



COVID-19 Pandemisi sırasında sağlık çalışanlarının stres, tükenmişlik ve yaşam memnuniyetinin değerlendirilmesi

Assessing healthcare workers' stress, burnout and life satisfaction during the COVID-19 Pandemic

● Ali Rıza Türk¹ ● Fatma Gökşin Cihan² ● Nur Demirbaş³

¹⁾ Schön Klinik Bad Arolsen, Uzm. Dr., Germany / {ORCID:0000-0001-6413-7012}

²⁾ Necmettin Erbakan Üniversitesi Meram Tıp Fakültesi, Aile Hekimliği ABD, Prof. Dr., Konya / {ORCID:0000-0001-7393-6860}

³⁾ Necmettin Erbakan Üniversitesi Meram Tıp Fakültesi, Aile Hekimliği ABD, Doç. Dr., Konya / {ORCID:0000-0002-4038-9386}

İletişim adresi:

Dr. Fatma Gökşin Cihan

E-mail: goksincihan@yahoo.com

Geliş tarihi: 08/08/2024

Kabul tarihi: 16/06/2024

Yayın tarihi: 30/09/2024

Etik Kurul Onayı ve İzinler: Çalışma Necmettin Erbakan Üniversitesi Meram Tıp fakültesi Etik Kurulu'ndan onay almıştır. (Sayı: 2021/3213, tarih: 07.05.2021). Çıkar çatışması bildirilmemiştir.

Alıntı Kodu: Türk AR. ve Ark. COVID-19 Pandemisi sırasında sağlık çalışanlarının stres, tükenmişlik ve yaşam memnuniyetinin değerlendirilmesi. Jour Turk Fam Phy 2024; 15 (3): 78-90. Doi: 10.15511/tjtfp.24.00378.

This article is published online with [Open Access](#) and distributed under the terms of the Creative Commons Attribution Non-Commercial License 4.0 (CC BY-NC 4.0).

Özet

Amaç: Bu çalışmanın amacı COVID-19 pandemisi sırasında sağlık çalışanlarının stres, tükenmişlik ve yaşam memnuniyetini değerlendirmektir.

Yöntem: Bu kesitsel çalışmanın evrenini üçüncü basamak bir üniversite hastanesinde çalışan yaklaşık 3500 sağlık çalışanı oluşturmaktadır. Rastgele örnekleme yöntemi kullanılarak çalışanların hekimler, yardımcı sağlık personeli, idari ve diğer personel (temizlik, güvenlik) olmak üzere dört grupta eşit temsili sağlanmıştır. Veriler Koronavirüs Stres Ölçeği, COVID-19 Tükenmişlik Ölçeği ve Yaşam Memnuniyeti Ölçeği kullanılarak toplanmıştır.

Bulgular: 383 katılımcının %55,6'sı (n=213) kadın, yaş ortalaması 32,79±7,90 yıl olup %64,2'si (n=246) dahili branşlarda, %24,5'i (n=94) cerrahi branşlarda ve %11,2'si (n=43) idari birimlerde çalışmaktaydı. Katılımcıların %44,6'sı (n=171) hekim, %36,8'i (n=141) yardımcı sağlık personeli iken; %78,3'ü (n=300) COVID hastalarıyla yakın temastaydı. Kadın sağlık çalışanlarının algılanan iş stresi, koronavirüse bağlı stres ve tükenmişlik puanları daha yüksek bulundu ($p<0.001$). Koronavirüse bağlı stres düzeyi cerrahi birimlerde çalışanlarda anlamlı olarak daha yüksekti ($p=0,002$). COVID pozitif hastalara maruz kalanların koronavirüsle ilişkili tükenmişlik puanları ve algılanan iş stresi anlamlı derecede daha yüksekti. Kariyer memnuniyetleri arttıkça koronavirüs stres puanları ve algılanan iş stresi azalmıştır. Katılımcıların yaşam memnuniyeti ile koronavirüs ve tükenmişlikle ilgili stres düzeyleri arasında zayıf bir negatif korelasyon vardı (sırasıyla $r=-0.202$ $p<0.001$; $r=-0.254$ $p<0.001$).

Sonuç: Katılımcıların yaşam memnuniyeti düzeyi ile stres ve tükenmişlik düzeyleri arasında negatif bir ilişki bulunmuştur. Sağlık hizmeti sunan doktorlar ve sağlık çalışanları her zaman değerlidir, ancak pandemi sırasında özellikle önemlidir. Bu hizmet sağlayıcıların bütünsel fiziksel ve ruhsal sağlıklarının korunması son derece önemlidir.

Anahtar kelimeler: COVID-19, pandemi, sağlık çalışanı, tükenmişlik, yaşam memnuniyeti

Summary

Introduction and Aim: The aim was to assess healthcare workers' stress, burnout, and life satisfaction during the COVID-19 pandemic.

Methods: The universe of this cross-sectional study was approximately 3500 healthcare professionals working in a tertiary university hospital. A random sampling method was used to ensure proportional equality representation of employees in four groups: physicians, auxiliary health personnel, administrative, and other staff (cleaning, and security). The data were collected using the Coronavirus Stress Scale, the COVID-19 Burnout Scale, and the Life Satisfaction Scale.

Results: Of 383 participants, 55.6% (n=213) were female, the mean age was 32.79±7.90 years, 64.2% (n=246) worked in internal units, 24.5% (n=94) in surgical units, and 11.2% (n=43) in administrative units. Physicians were 44.6% (n=171), auxiliary health personnel were 36.8% (n=141) and 78.3% (n=300) of the participants had close contact with COVID patients. Perceived job stress, coronavirus-related stress, and burnout scores of female health workers were higher ($p<0.001$). Coronavirus-related stress levels were significantly higher among those working in surgical units ($p=0.002$). Those who were exposed to COVID-positive patients had significantly higher coronavirus-related burnout scores and higher perceived work stress. Their coronavirus stress scores and perceived work stress decreased as their career satisfaction increased. There was a weak negative correlation between the participants' life satisfaction and stress levels related to coronavirus and burnout (respectively $r=-0.202$ $p<0.001$; $r=-0.254$ $p<0.001$).

Conclusion: A negative relationship was found between the participants' life satisfaction level and stress and burnout levels. Doctors and health workers who provide healthcare are always valuable but are especially important during a pandemic. Protecting these service providers' holistic physical and mental health is extremely important.

Keywords: COVID-19, pandemics, healthcare worker, burnout, life satisfaction

Alıntı Kodu: Türk AR. ve Ark. COVID-19 Pandemisi sırasında sağlık çalışanlarının stres, tükenmişlik ve yaşam memnuniyetinin değerlendirilmesi. Jour Turk Fam Phy 2024; 15 (3): 78-90. Doi: 10.15511/tjfp.24.00378.

Introduction

The pneumonia outbreak that emerged in December 2019 in Wuhan city of China's Hubei province, caused a pandemic by affecting the whole world in the following process. This disease, which causes acute respiratory symptoms and is caused by a pathogen from the Coronavirus family, has been named as Coronavirus-19 infection disease (COVID-19).⁽¹⁾

The pandemic has deeply affected the whole world and every segment of society. One of the occupational groups most affected by the COVID-19 epidemic is healthcare workers. As long as the epidemic continues, they and their relatives are at risk of contracting the disease, making them more vulnerable to the physical and psychological effects of the pandemic. Stress is a reaction that is the result of any external action, situation or event that creates physical and/or psychological effects on the individual and is revealed by individual qualities and/or psychological processes.⁽²⁾ Health workers are included in the occupational group with high stress intensity when compared to other occupational groups.⁽³⁾

In many studies conducted on physicians and health workers, reasons such as communication problems, excessive workload, insufficient number of personnel, inconvenience of working conditions, and working with intensive care patients were listed among the causes of work stress.^(4,5) In addition to physical health problems such as chronic headache, coronary artery disease, fibromyalgia, sleep disorders, and chronic fatigue; psychological problems such as anxiety, feeling of helplessness, depression,

increased use of harmful substances (cigarettes, alcohol, drugs); It has been determined that it causes professional and social problems such as decrease in job satisfaction, decrease in self-confidence, decrease in work efficiency, absenteeism, burnout syndrome, quitting work, deterioration in family relations, and decrease in communication ability.⁽³⁾

Satisfaction is defined; meeting the needs, wishes, desires and expectations of people or meeting basic biological needs such as hunger, thirst, sexuality. It can be also defined as providing physical, mental and social balance as a result of meeting psychosocial needs such as love, closeness, success, curiosity and interest.⁽⁶⁾ Satisfaction with life, on the other hand, indicates a general feeling of satisfaction with life, rather than meeting a specific need, and the emotion felt as a result of the evaluation of the comparative relationship between expectation and existing reality.⁽⁷⁾ Burnout is the loss of the original meaning of the profession and its detachment from its purpose, the thought that he can no longer really care about the people he serves, or the psychological withdrawal of himself from his work in response to a high degree of stress and dissatisfaction.⁽⁸⁾

As a result of the intense stress they experience, decrease in life satisfaction and burnout are common in physicians and health workers. ⁽⁷⁻¹⁰⁾ In addition to negatively affecting the performance and motivation of employees, burnout also affects employee health and behavior. In the follow-up and treatment process of a disease such as COVID-19 that has created a pandemic and spread around the world, healthcare

professionals are at the forefront as in any disease. Therefore, burnout syndrome is an important condition that requires awareness of the psychological health of healthcare professionals.

In the literature, there are studies on burnout in healthcare workers, but there are few studies that evaluate the effects of the stress experienced in this process on life satisfaction together with the scales specially developed for COVID-19.⁽⁸⁻¹³⁾ For this reason, the aim of the study is to evaluate the stress situations, burnout levels and life satisfaction of healthcare professionals working in a large tertiary hospital in the Central Anatolia Region during the COVID-19 pandemic and to determine the related factors.

Materials and Methods

This study, which was planned as a cross-sectional study, was conducted between 07.05.2021 and 07.09.2021. The population of the study consisted of 3500 healthcare professionals working at the Faculty of Medicine Hospital. Health workers in the institution work in four groups as assistant health personnel, physician, other personnel (cleaning personnel, security) and administrative personnel in terms of their general job descriptions. For this reason, the total number of samples was calculated by random sampling method by proportioning them according to the numbers in these four groups to ensure equal representation.

There were 1355 allied health personnel, 945 physicians, 250 cleaning staff and 330 administrative staff working at Necmettin Erbakan University

Faculty of Medicine during the specified period. In order to ensure proportional equality, it was planned to reach at least 10% of these four groups. The data of 383 health care workers, including 141 (10.4%) allied health workers, 171 (16.6%) physicians, 18 (13.5%) cleaning staff, and 53 (16.7%) administrative staff, who completed the questionnaire forms completely were analyzed. It was planned to include at least 377 people with a 5% margin of error and 95% confidence interval, but considering that there may be questionnaires that were left blank or incomplete, it was planned to include at least 382 healthcare professionals with an increase of 10%.

The exclusion criteria were determined as not being a hospital employee, not accepting to participate in the study, not having the ability to read, understand and answer the questions on their own. Necmettin Erbakan University Meram Medical Faculty ethics committee approval was obtained for the study with the date 07/05/2021, number 2021/3213.

Data collection

After ethics committee approval, the questionnaires were distributed and collected by the researcher on a voluntary basis. In order to collect data in the study, a structured questionnaire form was prepared, which questions the sociodemographic characteristics of the employees, as well as scales for the determination and evaluation of stress, burnout levels, and life satisfaction of health personnel due to COVID-19. Preliminary information about the study was given to the participants and their verbal consent was obtained.

Sociodemographic information form: The questionnaire form, which contains introductory information about the individual, was prepared by the researchers by scanning the relevant literature.⁽⁷⁻⁹⁾ The form consists of 28 questions about age, gender, marital status, educational status, smoking status, occupation, department, duration of employment, and whether there is a chronic disease.

Life Satisfaction Scale: The Life Satisfaction Scale, developed by Diener, Emmons, Larsen, and Griffin (1985), is a self-rating scale consisting of a single factor, five items and a Likert-type seven-point scale.⁽⁶⁾ The scale was adapted into Turkish by Dağlı et al. (2016). During the adaptation of the scale to Turkish, it was seen that the seven-digit answer options in its original form were not suitable for Turkish culture and the Likert number was reduced to five.⁽¹¹⁾ Scoring the statements in the scale; “I strongly disagree (1), I slightly agree (2), I agree moderately (3), I strongly agree (4), and I completely agree (5)”.

Coronavirus Stress Scale: The scale was adapted from the Perceived Stress Scale developed by Cohen et al. in 1983.⁽¹²⁾ Its validity and reliability for Turkey was performed by Arslan et al. (2021)⁽¹³⁾ It includes five questions that assess the stress associated with COVID-19. Each question is rated on a five-point Likert scale from 0 (never) to 4 (very often). Two questions in the scale are reverse scored. The total score is found to vary between 0 and 20. Overall, higher scores are associated with higher Corona-related stress.

COVID-19 burnout scale: The scale consists of

10 items and was developed from the Burnout Measure-Short version developed by Malach-Pines in 2005 by Yıldırım et al. in 2021 to measure the level of burnout associated with COVID-19.^(14,15) (While this scale was being developed, “in the coronavirus pandemic” was written instead of the concept of “in your job”; the answers were arranged accordingly). Each item is evaluated with a five-point Likert-type scale. The total score is found by adding the value of all 10 items and the total score is evaluated between 10-50. Higher scores indicate higher levels of burnout associated with the pandemic.

Statistical analysis

SPSS (Statistical Package for Social Sciences) for Windows 20.0 program was used for statistical analysis of the data obtained in the study. Descriptive statistics of continuous variables were analyzed in terms of mean and standard deviation, and descriptive statistics of categorical data were analyzed in terms of frequency and percentage. Chi-square test was used to compare categorical data.

In comparison of quantitative data, Independent Samples-T Test or One-Way Anova test and posthoc Tukey test were used for those meeting the assumption of normal distribution. The relationship between the variables was examined by Pearson Correlation analysis. The results were evaluated at the 95% confidence interval and the significance level of $p < 0.05$.

Results

55.6% (n=213) of 383 physicians and healthcare workers included in the study were female, and the

mean age was 32.79 ± 7.90 (min:19, max:56) years. Of the participants, 64.2% (n=246) worked in internal units, 24.5% (n=94) in surgical units, and 11.2% (n=43) in administrative units. 44.6% (n=171) of the employees were physicians, 36.8% (n=141) were assistant health personnel, 13.8% (n=53) were administrative personnel, and 4.7% (n=18) were working as other personnel (cleaning officer, security). The socio-demographic characteristics of the participants in the study are given in **Table 1**.

The average weekly working time of the participants was 50.46 ± 15.76 (30-110) hours. When the weekly working hours were categorized according to the "Occupational Health and Safety Law", 64.5% (n=247) of the employees were working under normal working conditions for 45 hours or less. The frequency of night shifts was 52.5% (n=201) and the mean number of shifts was 7.07 ± 3.30 days (min: 1 max: 17). It was found that 48.3% (n=185) of the participants were satisfied with their city and 33.2% (n=127) were satisfied with their chosen career.

78.3% (n=300) of the participants had face-to-face contact with COVID patients, 32.1% (n=123) were diagnosed with COVID at least once during the pandemic. During the pandemic, at least one COVID positive case was found in the immediate family of 88.0% (n=337) of the participants.

The average score values and reliability coefficients of the total scores of the Satisfaction with Life, Coronavirus Stress and Coronavirus Burnout Scales used in the study are shown in **Table 2**. The coronavirus-related stress score (10.24 ± 2.81) and

COVID-19 burnout score (29.63 ± 8.18) of female health workers were found to be higher than the stress score (9.02 ± 3.04) and burnout score of men ($p < 0.001$; $p < 0.001$). Perceived job stress level was found to be higher in females (6.60 ± 2.46) than males (6.08 ± 2.44) ($p = 0.039$). Corona-related stress level was significantly higher among those working in surgical sciences than those working in internal sciences ($p = 0.002$).

The burnout score (29.06 ± 8.56) in surgical units was higher than those working in other units ($p = 0.048$). Life satisfaction level in those working as cleaning staff/security guards; was significantly lower than physicians, assistant health personnel and administrative personnel (respectively $p = 0.005$; $p = 0.002$; $p = 0.008$). No significant relationship was found between the tasks/titles performed by the participants and their coronavirus-related stress score, COVID-19 burnout score, and perceived job stress levels ($p = 0.402$; $p = 0.589$) (**Table 3**).

No significant difference was found between the time spent by healthcare workers in the profession and the coronavirus-related stress score, COVID-19 burnout score, life satisfaction scores and perceived work stress levels ($p > 0.05$). The coronavirus-related burnout score in those who had face-to-face contact with COVID-positive patients (28.02 ± 8.89) was significantly higher than those who did not have face-to-face contact (24.93 ± 9.20) ($p = 0.001$).

In addition, the level of perceived work stress in those who had face-to-face contact with COVID-positive patients (6.50 ± 2.42) was significantly higher than those who had no contact (5.88 ± 2.59) ($p = 0.042$).

Tablo 1: Sociodemographic characteristics of the participants

		n	%
Gender	Female	213	55.6
	Male	170	44.4
Age	30 years and under	204	53.3
	31 years and older	179	46.7
Working Unit	Administrative units	43	11.2
	Internal sciences	246	64.3
	Surgical sciences	94	24.5
Task	Physician	171	44.7
	Assistant Health Person-nel	141	36.8
	Administrative Staff	53	13.8
	Other Staff	18	4.7
Marital status	Married	228	59.5
	Single	155	40.5
Living with	Alone	71	18.5
	Spouse/spouse and child	228	59.5
	Family elders	64	16.8
	Other	20	5.2
Educational status	Primary education	13	3.4
	High school	48	12.5
	College	27	7.1
	University	208	54.3
	Degree (Msc/PhD)	87	22.7
Duration in the profession	10 years and less	261	68.1
	More than 10 years	122	31.9

COVID-related burnout scores were found to be significantly higher in people with close relatives with COVID positive cases (27.71±9.01) than in those without (24.82±8.89) (p=0.036).

There was a negative weak correlation between the participants' level of life satisfaction and the level of stress related to the Corona virus and the level of burnout. (r=-0.202 p<0.001, respectively; r=-0.254 p<0.001) (Table 4). A moderately significant positive correlation was found between the level of coronavirus-related stress and the level of burnout (r=0.581, p<0.001). 0.338 of the increase in the level of burnout due to COVID-19 is attributed to coronavirus-related stress (R²=0.338 p<0.001).

Discussion

The COVID-19 pandemic has created an extremely negative environment for the mental health and social status of healthcare workers. How long the process will last and the lack of a clear treatment, weakening of social relations due to the pandemic, and increased individualization can negatively affect mental health.^(7,13) In order for people to work more efficiently, it is important that they feel good both mentally and physiologically.

Healthcare workers face a higher risk of burnout due to more stress and intense working conditions compared to other segments of the society, as they work in the same environment with people who are infected or are likely to be carriers.^(3,4) The decrease in life satisfaction as a result of burnout and increased stress negatively affects health workers.^(6,9)

This study is planned to be a guide to detect burnout due to COVID-19 in healthcare workers, to increase life satisfaction and to provide more effective psychological support. For this reason, it was aimed to evaluate the relationship between COVID-19 related stress, burnout and life satisfaction levels of healthcare workers and the aforementioned criteria during the COVID-19 pandemic.

Although there are studies examining the stress status, burnout level and life satisfaction of healthcare professionals during the pandemic process in the literature,^(13,15) no study has been found that examines all of these factors in healthcare professionals in different units of a hospital and investigates the relationship between them, or examines this relationship with pandemic-specific scales. What makes this study powerful and important is that it has

Tablo 2: Cronbach Alfa values of the scales used in the study

	Numb. of Items	Min.- max.	Mean±SD	Cronbach Alfa
Life Satisfaction Scale	5	5-25	14.14 ±4.10	0.866
Coronavirus Stress Scale	5	0-19	9.69 ± 2.97	0.788
COVID-19 Burnout Scale	10	10-49	27.36 ± 9.04	0.930

Tablo 3: Coronavirus-related stress scores, COVID-19 burnout scores, and perceived job stress levels of the participants

	Life Satisfaction Levels	Coronavirus-Related Stress	COVID -19 Burnout	Perceived job stress
	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Gender				
Female	14.03±4.01	10.24±2.81	29.63±8.18	6.60±2.46
Male	14.26±4.21	9.02±3.04	24.50±9.28	6.08±2.44
p	0.583	<0.001	<0.001	0.039
Age				
≤30a	14.34±3.57	9.54±3.18	27.46±9.33	6.47±2.29
31-40b	14.60±4.45	9.86±2.51	27.80±8.51	6.35±2.34
>40c	12.89±4.72	9.89±2.99	26.41±9.00	6.11±3.05
p	0.024ac; 0.16bc	0.551	0.584	0.557
Unit				
Administrative a	14.44±4.65	9.88±3.02	25.19±8.78	5.86±2.75
Internal b	14.23±4.08	9.33±2.96	27.08±9.18	6.30±2.41
Surgical c	13.73±3.89	10.57±2.81	29.06±8.56	6.79±2.79
p	0.526	0.002bc	0.048	0.094
Task				
Physician a	14.13±3.88	9.49±2.99	28.01±9.45	6.46±2.41
Assistant Health Personnel b	14.50±3.94	9.78±2.78	27.00±8.22	6.13±2.54
Administrative Staff c	14.30±4.52	9.81±2.70	26.26±9.06	6.40±2.34
Other Staff d	10.78±4.83	10.67±4.65	27.05±11.21	7.28±2.67
p	0.005ad; 0.002bd;	0-19	9.69 ± 2.97	0.788
Satisfaction about the place of residence				
Satisfied a	15.19±3.96	9.80±2.73	26.38±8.97	6.15±2.61
Partially satisfied b	13.81±3.73	9.53±3.05	28.38±8.79	6.33±2.27
Not satisfiedc	11.49±4.11	9.78±3.51	27.96±9.68	7.16±2.34
p	0.005ab;<0.001ac;0.001bc	0.702	0.121	0.019ac

Tablo 3: Coronavirus-related stress scores, COVID-19 burnout scores, and perceived job stress levels of the participants

	Life Satisfaction Levels	Coronavirus-Related Stress	COVID -19 Burnout	Perceived job stress
	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Satisfaction with the career				
Satisfied ^a	16.42±3.91	9.08±2.87	24.84±8.70	5.50±2.60
Partially satisfied ^b	13.99±3.28	9.80±2.94	27.56±8.93	6.30±2.19
Not satisfied ^c	11.10±3.72	10.38±3.03	30.57±8.71	7.76±2.16
p	<0.001 ^{ac} ; <0.001 ^{bc} ; <0.001 ^{ab}	0.004 ^{ac}	<0.001 ^{ac} ; 0.026 ^{bc} ; 0.024 ^{ab}	<0.001 ^{ac} ; 0.01 ^{bc} ; <0.001 ^{ab}

grasped this holistic approach and examined it with pandemic-specific scales.

There is a strong correlation between coronavirus-related stress, burnout levels, and perceived stress levels at work and gender. In the presented study, the level of coronavirus-related stress, coronavirus-related burnout and perceived work stress level of female healthcare workers were found to be higher than males. In a study investigating the stress level of gender roles during the pandemic period, the stress level of women was found to be higher than men, in accordance with this study.⁽¹⁶⁾

According to another study conducted in Wuhan, it has been determined that female employees are in a riskier position than men in experiencing psychological problems during the pandemic period.⁽¹⁷⁾ This may be because men feel obliged to appear strong as a gender role, while women respond more cognitively to bodily and spiritual sensations than men.

In the current study, coronavirus stress level and burnout levels were higher among those working in surgical sciences than those working in internal sciences. In a previous study by Arpacioğlu et al. (2021), during the pandemic period, the emotional burnout levels of healthcare professionals working in surgical sciences were found to be higher than those in internal sciences.⁽¹⁸⁾ The reason for these two situations may be that those working in surgical branches have closer contact with patients during interventional procedures and feel that the risk of COVID-19 is higher.⁽¹⁹⁾

As individuals' satisfaction with their careers increases, their life satisfaction levels increase significantly, and their perceived job stress levels decrease. It has been demonstrated in some previous studies that there is a positive relationship between the perception of occupational satisfaction and the perception of life satisfaction.⁽⁷⁻⁹⁾ The "spillover "

and “compensatory” models, which are among the approaches stated in the literature to explain the relationship between occupational satisfaction and life satisfaction, explain the relationship between health workers’ perceptions of occupational satisfaction and life satisfaction.

While the spillover model states that an increase in job satisfaction will increase life satisfaction, the compensatory states that a decrease in job satisfaction will also decrease life satisfaction.⁽²⁰⁾ According to the study presented, those who are satisfied with their career choices experience less coronavirus-related stress and job stress than those who are dissatisfied. The degree of corona-related burnout also decreases as the chosen career satisfaction increases. These results reveal that career choice strongly affects many aspects of life.⁽²¹⁾

In the presented study, it was found that healthcare professionals giving direct care to COVID patients, face-to-face contact, or their or their relatives’ diagnosis of COVID did not change the level of stress

and life satisfaction associated with coronavirus. In a study conducted in the early stages of the pandemic, it was found that people who have face-to-face contact with COVID patients have higher levels of trait and state anxiety than those who do not.⁽²²⁾

However, in another study, no difference was found in death anxiety levels in people who had COVID-19 or their relatives had COVID-19.⁽²³⁾ We think that this lack of interest in the presented study is due to the fact that the study was conducted relatively late in the pandemic. In addition, according to our study, those who have face-to-face contact with COVID-positive patients are at a significantly higher risk of coronavirus-related burnout than those who have no contact. Again, the perceived work stress of those who have face-to-face contact with COVID-positive patients is higher than those who have no contact.

People who have been diagnosed with COVID positive cases in their relatives also seem to be at higher risk for COVID-related burnout. Even in the

Tablo 4: The Relationship between Coronavirus-related stress, burnout levels, and life satisfaction

		Life Satisfac-tion Levels	Coronavirus-Related Stress	COVID -19 Burnout
Life Satisfaction Levels	r	1		
	p			
Coronavirus-Related Stress	r	-0.202**	1	
	p	<0.001		
COVID -19 Burn-out	r	-0.254**	0.581**	1
	p	<0.001	<0.001	



current study conducted in the relatively late stages of the COVID pandemic, the statistical significances show that the effects of the pandemic still continue.

Limitation: The results of the study cannot be generalized because it was conducted in a university hospital providing tertiary healthcare services and was single centered.

Conclusion:

As a result; stress and burnout levels of women were higher than stress and burnout levels of men. Life satisfaction decreased with increasing age. Job stress was found to be higher in single people. As individuals' satisfaction with their careers increased, their life satisfaction levels also increased significantly. Those who were satisfied with their career choices had lower levels of job stress and burnout.

Therefore, psychological support will improve health workers' well being. Especially the female gender, single people and those living at home with their families should be provided with social support. It should not be forgotten that each individual of the hospital staff is exposed to the effects of this epidemic, although they do not actively fight against the pandemic, and the socio-psychological and pathological effects of the pandemic should not be underestimated.

Ethics committee: Necmettin Erbakan University Meram Medical Faculty ethics committee approval was obtained for the study with the date 07/05/2021, number 2021/3213.

Conflict of interest: The authors declared no conflict of interest. The authors declared that they received no financial support for this study.

Author contributions: **Consept:** Fatma Gökşin CİHAN, Nur DEMİRBAŞ; **Desing:** Ali Rıza TÜRK; **Supervision:** Fatma Gökşin CİHAN, Nur DEMİRBAŞ; **Data collection and/or processing:** Ali Rıza TÜRK; **Analysis and/or interpretation:** Ali Rıza TÜRK, Nur DEMİRBAŞ; **Literature search:** Ali Rıza TÜRK, Nur DEMİRBAŞ; **Writing:** Ali Rıza TÜRK, Fatma Gökşin CİHAN, Nur DEMİRBAŞ; **Critical review:** Fatma Gökşin CİHAN, Nur DEMİRBAŞ.

Alıntı Kodu: Türk AR. ve Ark. COVID-19 Pandemisi sırasında sağlık çalışanlarının stres, tükenmişlik ve yaşam memnuniyetinin değerlendirilmesi. Jour Turk Fam Phy 2024; 15 (3): 78-90. Doi: 10.15511/tjtfp.24.00378.

Kaynaklar:

1. Gao Yd, Ding M, Dong X, Zhang Jj, Azkur KA, Azkur D, et al. Risk factors for severe and critically ill COVID-19 patients: a review. *Allergy* 2021;76(2):428-55.
2. Dragoş D, Tănăsescu MD. The effect of stress on the defense systems. *J Med Life* 2010;3(1):10-8.
3. Clough BA, March S, Chan RJ, Casey LM, Phillips R, Ireland MJ. Psychosocial interventions for managing occupational stress and burnout among medical doctors: a systematic review. *Syst Rev* 2017;6(1):144.
4. Rotenstein LS, Torre M, Ramos MA, Rosales RC, Guille C, Sen S, Mata DA. Prevalence of burnout among physicians: A Systematic Review. *JAMA* 2018;320(11):1131-50.
5. Bryant C, Fairbrother G, Fenton P. The relative influence of personal and workplace descriptors on stress. *British Journal of Nursing* 2000;9(13):876-80.
6. Diener E, Emmons RA, Larsen RJ, Griffin S. The satisfaction with life scale. *Journal of Personality Assessment* 1985;49 (1): 71-5.
7. Tokay AM, Mersin S. Life satisfaction, life quality, and leisure satisfaction in health professionals. *Perspect Psychiatr Care* 2021;57(2):660-6.
8. Friganović A, Selič P, Ilić B, Sedić B. Stress and burnout syndrome and their associations with coping and job satisfaction in critical care nurses: a literature review. *Psychiatr Danub* 2019;31(Suppl 1):21-31.
9. Mahmood JI, Grotmol KS, Tesli M, Moum T, Andreassen O, Tyssen R. Life satisfaction in Norwegian medical doctors: a 15-year longitudinal study of work-related predictors. *BMC Health Services Research* 2019;19(1):1-10.
10. West CP, Dyrbye LN, Shanafelt TD. Physician burnout: contributors, consequences, and solutions. *J Intern Med* 2018;283(6):516-29.
11. Dagli A, Baysal N. Adaptation of life satisfaction scale into Turkish: validity and reliability study. *Electronic Journal of Social Sciences* 2016;15(59):11-16.
12. Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. *Journal of Health and Social Behavior* 1983;24:386-96.
13. Arslan G, Yildirim M, Tanhan A, Bulus M, Allen K-A. Coronavirus stress, optimism pessimism, psychological inflexibility, and psychological health: Psychometric properties of the Coronavirus Stress Measure. *International Journal of Mental Health and Ad-diction* 2021;19(6):2423-39.
14. Malach-Pines A. The Burnout Measure, short version. *International Journal of Stress Management* 2005;12(1):78-88.
15. Yildirim M, Solmaz F. COVID-19 burnout, COVID-19 stress and resilience: Initial psychometric properties of COVID-19 Burnout Scale. *Death Studies* 2020;46(3):524-32.
16. Ekmekci EI, Gazey H, Cicek S, Candansayar S. The Relationship of health care workers with stress level and gender roles in the COVID-19 Pandemic: Is the problem just work-limited? *Journal of Clinical Psychiatry* 2021; 25:0-7.
17. Kang L, Ma S, Chen M, Yang J, Wang Y, Li R, et al. Impact on mental health and perceptions of psychological care among medical and nursing staff in Wuhan during the 2019 novel coronavirus disease outbreak: A cross-sectional study. *Brain, behavior, and immunity* 2020;87:11-7.
18. Arpacioğlu S, Baltalı Z, Unubol B. Burnout, fear of COVID-19, depression, occupational satisfaction levels and related factors in healthcare workers in the COVID-19 pandemic. *Cukurova Medical Journal* 2021;46(1):88-100.
19. Raudenská J, Steinerová V, Javůrková A, Urits I, Kaye AD, Viswanath O, Varrassi G. Occupational burnout syndrome and post-traumatic stress among healthcare professionals during the novel coronavirus disease 2019 (COVID-19) pandemic. *Best Pract Res Clin Anaesthesiol* 2020;34(3):553-60.
20. Uyguç N, Arbak Y, Duygulu E, Cıraklar Nh. Examining the relationship between job and life satisfaction under three basic assumptions. *Journal of Dokuz Eylül University Faculty of Economics and Administrative Sciences* 1998;13(2):193-204.
21. Ruiz-Fernández MD, Ramos-Pichardo JD, Ibáñez-Masero O, Cabrera-Troya J, Carmona-Rega MI, Ortega-Galán ÁM. Compassion fatigue, burnout, compassion satisfaction and perceived stress in healthcare professionals during the COVID-19 health crisis in Spain. *J Clin Nurs* 2020;29(21-22):4321-4330.
22. Appiani FJ, Rodríguez CF, Sarotto L, Yaryour C, Basile ME, Duarte JM. Prevalence of stress, burnout syndrome, anxiety, and depression among physicians of a teaching hospital during the COVID-19 pandemic. *Arch Argent Pediatr* 2021;119(5):317-24.
23. Cetin SB, Sozel H. Death anxiety levels of healthcare professionals in the COVID-19 process. *Eskisehir Medical Journal* 2021;2(2):74-81.