4%)
	State Anxiety	53 (27.7%)	138 (72.3%)

Table 6. Evaluation of the factors affecting continuous anxiety score								
	Univariate Analysis				Multivariate Analysis			
	Sig.	OR	95% C.I. OR		Sig.	OR	95% C.I. OR	
			Lower	Upper			Lower	Upper
Sex (Female)	0.001	0.261	0.134	0.507	0.067	0.484	0.223	1.051
Working Time in the Profession	0.049	1.21	1.001	1.461	0.774	1.033	0.828	1.289
Overall Health Status	0.001	6.883	3.603	13.151	0.001	5.814	2.988	11.31

Multivariate Logistic Regression model Nagelkerke R Square 0.370.
 Dependent Variable: Continuous Anxiety Score Above 40
 Working time in the profession and overall health status parameters were added to the model as continuous variable.

CI: Confidence interval, OR: odd ratio, Sig: significance

workers ($p<0.000$). The state anxiety, trait anxiety, total anxiety and fear of coronavirus scale scores of the regular workers were significantly higher than those of the shift workers ($p:0.043$, $p:0.008$, $p:0.017$, $p:0.007$, respectively). The state anxiety score and the fear of coronavirus scale scores of the married were significantly higher than the singles ($p:0.029$, $p:0.00$ respectively). There was no significant difference between the scale scores according to the status of people having COVID-19 disease. The median trait anxiety score of those who have a family member with COVID-19 was significantly higher than those who do not ($p:0.011$).

State anxiety and total anxiety scores of those who have worked in the institution for 0-1 years were significantly lower than those who work for 2-6 years and 7-11 years ($p:0.003$, $p:0.015$, respectively). The lowest scores on the scales belong to the participants whose working period in the institution is between 0-1 years. Dentists had the highest state anxiety scores according to occupation, while nurses had the highest total anxiety and emotional exhaustion scores. The trait anxiety scores of drivers were significantly lower than dentists, doctors, midwives, and nurses. ($p:0.049$, $p:0.004$, $p:0.020$, $p:0.001$, respectively). Drivers' Depersonalization dimension score was significantly lower than doctors and dentists ($p:0.010$, $p:0.028$).

The state anxiety, total anxiety, and emotional exhaustion sub-dimension scores of those who stated their general health status as "very good" were significantly lower than the others ($p<0.001$). There was no significant difference in the sub-dimension scores of state anxiety, total anxiety, and emotional exhaustion according to the department they work in. The state anxiety, trait anxiety, total anxiety and emotional exhaustion dimensions, Depersonalization dimension and coronavirus fear scale scores of those who stated that their sleep patterns were disturbed during the pandemic were significantly higher than those who stated that their sleep patterns were not disturbed ($p<0.001$, $p:0.017$, $p<0.001$, respectively). Considering the individuals' status of doing activities for psychological relaxation, the emotional exhaustion sub-dimension mean score and the trait anxiety score median of those who did not do any activity were significantly higher than the others ($p:0.046$, $p:0.039$, respectively).

Total anxiety score and Maslach-emotional exhaustion dimension score showed a positive correlation at a high level ($rs:0.631$, $p<0.001$). Maslach-depersonalization dimension score showed a low to

moderate positive correlation (rs:0.391, $p<0.001$). The coronavirus fear scale score showed a moderate positive correlation. (rs:0.431, $p<0.001$). Trait anxiety score and emotional Exhaustion dimension score showed a positive and moderate correlation (rs:0.581, $p<0.001$). There was a moderate positive correlation between the total score of the fear of coronavirus scale and trait anxiety, state anxiety, and total anxiety scores (rs:0.404, rs:0.405, rs:0.431, $p<0.001$). There was a low-moderate positive correlation between emotional exhaustion sub-dimension score (rs:0.357, $p<0.001$).

DISCUSSION

The pandemic, which has affected the whole world, has also brought about changes in the way healthcare professionals work. These changes consist of an increase in work tempo and a change in working hours. Psychiatric effects were observed in healthcare workers due to the increase in social isolation and workload during the pandemic.⁹

In a study examining 371 healthcare workers who were actively working during the pandemic process, the mean the Maslach depersonalization, fear of COVID-19, HSA (patient health questionnaire) anxiety and depression scales of the female group was significantly higher than the the male group.¹⁰ Similarly, in our study, state anxiety, trait anxiety, total anxiety, Maslach-emotional Exhaustion dimension, depersonalization dimension and fear of coronavirus scale scores were significantly higher in women. In the same study, the mean scores of the emotional exhaustion and depression scales were significantly higher in singles than the married. In the fear of COVID-19 scales, the group average of those who say they live with their spouse or children was significantly higher than those who live alone.¹⁰ Accordingly, in our study, the state anxiety score, and the fear of coronavirus scale scores of the married were significantly higher than the singles.

In another study conducted with health workers in Istanbul, it was observed that those who worked alternately between day and night experienced more general burnout.¹¹ In our study, on the other hand, the state anxiety, trait anxiety, total anxiety and fear of coronavirus scale scores of regular (daytime) workers were significantly higher than those of shift workers.

In the study conducted by Arisoy *et al.*, it was reported that the mean scores of from the coronavirus (COVID-19) Fear Scale were significantly lower in individuals aged 59 years and younger than those

aged 60 and over. In our study, the lowest scores on the scales belong to the participants whose working period in the institution was between 0-1 years. In the same study, it was seen that those who had a positive COVID-19 test result had a higher fear of coronavirus than those who had a negative test result or had not been tested before.¹² In our study, there was no significant difference between the scale scores of individuals according to the status of having COVID-19 disease.

According to the study of Bitan *et al.* factors associated with fear of COVID-19 were reported as gender, chronic illness, being in a risk group and death of a family member from COVID-19, but fear was also associated with anxiety, stress and depression.¹³

According to the study of Yakut *et al.* conducted with 112 healthcare workers, it was observed that fear of COVID-19 increased excessive workload, excessive workload decreased the level of perceived social support, excessive workload increased the level of burnout, and perceived social support decreased the level of burnout.¹⁴ For this reason, it is thought that supporting people's social life and increasing their social opportunities will be effective in reducing the level of burnout.

According to the study of DiniButun *et al.*, physicians who were actively involved in the fight against COVID-19 had a lower burnout level than those who were not actively involved. Physicians who have been actively involved in the fight against COVID-19 have been observed to appreciate the usefulness of their work. This reason could explain higher job satisfaction and less burnout.¹⁵ It has been observed that the fear of infection and burnout of healthcare workers working in the COVID-19 service is lower than those working in the oncology service. This shows that different groups should be taken into consideration during pandemic periods and a strategy suitable for individuals should be developed.¹⁶ One study found a relationship between state anxiety and problematic social media use. For this reason, the use of social media should be done correctly in times of crisis. In a study conducted with healthcare professionals in Istanbul, it was reported that the nervousness of the employees increased and problems such as muscle tension, disorder in eating and drinking behaviors, and difficulty in falling asleep has been reported by healthcare professionals during the COVID-19 pandemic.¹¹

In our study, it was found that regular sleep had a positive effect on anxiety and burnout, and that individuals' doing activities for psychological relaxation significantly decreased the emotional exhaustion sub-dimension score average and the Trait Anxiety score median values. Psychiatric services should be provided to these groups to reduce the impact of health workers during a crisis such as a pandemic. The Turkish Psychiatric Association recommended that psychological support programs be organized for healthcare professionals in the form of collective psychoeducation and relaxation activities, group and individual mental problem sharing, psychiatric evaluation and examination.¹⁷ To prevent burnout that may occur due to the increase in work intensity, health workers should be positively supported by their managers. Suitable resting environments should be created where employees can rest to prevent burnout.

Limitations and Strengths

Our study has some limitations. It is a study conducted in a single district of Istanbul and only on primary care workers. Therefore, generalization may not be possible.

Our study is very valuable because it was conducted during a difficult period of data collection during the pandemic period, and it is a study conducted with healthcare professionals working in difficult conditions.

CONCLUSION

In this study, it was seen that the anxiety and burnout levels of primary health care workers who took an active role during the pandemic were high in line with the literature. It has been observed that many factors such as gender, department of study and working style increase the anxiety and burnout levels of individuals. Programs should be made to protect and improve the mental health of primary health care workers.

*** This study, titled "assessment of emotional state, burnout levels, and anxiety status of primary healthcare workers during the COVID-19 Pandemic," was previously presented as an oral presentation at the 5th International 23rd National Public Health Congress held on December 13-18, 2021.**

***The authors declare that there are no conflicts of interest.**

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