



ARAŞTIRMA / RESEARCH

Impact of the COVID-19 pandemic on the family and social lives of healthcare professionals

COVID-19 pandemisinin sağlık profesyonellerinin aile ve sosyal hayatlarına etkisi

Refiye Akpolat¹, Hamide Şişman², Dudu Alptekin², Esmâ Gökçe³, Derya Gezer⁴, Sevban Arslan⁵

¹Kocaeli University of Health and Technology Faculty of Health Sciences, Kocaeli, Turkey

²Cukurova University Abdi Sütcü Vocational School of Health Services, Adana, Turkey

³Toros University Vocational School of Health Services, Mersin, Turkey

⁴Tarsus University Faculty of Health Sciences Mersin, Turkey

⁵Cukurova University Faculty of Health Sciences, Adana, Turkey

Cukurova Medical Journal 2022;47(2):704-714

Abstract

Purpose: In this study, it was aimed to evaluate the impact of the novel coronavirus-2019 (COVID-19) on the family and social lives of frontline healthcare workers during the pandemic.

Materials and Methods: A total of 136 frontline healthcare workers working in COVID-19 clinics and wards, intensive care units (ICUs), and emergency units were included. A questionnaire consisting of 19 questions was applied to all participants through face-to-face interviews. The demographic and occupational characteristics and family and social lives of the participants were documented.

Results: While 95 (69.9%) of the participants experienced negative consequences in their family life, 91 (66.9%) of them were found to have negative consequences in their social life. 51 of the healthcare professionals (37.5%) used spirituality as a strategy to cope with negative thoughts and emotions. During the pandemic, a statistically significant relationship was found between frontline work and family life, especially for those with children.

Conclusion: The family and social lives of healthcare professionals who care for patients with Covid are adversely affected.

Keywords: COVID-19, family life, pandemic, social life, healthcare professionals

Öz

Amaç: Bu çalışmada, yeni koronavirüs-2019' un (COVID-19) pandemi sırasında ön saflardaki sağlık çalışanlarının aile ve sosyal yaşamları üzerindeki etkisini değerlendirme amaçlanmıştır.

Gereç ve Yöntem: COVID-19 klinikleri ve servislerinde, yoğun bakım ünitelerinde (YBÜ'ler) ve acil ünitelerde çalışan toplam 136 ön saf sağlık çalışanı dahil edilmiştir. Tüm katılımcılara yüz yüze görüşme yoluyla 19 sorudan oluşan soru formu uygulanmıştır. Katılımcıların demografik ve mesleki özellikleri, aile ve sosyal yaşamları belgelendi.

Bulgular: Katılımcıların 95'i (%69,9) aile yaşamında olumsuz sonuçlar yaşarken, 91'i (%66,9) sosyal yaşamda olumsuz sonuçlar yaşadığı saptanmıştır. Sağlık çalışanlarından 51 kişisi (%37,5) maneviyatı, olumsuz düşünce ve duygularla başa çıkmak için bir strateji olarak kullanmıştır. Pandemi sırasında, özellikle çocuk sahibi olanlar için ön saf çalışma ve aile hayatı arasında istatistiksel olarak anlamlı bir ilişki bulunmuştur.

Sonuç: Covid'li hastaların bakımını yapan sağlık çalışanlarının aile ve sosyal yaşantıları olumsuz yönde etkilendiği belirlenmiştir.

Anahtar kelimeler: Aile hayatı, COVID-19, pandemi, sağlık çalışanları, sosyal hayat

Yazışma Adresi/Address for Correspondence: Dr. Refiye Akpolat, Kocaeli University of Health and Technology Faculty of Health Sciences, Kocaeli, Turkey E-mail: refiyeakpolat@gmail.com
Geliş tarihi/Received: 16.03.2022 Kabul tarihi/Accepted: 28.04.2022

INTRODUCTION

According to the World Health Organization (WHO) statement, viral diseases pose a significant threat to public health with emerging viruses¹. Throughout history, the world has witnessed several disease outbreaks. Most recently, pneumonia of unknown cause was first identified in Wuhan, Hubei province of China in December 2019, and novel coronavirus-2019 (COVID-19) caused by severe acute respiratory syndrome-coronavirus 2 (SARS-CoV-2) rapidly spread to the world, leading to a devastating pandemic. The WHO declared the COVID-19 pandemic on March 11th, 2020². Since then, nearly 93,611,355 individuals were infected and 2,022,405 individuals died from COVID-19³.

The COVID-19 outbreak has affected the aspects of daily life, leading to a high number of deaths and tremendous damage to the world economy. It has led to unprecedented disruption in work life, social life, and healthcare systems. Besides its high mortality and morbidity rates, COVID-19 has adversely affected the mental health of societies, as self-isolation is a critical step to prevent the spread of the virus. Social isolation or quarantine is defined as a complete or partial restriction of activities of healthy individuals, keeping themselves away from others⁴.

Physical isolation may lead to the interruption of social life and daily living activities. However, healthcare workers (HCWs) are at the frontline during the COVID-19 pandemic and act as the key players in this fight. Therefore, they are among the most stressed workers and vulnerable to serious mental health consequences of the pandemic. The HCWs have always been at the frontline during epidemics, pandemics, and outbreaks. The pandemic is still ongoing throughout the world and HCWs are at a greater risk of infection due to pathogen exposure, long working hours, psychological distress, fatigue, occupational burnout, stigma, and physical and psychological violence⁵. The psychological stressors include the lack of or improper use of personal protective equipment (PPE), compelling working conditions, exposing close contact for long hours with the suspected or confirmed cases, and self-isolation of the HCWs due to the fear of becoming infected and infecting their loved ones⁶⁻⁹. The WHO has emphasized the high burden on HCWs and called for action to fulfill their unmet needs immediately and to protect the physical and mental health of HCWs¹⁰.

Since communicable disease outbreaks have affected, to various degrees, many aspects of the life of individuals including daily life, mental health, and family and social life, governments should provide psychological counseling to frontline HCWs, in addition to social support¹¹. Self-isolation during the outbreaks prevents the individuals from daily living activities, posing serious hazardous effects on mental health. Although technology-based communication offers a wide range of benefits such as remote audio-visual interviews during the COVID-19 pandemic, physical distancing leads to serious consequences on mental health and wellbeing. Recent studies have shown that anxiety and loneliness are more common among the frontline HCWs, as they necessarily isolate themselves from both the family and community. Such outbreaks have a devastating impact on daily life, increasing the stress and anxiety levels in both the short- and long-term^{12, 13}.

In the literature, there are severe studies investigating the impact of the COVID-19 pandemic on mental health and certain risk factors have been proposed including self-isolation, physical distancing from loved ones, and fear of being infected and/or infecting loved ones¹⁴. Prolonged self-isolation has been shown to be associated with the increased severity of anxiety and adjustment disorder. During the pandemic, many HCWs are frustrated over the excessive social expectations from them such as being a spouse or being a mother or father. These expectations pose a certain constraint on HCWs, resulting in psychological distress¹⁵. In the present study, we aimed to evaluate the impact of COVID-19 on the family and social life of frontline HCWs during the pandemic. In the findings of the study, it was determined that health workers were negatively affected by the pandemic process and the factors affecting it.

Healthcare workers are vital during the pandemic period. Knowing their physical and mental problems and how they deal with these problems in this period will guide the solution of the problem in order to improve their working and private life conditions and to ensure their safety. Considering that the family and social lives of healthcare professionals are also factors affecting their working lives, this study will contribute to the literature from a different perspective. A new contribution will be made to the literature on which techniques healthcare professionals use to cope with the problems they experience. It is the hypothesis of the research that the family and social lives of the

employees in the clinic where Covid-19 patients are found are negatively affected.

MATERIALS AND METHODS

Design and setting

This descriptive, cross-sectional study was conducted at a University Health Practice and Research Center Hospital between June 2020 and August 2020. 148 healthcare workers actively working at the front, including COVID-19 clinics and wards, intensive care units (ICUs), and emergency units, constituted the population of the study. All employees were asked to be included in the study without making sampling calculations. A total of 136 volunteer health workers were included in the study. Before starting the study, all participants were informed about the study, and their written consent was obtained on a voluntary basis.

Volunteering and working actively in the COVID Clinic for at least 3 months were required to participate in the research. However, 12 health workers were not included in the study because they were excused for long-term health. Out of a total of 148 participants, 136 people were included in the study.

Research; Ethics committee approval was obtained from the Cukurova University Faculty of Medicine Non-Interventional Clinical Research Ethics Committee and institutional permissions (The Approval No. 15.05.2020/99) were obtained from the hospital where the research was conducted. The employees who agreed to participate in the study were given detailed information about the study and their written consent was obtained. The study was conducted in accordance with the principles of the Declaration of Helsinki.

Data collection

Using the 19-item questionnaire platform created by the researcher in line with the literature^{5,6,8,11}, it was applied to all participants through face-to-face interviews. Using open-ended questions, participants' sociodemographic data such as age, gender, educational status, marital status, having children; occupational data, including occupation, hours worked, workplace, weekly working hours, and work schedule; Family and social life characteristics including strategies for coping with negative thoughts and emotions were recorded. The data were collected

by the researcher by applying a face-to-face survey in the working environment during working hours.

Statistical analysis

Evaluation of the research data was made using SPSS 24.0. In the results of the study, mean values were used according to the distribution of the data for quantitative variables as descriptive statistics, and the number of cases (percent) was given for qualitative variables. In the study, the normality assumptions of the data were checked by considering the Kolmogorov-Smirnov test, skewness and kurtosis values. After checking the normality assumptions, cross tables and chi-square test were used to control the relations. A p value of 0.05 or less was considered significant in all tests.

RESULTS

Of a total of 136 frontline HCWs included in the study, 89 (65.4%) were nurses, 88 (64.7%) were females, 86 (63.2%) were married, 81 (59.6%) had a child, 48 (59.2%) had two children, and 54 (39.7%) were aged >35 years. The mean age of the participants was 34.10 ± 7.67 (min:20:max:51) years. The sociodemographic characteristics of the participants are shown in Table 1.

Of the participants, 77 (56.6%) needed self-isolation from their families, and 95 (69.9%) experienced adverse consequences on family life during the pandemic. A total of 91 HCWs (66.9%) experienced adverse consequences on social life, while 51 HCWs (37.5%) used spirituality as a strategy for coping with negative thoughts and feelings (Table 2).

There was a statistically significant correlation between the frontline working during the pandemic and family life, particularly for those having children ($\chi^2=9.091$; $p=0.003$). A total of 26 HCWs (63.5%) who had no adverse effect on their family life were working in the ICU setting, while 57 HCWs whose family life was adversely affected were working in the COVID-19 clinics and wards, indicating, a statistically significant correlation between the work setting and family life ($\chi^2=15.378$; $p=0.000$) (Table 3).

Furthermore, a statistically significant relationship was observed between the effect of frontline working on social life and having children ($\chi^2=3.875$; $p=0.049$). Similarly, 24 HCWs (53.4%) who had no adverse effect on social life were working in the ICU setting, while 51 HCWs (56.0%) whose social life was adversely affected were working in the COVID-19

clinics and wards, indicating that the social life of the HCWs who were working in the COVID-19 clinics was more severely affected than those working in the ICU setting ($\chi^2=7.657$; $p=0.022$) (Table 4).

Table 1. Sociodemographic characteristics of participants

Variable (N=136)	n	%
Ages classes [$\bar{x} \pm S.S \rightarrow 34,10 \pm 7,67$ (years)]		
<30	46	33.8
30-35	36	26.5
>35	54	39.7
Profession		
Nurse	89	65.4
Doctor	15	11.1
Other	32	23.5
Gender		
Female	88	64.7
Male	48	35.3
Marital status		
The married	86	63.2
Single	50	36.8
Having children		
Yes	81	59.6
No	55	40.4
Number of children		
1	25	30.9
2	48	59.2
3	8	9.9
Family type		
Core	126	92.6
Large	10	7.4
Education level		
High school and ↓	52	38.2
Undergraduate	62	45.6
Postgraduate-Doctorate	22	16.2
Clinic studied		
Emergency Unit	12	8.8
Covid Clinic	71	52.2
Intensive care	53	39.0
Working year [$\bar{X} \pm S.S \rightarrow 10,85 \pm 7,28$ (years)]		
≤5 years	41	30.1
6-15 years	62	45.6
>15 years	33	24.3
How it works		
Day	52	38.2
Shift	84	61.8
Working hours per week		
40 hours	82	60.3
45 hours	36	26.5
> 45 hours	18	13.2

Table 2. Data of participants

Variable (N=136)	n	%
Chronic illness		
Yes	72	52.9
No	64	47.1
Stay away from family during the epidemic		
Yes	77	56.6
No	59	43.4
Have a problem with a partner		
Yes	23	26.7
No	63	73.3
Fear of infecting the family		
Yes	127	93.4
No	9	6.6
Prevention for contamination		
Being isolated	47	34.5
Only mask	14	10.3
Applying standard precautions	67	49.3
Practicing personal hygiene	8	5.9
The effect of working on family life		
It had no negative effects	41	30.1
Had a negative effect	95	69.9
The effect of work on social life		
It had no negative effects	45	33.1
Had a negative effect	91	66.9
Coping with the thought of the negative event		
Did nothing	51	37.5
Hobby /activity	34	25.0
Orientation to spiritual beliefs	51	37.5

Table 3. Effects of the pandemic on the family life of participants

The effect of the work on the family	Normal (n=41)		Negative(n=95)		Statistical analysis*
	n	%	n	%	
Profession					
Nurse	26	63.4	63	66.3	$\chi^2=0.128$ $p=0.938$
Doctor	5	12.2	10	10.5	
Other	10	24.4	22	23.2	
Age classes					
<30	18	43.9	28	29.5	$\chi^2=2.805$ $p=0.246$
30-35	10	24.4	26	27.4	
>35	13	31,7	41	43.1	
Gender					
Female	23	56.1	65	68.4	$\chi^2=1.403$ $p=0.236$
Male	18	43.9	30	31.6	
Having children					
Yes	16	39.0	65	68.4	$\chi^2=9.091$ $p=0.003$
No	25	61.0	30	31.6	
Number of children					
1	6	37.5	19	29.2	$\chi^2=0.289$ $p=0.865$
2	8	50.0	39	60.0	
3	2	12.5	7	10.8	
Education level					
High school and ↓	15	36.6	37	38.9	$\chi^2=0.078$ $p=0.962$
Undergraduate	19	46.3	43	45.3	
Postgraduate-Doctorate	7	17.1	15	15,8	
Clinic studied					
Emergency Unit	1	2.4	11	11.6	$\chi^2=15.378$ $p=0.000$
Covid Clinic	14	34.1	57	60.0	
Intensive care	26	63.5	27	28.4	
Working year					
≤5 years	15	36.6	26	27.4	$\chi^2=2.065$ $p=0.365$
6-15 years	19	46.3	43	45.2	
> 15 years	7	17.1	26	27.4	
Chronic illness					
Yes	17	41.5	55	57.9	$\chi^2=3.104$ $p=0.078$
No	24	58.5	40	42.1	

Table 4. Effects of the pandemic on the social life of participants

The effect of work on social life	Normal (n=41)		Negative (n=95)		Statistical analysis*
	n	%	n	%	
Profession					$\chi^2=1.615$ p=0.446
Nurse	29	64.4	60	65.9	
Doctor	7	15.6	8	8.8	
Other	9	20.0	23	25.3	
Age classes					$\chi^2=3.489$ p=0.175
<30	17	37.8	29	31.9	
30-35	15	33.3	21	23.1	
>35	13	28.9	41	45.1	
Gender					$\chi^2=1.413$ p=0.234
Female	26	57.8	62	68.1	
Male	19	42.2	29	31.9	
Having children					$\chi^2=3.875$ p=0.049
Yes	21	46.7	60	65.9	
No	24	53.3	31	34.1	
Number of children					$\chi^2=1.543$ p=0.462
1	8	38.1	16	26.7	
2	11	52.4	37	61.7	
3	2	9.5	7	11,6	
Clinic studied					$\chi^2=7.657$ p=0.022
Emergency Unit	1	2.2	11	12.1	
Covid Clinic	20	44.4	51	56.0	
Intensive care	24	53.4	29	31.9	
Working year					$\chi^2=4.798$ p=0,091
≤5 years	14	31.1	27	2.7	
6-15 years	25	55.6	37	40.6	
>15 years	6	13.3	27	29.7	
Chronic illness					$\chi^2=1.472$ p=0.225
Yes	20	44.4	52	57.1	
No	25	55.6	39	42.9	

In this study, we found a statistically significant relationship between the sex of the HCWs and coping strategies for managing negative thoughts and feelings ($\chi^2=7.427$; $p=0.024$). Predominantly, female respondents did spiritual practices such as prayer, meditation, and autosuggestion, while the majority of male respondents did not use any coping strategy (Table 5). In addition, there was a statistically

significant relationship between the coping strategies for managing negative thoughts and feelings used and having children ($\chi^2=8.232$; $p=0.016$). The majority of the respondents (74.5%) who dealt with spirituality had a child, indicating that HCWs having a child used spirituality practices more frequently as a strategy of coping with negative thoughts and feelings than those having no child (Table 5).

Table 5. Coping strategies for managing negative thoughts and feelings

Coping with negative thinking	Nothing (n=51)		Hobby or other(n=34)		Spiritual beliefs(n=51)		Statistical analysis*
	n	%	n	%	n	%	
Profession							$\chi^2=3.361$ $p=0.499$
Nurse	32	62.8	22	64.8	35	68.6	
Doctor	4	7.8	6	17.6	5	9.8	
Other	15	29.4	6	17.6	11	21.6	
Age classes							$\chi^2=4.487$ $p=0.344$
<30	20	39.2	8	23.5	18	35.3	
30-35	15	29.4	11	32.4	10	19.6	
>35	16	31.4	15	44.1	23	45.1	
Gender							$\chi^2=7.427$ $p=0.024$
Female	26	51.0	23	67.6	39	76.5	
Male	25	49.0	11	32.4	12	23.5	
Having children							$\chi^2=8.232$ $p=0.016$
Yes	24	47.1	19	55.9	38	74.5	
No	27	52.9	15	44.1	13	25.5	
Education level							$\chi^2=3.692$ $p=0.449$
High school and ↓	20	39.2	12	35.3	20	39.2	
Undergraduate	25	49.0	13	38.2	24	47.1	
Postgraduate- Doctorate↑	6	11.8	9	26.5	7	13.7	
Clinic studied							$\chi^2=8.176$ $p=0.085$
Emergency Unit	5	9.8	5	14.7	2	3.9	
Covid Clinic	21	41.2	21	61.8	29	56.9	
Intensive care	25	49.0	8	23.5	20	39.2	
Chronic illness							$\chi^2=1.456$ $p=0.483$
Yes	26	51.0	21	61.8	25	49.0	
No	25	49.0	13	38.2	26	51.0	

DISCUSSION

In the present study, we evaluated the impact of COVID-19 on the family and social life of frontline HCWs during the pandemic. The study results showed that frontline working during the pandemic had both physical and psychological adverse effects. Over a year of the pandemic, there are also several reports showing similar results in the literature^{8, 16-18}.

In the current study, the majority of frontline HCWs experienced adverse effects of COVID-19 on their family and social life and the main stressors were

anxiety, distress, feeling of loneliness, and a fear of being infected and/or infecting their loved ones. Similarly, in recent studies, Muller et al.⁸ and Shaukat et al.¹⁸ reported anxiety, depression, distress, and sleep disorders in HCWs during the pandemic. In another study comparing the emotional state, somatic responses, sleep quality, and the behavior of individuals living in Hubei province, Yuan et al.¹⁷ showed that frontline HCWs became increasingly anxious with fear and distress than other professions. In addition, Mo et al.¹⁶ evaluated work stress among Chinese nurses during the pandemic and reported

that nurses fighting against the COVID-19 were under pressure and there was a positive correlation between the stress burden and anxiety.

In our study, we found no significant effect of the age of the HCWs on their family and social life. However, in a study, Matsuiishi et al.¹⁹ showed that younger age was a risk factor for anxiety and depression.

During the fight against the pandemic, HCWs continue to look after their families. The majority of the HCWs in our study experienced adverse consequences in their family and social life including the lack of a caregiver while they were working. A total of 68.4% of the respondents had difficulties in their family and social life during the pandemic. In a study, Cai et al.²⁰ assessed the psychological impact and coping strategies of frontline medical staff during the COVID-19 pandemic and reported that many had concerns regarding viral transmission to their children and experienced stress due to the perceived risk of infection to themselves and their families. In another study investigating anxiety, depression, traumatic stress, and COVID-19-related anxiety in the United Kingdom during the pandemic, Shevlin et al.²¹ suggested that being married with children was associated with a greater level of stress. However, in a study conducted in Turkey, Göksu et al.²³ found no significant difference in the stress levels of single and married individuals. On the contrary, previous studies showed that being single, female sex, and having children were associated with the increased severity of anxiety and depression¹⁹⁻²⁵.

Actively working during the pandemic has caused the stigmatization of the HCWs and self-isolation from their families and society. Therefore, the use of effective coping strategies is of utmost importance for HCWs such as taking adequate rest after working, having healthy diets, physical activity, and communicating with the family and loved ones²⁶. Psychological stress, anxiety, distress, and depression may result in burnout in the long term. In addition, some may suffer from post-traumatic stress disorder, even after the pandemic is over. Thus, being healthy and keeping well with mental health protection is critical in the long-term^{27, 28}.

The use of strategies for coping with negative thoughts and feelings during the pandemic is of paramount importance for HCWs. In our study, 76.5% of the respondents were using spiritual practices and 74.5% of them had children. Throughout history, several methods to cope with

psychological stressors have been used during outbreaks and natural disasters. Imperatori et al.²⁹ and Martinez et al.³⁰ reported that religious practices and social support were helpful strategies to cope with psychological stress. Close contact with suspected or confirmed cases during the pandemic increase the level of psychological stress of HCWs. In their study evaluating the psychological effects of the pandemic, Babore et al.³¹ demonstrated that a positive attitude toward stressful situations including the ability to problem-solve, seeking social support, and turning to religion was the main protective factor with lower distress levels.

Psychological resilience and stability are vital for HCWs during the outbreaks^{32,33}. In their study, Bozdağ and Ergün³⁴ evaluated the psychological resilience of HCWs during the COVID-19 pandemic and concluded that the needs of HCWs should be prioritized in any practice by enhancing their positive emotions and weakening their negative emotions. Since the effect of COVID-19 on mental health may take months, before it becomes fully apparent, those who do not meet the criteria for a medical diagnosis should be provided coping strategies, psychological support, and resources³⁵.

In a study, it was seen that besides the psychological effects seen in health workers, they were also negatively affected physically. After long and tiring working hours, they had to use antihistamines for insomnia and parol for headaches. It was stated that smoking and caffeine consumption increased due to long working hours and stress. In addition, obsessive behaviors occurred in some employees in terms of antiseptic use³⁶.

There are studies showing that wearing personal protective equipment during long working hours causes anxiety, depression, and suicidal ideation³⁷. Nonetheless, there are some limitations to this study. The single-center design and relatively small sample size preclude the generalization of the results to the overall population. Further large-scale, prospective studies and meta-analyses including a comprehensive literature review are needed to gain a better understanding of the impact of the COVID-19 pandemic on the family and social life of frontline HCWs.

In conclusion, frontline HCWs during the COVID-19 pandemic have faced excessive physical and psychological distress due to long working hours, inadequate rest periods, insomnia, social distancing,

and self-isolation from their family and loved ones and the family and social life of many HCWs are affected adversely. Although the focus on the transmission of COVID-19 infection has distracted the attention from the psychological consequences of the pandemic to the physical consequences, emerging mental health problems may result in health problems in the long term. For both the current and future pandemics, the unmet needs of HCWs should be addressed and psychological support should be provided, when necessary and appropriate coping strategies should be trained. Those who need psychological counseling should be identified based on regular screening programs. To improve the psychological resilience of frontline HCWs, coping strategies should be developed including affirmation techniques, peer support, and family and social support. It will be more reliable in terms of the results of the study if the future planned studies are applied to wider populations according to the geographical regions.

Yazar Katkıları: Çalışma konsepti/Tasarımı: RA, HŞ, DA, EG; Veri toplama: RA, SA, HŞ; Veri analizi ve yorumlama: RA, SA; Yazı taslağı: RA; İçeriğin eleştirel incelenmesi: SA, DG, DA, HŞ; Son onay ve sorumluluk: RA, HŞ, DA, EG, DG, SA; Teknik ve malzeme desteği: -; Süpervizyon: RA, DG, EG, HŞ; Fon sağlama (mevcut ise): yok.

Etik Onay: Bu çalışma için Çukurova Üniversitesi Tıp Fakültesi Girişimsel Olmayan Klinik Araştırmalar Etik Kurulundan 15.05.2020 tarih ve 99/32 sayılı kararı ile etik onay alınmıştır.

Hakem Değerlendirmesi: Dış bağımsız.

Çıkar Çatışması: Yazarlar, bu makalenin soruşturulması, yazarlığı ve/veya yayınlanmasında ilgili potansiyel bir çıkar çatışması olmadığını beyan ederler.

Finansal Destek: Bu çalışma, kamu, ticari veya kar amacı gütmeyen sektörlerdeki herhangi bir finansman kurumundan belirli bir hibe almamıştır.

Yazarın Notu: We would like to thank our healthcare professionals and biostatistics expert Melih Uzunoğlu who voluntarily supported our research in data collection.

Author Contributions: Concept/Design : RA, HŞ, DA, EG; Data acquisition: RA, SA, HŞ; Data analysis and interpretation: RA, SA; Drafting manuscript: RA; Critical revision of manuscript: SA, DG, DA, HŞ; Final approval and accountability: RA, HŞ, DA, EG, DG, SA; Technical or material support: -; Supervision: RA, DG, EG, HŞ; Securing funding (if available): n/a.

Ethical Approval: For this study, ethical approval was obtained from the Ethics Committee of Cukurova University Faculty of Medicine Non-Interventional Clinical Research dated 15.05.2020 and numbered 99/32.

Peer-review: Externally peer-reviewed.

Conflict of Interest: The authors declare they have no potential conflict of interest regarding the investigation, authorship, and/or publication of this article.

Financial Disclosure: This study received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Acknowledgement: Veri toplama konusundaki araştırmalarımıza gönüllü olarak destek veren sağlık çalışanlarımıza ve biyoistatistik uzmanı Melih Uzunoğlu'na teşekkür ederiz.

REFERENCES

- Ashour HM, Elkhatib WF, Rahman MM, Elshabrawy HA. Insights into the recent 2019 novel coronavirus (sars-CoV-2) in light of past human coronavirus outbreaks. *Pathogens*. 2020;9:186.
- World Health Organization. Coronavirus. <http://www.who.int/docs/default-source/coronaviruse/transcripts/who-audio-emergencies-coronavirus-press-conference-full-and-final-11mar2020>.
- World Health Organization. Coronavirus disease (COVID-19) Dashboard Data.2021; <https://covid19.who.int> last updated: 2021.1.18, 2:55pm CET.
- Centers for Disease Control and Prevention (CDC). Quarantine and isolation. 2017. Available from: <https://www.cdc.gov/quarantine/index.html>. Date of access: 24.02.2022.
- World Health Organization. Coronavirus disease (COVID-19) outbreak: rights, roles, and responsibilities of health workers, including key considerations for occupational safety and health. March 2020 (No. WHO/2019-nCov/HCWadvice/2020.2). World Health Organization.
- Kaya B. Effects of pandemic on mental health. *J Clin Psychiatry*. 2020;23:123-4.
- Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet*. 2020;395:912-20.
- Muller RAE, Stenslan RSØ, van de Velde RS. The mental health impact of the covid-19 pandemic on healthcare workers, and interventions to help them: A rapid systematic review. *Psychiatry Res*. 2020;293:113441.
- Temsah MH, Al-Sohime F, Alamro N, Al-Eyadhy A, Al-Hasan K., Jamal A et al. The psychological impact of COVID-19 pandemic on health care workers in a MERS-CoV endemic country. *J Infect Public Health*. 2020;13:877-82.
- World Health Organization. Covid 19 public health emergency of international concern (PHEIC). Global research and innovation forum: towards a research roadmap. 2020. https://www.who.int/blueprint/prioritydiseass/keyaction/Global_Research_Forum Date of Access: 02.03.2022.
- Liu X, Shao L, Zhang R, Wei Y, Li J, Wang C et al. Perceived social support and its impact on psychological status and quality of life of medical staffs after outbreak of SARS-CoV-2 pneumonia: a cross-sectional study. Available at SSRN 3541127, 2020.
- Joos A. Psychosomatic medicine and Covid-19 pandemic. *Psychother Psychosom*. 2020;89:263-4.
- Rossi R, Soggi V, Talevi D, Mensi S, Niolu C, Pacitti F et al. COVID-19 pandemic and lockdown measures impact on mental health among the general population in Italy. *Front Psychiatry*. 2020;7:790.
- Kardeş VÇ. Psychological and behavioral assessment

- during and after pandemic. *Turk J Diab Obes.* 2020;4:160-9.
15. Muştu C, Baltacı D, Kutaniş R, Kara İH. Birinci basamak ve hastanede çalışan hemşirelerde anksiyete, depresyon ve hayat kalitesi. *Konuralp Tıp Dergisi.* 2012;4:17-23.
 16. Mo Y, Deng L, Zhang L, Lang Q, Liao C, Wang N et al. Work stress among Chinese nurses to support Wuhan in fighting against COVID-19 epidemic. *J Nurs Manag.* 2020;28:1002-9.
 17. Yuan S, Liao Z, Huang H, Jiang B, Zhang X, Wang Y. Comparison of the indicators of psychological stress in the population of Hubei province and non-endemic provinces in China during two weeks during the coronavirus disease 2019 (COVID-19) outbreak in February 2020. *Med Sci Monit.* 2020;15:e923767.
 18. Shaikat N, Ali DM, Razzak J. Physical and mental health impacts of COVID-19 on healthcare workers: a scoping review. *Int J Emerg Med.* 2020;13:40.
 19. Matsushita K, Kawazoe A, Imai H, Ito A, Mouri K, Kitamura N et al. Psychological impact of the pandemic (H1N1) 2009 on general hospital workers in Kobe. *Psychiatry Clin Neurosci.* 2012;66:353-60.
 20. Cai H, Tu B, Ma J, Chen L, Fu L, Jiang Y et al. Psychological impact and coping strategies of frontline medical staff in Hunan between January and March 2020 during the outbreak of coronavirus disease 2019 (COVID-19) in Hubei, China. *Med Sci Monit.* 2020;26:e924171.
 21. Shevlin M, McBride O, Murphy J, Miller JG, Hartman TK, Levita L et al. Anxiety, depression, traumatic stress and COVID-19-related anxiety in the UK general population during the COVID-19 pandemic. *BJPsych Open.* 2020;6:e125.
 22. Liu X, Kakade M, Fuller CJ, Fan B, Fang Y, Kong J et al. Depression after exposure to stressful events: lessons learned from the severe acute respiratory syndrome epidemic. *Compr Psychiatry.* 2012;53:15-23.
 23. Göksu Ö, Kumcağız H. Perceived stress level and anxiety levels in individuals in the Covid-19 Outbreak. *Electronic Turkish Studies.* 2020;15:463-79.
 24. Vinck L, Isken L, Hooiveld M, Trompenaars M, Ijzermans J, Timen A. Impact of the 2009 influenza A(H1N1) pandemic on public health workers in the Netherlands. *Euro Surveill.* 2011;16:19793.
 25. Vyas KJ, Delaney EM, Webb-Murphy JA, Johnston SL. Psychological impact of deploying in support of the US response to Ebola: a systematic review and meta-analysis of past outbreaks. *Mil Med.* 2016;181:e1515-31.
 26. Yıldırım H. The effects of new coronavirus disease on society and nursing approaches. In *Epidemic and Domestic Relations* (Eds Aylaz R, Yıldız E):132-142. Malatya, İnönü University Publisher, 2020.
 27. Cullen W, Gulati G, Kelly BD. Mental health in the COVID-19 pandemic. *QJM.* 2020;113:311-2.
 28. Torales J, O'Higgins M, Castaldelli-Maia M, Ventriglio A. The outbreak of COVID-19 coronavirus and its impact on global mental health. *Int J Soc Psychiatry.* 2020;66:317-20.
 29. Imperatori C, Bersani FS, Massullo C, Carbone GA, Salvati A, Mazzi G et al. Neurophysiological correlates of religious coping to stress: a preliminary EEG power spectra investigation. *Neurosci Lett.* 2020;29:134956.
 30. Martínez JP, Méndez I, Ruiz-Esteban C, Fernández-Sogorb A, García-Fernández JM. Profiles of burnout, coping strategies and depressive symptomatology. *Front Psychol.* 2020;2:591.
 31. Babore A, Lombardi L, Viceconti ML, Pignataro S, Marino V, Crudele M et al. Psychological effects of the COVID-2019 pandemic: Perceived stress and coping strategies among healthcare professionals. *Psychiatry Res.* 2020;293:113366.
 32. British Columbia Centre for Disease Control. Supporting the psychosocial well-being of health care providers during the novel coronavirus (COVID-19) pandemic. 2020. <http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID-19-Psychosocial-Supports-HCW.pdf>.
 33. Santarone K, Mckeeney M, Elkbuli A. Preserving mental health and resilience in frontline healthcare workers during COVID-19. *Am J Emerg Med.* 2020;38:1530-1.
 34. Bozdağ F, Ergün N. Psychological resilience of healthcare professionals during COVID-19 pandemic. *Psychol Rep.* 2021;124:2567-86.
 35. Esterwood E, Saeed SA. Past epidemics, natural disasters, Covid-19, and mental health: learning from history as we deal with the present and prepare for the future. *Psychiatr Q.* 2020;91:1121-33.
 36. Khatatbeh M, Alhalaiqa F, Khasawneh A, Al-Tammemi AB, Khatatbeh H, Alhassoun S et al. The experiences of nurses and physicians caring for covid-19 patients: findings from an exploratory phenomenological study in a high case-load country. *Int J Environ Res Public Health.* 2021;18:9002.
 37. Young KP, Kolcz DL, O'Sullivan DM, Ferrand J, Fried J, Robinson K. Health care workers' mental health and quality of life during COVID-19: Results from a mid-pandemic, national survey. *Psychiatr Serv.* 2021;72:122-8.