



The Impact of Changing Processes in the COVID-19 Pandemic on Health Care Workers' Burnout Syndrome: Web-Based Questionnaire Study

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Abstract

Aim: Health care workers at the forefront of the Coronavirus disease-2019 (COVID-19) pandemic have faced increased workload and intense stress. It is essential to understand the relationship between specific processes that have changed due to the COVID-19 pandemic and the level of burnout of health workers. This study aims to determine health workers' perceptions regarding changing processes and burnout levels during the COVID-19 pandemic.

Methods: This study was carried out in a descriptive design. The research population consists of health workers who are actively working in Turkey. A web-based survey sampled 537 health workers who agreed to participate in the study. Research data was collected during dates between December 31, 2020, and January 10, 2021. This study measured health workers' perceptions of burnout and their experiences and attitudes during the COVID-19 pandemic.

Results: According to the findings of the study, 52% of health workers reported burnout. As a result of the regression analysis, we found that increased workload in nurses ($B=1.12$, $t=0.56$, $p<0.05$), failure to provide a safe work environment to physicians ($B=1.04$, $t=2.28$, $p<0.05$), increased mobbing on non-healthcare workers ($B=0.74$, $t=2.31$, $p<0.05$) and management vulnerabilities ($B=0.71$, $t=2.02$, $p<0.05$) had a positive impact on health care workers' burnout levels.

Conclusion: The changing processes in the COVID-19 pandemic have increased burnout rates in health professionals. Health care workers should be given the support they need to do their jobs, stay safe.

Keywords: Burnout, perception of health workers, COVID-19, work stress, health care professionals

Introduction

Burnout is a long-term and stressful psychological syndrome, many authors have analyzed this concept, and various models have been developed. Freudenberger first defined the concept of burnout in 1974 as the state of exhaustion caused by failure, wear, loss of energy and power, or unfulfilled desires in internal human resources (1). Maslach defined burnout as a syndrome of emotional exhaustion, desensitization, and inadequacy in individuals working with people of specific capacities (2). In Maslach and Jackson's most widely accepted conceptualization, burnout is considered a three-dimensional syndrome. These three dimensions are emotional exhaustion,

desensitization, and personal success (3). Many researchers have researched burnout in different workplaces in the last 20 years (4,5). Burnout is defined as a psychological syndrome characterized as a negative emotional response to a person's work as a result of prolonged exposure to a stressful work environment. According to this definition, employees working in stressful occupations are more likely to develop burnout syndrome (6). Health care is listed among stressful occupations requiring intense personal interaction with people, especially patients and other health care providers. This situation paves the way for higher levels of stress and consequent burnout syndrome (7,8). Burnout is considered a severe problem among health care professionals (9,10). Burnout of health workers

is essential because it will affect itself and the society in which it provides health care. Burnout may cause negative consequences on patient care provided by the health care worker (11).

The Coronavirus disease-2019 (COVID-19), which the World Health Organization considers a "pandemic," is a serious health problem facing humanity (12). Although health workers vary by country, they constitute an essential part of the people who contract the disease. According to some reports, health workers account for 14% of confirmed COVID-19 cases. More than 40,000 health workers have been established as COVID-19 positive in Turkey (13). It is known that health workers face numerous challenges at every stage of the pandemic. Even though studies have been carried out on anxiety and depression caused by the COVID-19 pandemic on society, very few studies have been conducted that show the psychological effects on health workers. Many trigger factors such as changing processes due to the burnout pandemic, increasing pressure, long working hours, administrative weaknesses, fear of carrying diseases to the immediate environment have increased burnout rates due to the burnout pandemic already expected in health professional groups (14,15).

Several studies have shown that physicians experience depression and anxiety that can trigger burnout due to the COVID-19 pandemic (16).

Burnout levels are likely to increase during the COVID-19 pandemic when health care workers face a high workload in providing health care. This increase is associated with a wide range of occupational stress factors that are likely to increase during the COVID-19 pandemic (17). Many of the health workers refused to work during the COVID-19 pandemic and quarantined themselves. This quarantine decision is due to the fear of infection. The constant fear of disease during quarantine and interruption of social support are critical factors that can affect burnout (18). In addition, many factors, such as lack of personal protective equipment, were associated with increased burnout and other mental health problems among health workers (19).

This study aims to determine whether the COVID-19 pandemic affects the level of burnout among health care professionals and the factors associated with it.

Methods

This study was carried out in a descriptive design. The web-based test method applied to 537 participants who agreed to participate in the research was used as a data collection method. Our research data was collected between 12/31/2020-10/01/2021. This study was carried out with participants living in different cities of Turkey who agreed to participate in the research. All participants

provided informed consent for inclusion before they participated in the study. The survey was conducted anonymously, and all responses were optional. In this study, "Personal Information Form" and "Maslach Burnout Inventory (MBI)" were used as data collection instruments. The researcher's information form in our study consists of variables including participants' gender, age, institution type, profession, year of experience in the job, department studied, type of work, and questions about the perceptions of health workers during the COVID-19 pandemic.

Maslach Burnout Inventory

MBI was adapted to Turkish by Ergin (20) and reliability and validity analyses were performed. MBI consists of three subdivisions and a total of 22 substances: 9 substances of emotional exhaustion (EE), five senses of desensitization (DS), and eight substances of personal achievement (PA). The EE subdivision of MBI defines a person's feelings of being consumed and overloaded by his/her profession. The sub-dimension of DS is that the person acts without emotion and careless towards the people he/she serves. The PA sub-dimension defines a person's feelings of overcoming problems with success. After pre-application of the scale with a group of 235 people (physicians, nurses, teachers, etc.), some changes were made to the plate due to the analysis of the data obtained from the group. After the question items that make up the MTE were scored in the range of 0-4 points, each sub-scale was collected among itself, and three separate points were obtained. The EE and DS sub-dimensions of the 4-item Likert scale of 22 items were evaluated with a score of never=0, very rare=1, sometimes=2, most of the time=3 and always=4 points each. At the same time, in the lower PA dimension, scoring was conducted in reverse as never=4, very rare=3, sometimes=2, most of the time=1, and always=0 points. By collecting points for all sub-dimensions, scores were obtained ranging from 0-36 for EE, 0-20 for DS, 0-32 for PA, and 0-88 for MBI. In the EE and DS sub-dimensions, high scores indicate high burnout, and in the PA subgroup, the high score indicates an increase in burnout.

Ethical Aspect of the Research

This study received the non-interventional practices ethical committee decision no. E-20292139-050.01.04-427 dated 30/12/2020 by Sebahattin Zaim University Ethics Committee.

Results

Study Group

The study group of the study constituted 537 people, including 180 men and 357 women, between the ages of 18 and 65 (age=35.73±10.13). The highest rate of the participants was 36.5% from the 2nd-tier public hospital,

nurses followed this rate with 44.1%, the average year of work in the profession was reported as 12.9±9.79%, the department in which they worked was notified as an outpatient with a rate of 32.2%, and participants said they worked without shifts with a rate of 54.7% (Graphic 1).

Statistical Analysis

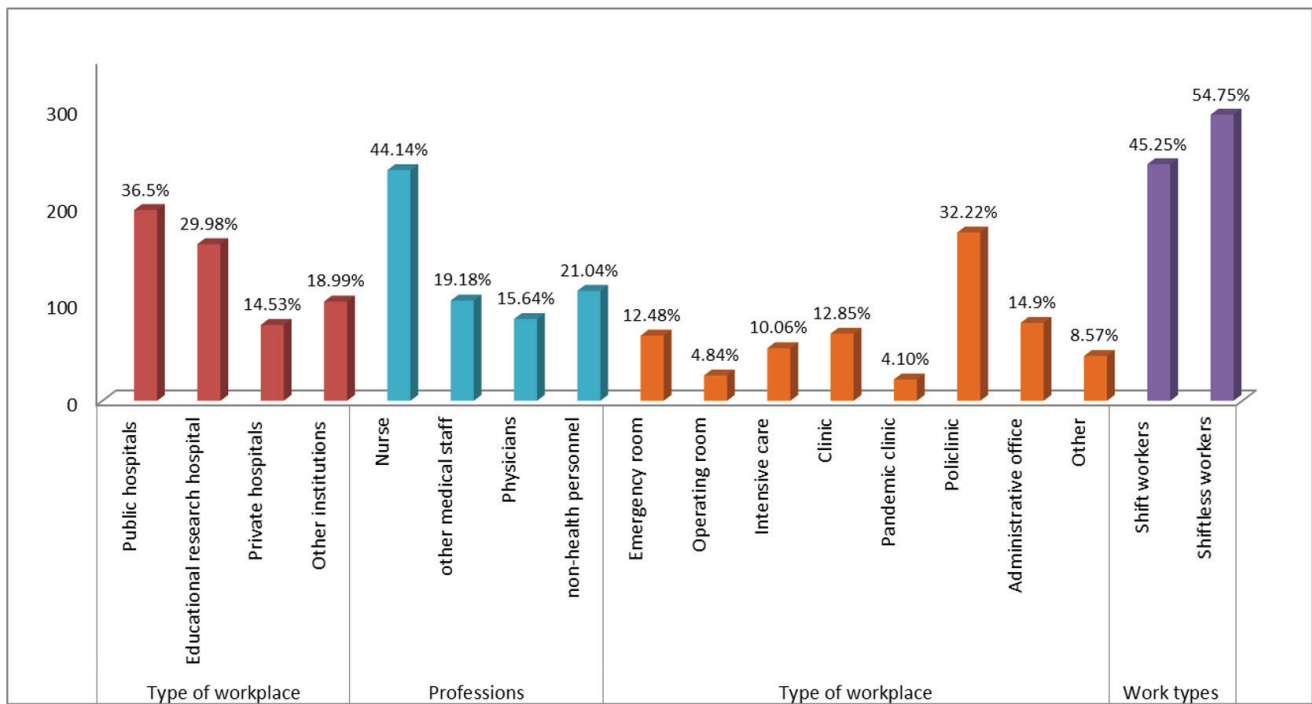
Relationship Between Variables and Descriptive Statistics

Table 1 contains the average, standard deviation, kurtosis, skewness coefficients, and correlation coefficients between variables. The average age was found to be 35.73±10.13, while the total burnout average was found to be 51.80±7.85. Kurtosis values were between -0.59 and 0.19, and the skewness values were between -0.36 and 0.50. These values indicate that the variables exhibit a normal distribution. When correlation coefficients are examined, there is no significant correlation between the age of the participants and their burnout scores. In addition,

while there was a negatively substantial relationship between the personal success sub-dimension and the EE and desensitization sub-dimensions, a significant positive association was found between the total burnout average and all sub-dimensions. There is also a positive, meaningful relationship between EE and desensitization.

Comparison of Burnout Levels by Demographic Variable

Independent samples were tested to compare burnout levels based on the gender of the participants. According to analysis results, there is a significant difference between EE (t=3.911, p<0.001), desensitization (t=3.407, p<0.001), personal success (t=-2.333, p<0.05) and exhaustion total scores (t=3.296, p<0.001) as per gender. While female participants' total scores from emotional exhaustion, desensitization, and burnout were found to be higher, the average of men in the lower dimension of personal success was found to be higher. When the impact size



Graphic 1. Socio-demographic characteristics of the participants

	X̄	SD	Skewness	Kurtosis	1	2	3	4
1. Age	35.73	10.13	0.50	-0.59	-	-	-	-
2. Emotional exhaustion	24.64	5.85	-0.36	-0.31	0.01	-	-	-
3. Desensitization	10.84	3.94	0.04	-0.53	0.04	0.64**	-	-
4. Personal success	16.33	5.01	-0.32	0.19	-0.08	-0.47**	-0.39**	-
5. Overall score	51.80	7.85	-0.29	-0.21	-0.02	0.77**	0.73**	0.09*

SD: Standard deviation

of MBI and its sub-dimensions were examined by gender, it was determined that the effect was low (Cohen's $d=0.2 < d < 0.5$).

Independent samples were tested to compare burnout levels based on the work types of the participants. According to analysis results, there is a significant difference between EE ($t=4.288$, $p<0.001$), desensitization ($t=4.471$, $p<0.001$), and exhaustion total scores ($t=5.781$, $p<0.001$) as per work types. Emotional exhaustion, desensitization, and total burnout scores were higher among shift workers than those of shiftless workers. When the impact size of MBI and its sub-dimensions were examined as per work type groups, it was determined that the effect was low (Cohen's $d=0.2 < d < 0.5$).

One-Way analysis of variance was applied to compare burnout levels based on participants' professions. According to analysis results, there is a significant difference between EE ($F=9.394$, $p<0.001$), desensitization ($F=6.226$, $p<0.001$), personal success ($F=2.805$, $p<0.05$), and exhaustion total scores ($F=7.260$, $p<0.001$) as per professions. Lysergic acid diethylamide (LSD) test, one of the post-hoc tests, was performed to determine which groups had differences. As a result of the analysis, it was found that the average of emotional exhaustion, desensitization, and total burnout of physicians was lower than that of nurses and other health workers. In addition, personal success averages in physicians were higher than those of nurses and non-health personnel. Nurses had higher standards of emotional burnout and mass burnout than physicians and non-medical staff. Nurses have higher averages of desensitization than physicians and other medical staff while having lower average PA scores. The calculated value of η^2 for the occupation variable was less ($\eta^2: <0.06$ soft effect).

One-Way analysis of variance was applied to compare burnout levels based on participants' type of workplace. According to analysis results, there is a significant difference between EE ($F=2.899$, $p<0.001$), desensitization ($F=6.125$, $p<0.001$), and exhaustion total scores ($F=6.910$, $p<0.001$) as per to type of workplace. LSD test, one of the post-hoc tests, was performed to determine which groups had differences. It was found that employees in private hospitals had higher average EE scores, desensitization, and burnout than public hospitals, educational research hospitals, and other institutions. At the same time, it was found that the average desensitization of academic research hospital employees compared to employees of public hospitals and other institutions was lower. The calculated value of η^2 for the workplace variable was low ($\eta^2: <0.06$ soft effect).

Perception of Health Workers During the Pandemic Period and its Relationship With Burnout

Table 2 contains Pearson correlation coefficients (r) between health workers' perceptions and their burnout levels. When the perception of health workers is examined, it is seen that the highest value with an average of 9.77 is in the expression M3 ("I think the fear of carrying infections to our families has increased"). The lowest average is in the expression M2 with a rate of 6.54 ("I think violence has increased"). When the relationship between perceptions and the burnout levels of health workers is examined, it is seen that the burnout levels of nurses and non-health personnel in particular and all perceptions in Table 3 are positively significantly related. At the same time, there was a positive oriented significant relationship between burnout and the expression M5 ("I think a safe working environment cannot be provided"), M6 ("I think revolving capital practices are unfair"), M7 ("I think mobbing is

Table 2. The relationship between the perceptions of health workers and their burnout levels during the pandemic period

Perceptions	X	SD	Burnout (r)			
			Nurse	Other health personnel	Physician	Non-health staff
M1. I think the fear of getting infected has increased.	9.36	1.23	0.14*	0.05	0.13	0.29**
M2. I think violence is on the rise.	6.54	1.77	0.22**	-0.08	-0.04	0.31**
M3. I think there is a growing fear of infection in our families.	9.77	0.81	0.25**	0.00	0.21	0.19*
M4. I think we do not spare enough time for our families and they cannot receive enough attention.	9.44	1.24	0.13*	-0.02	0.09	0.29**
M5. I think a safe working environment cannot be provided.	8.49	2.11	0.26**	0.21*	0.31**	0.43**
M6. I think revolving capital practices are unfair.	9.54	1.41	0.20**	0.25*	0.06	0.25**
M7. I think mobbing is increasing.	8.01	2.57	0.31**	0.22*	0.09	0.48**
M8. I think the management weakness is growing.	8.13	2.51	0.28**	0.30**	0.17	0.49**
M9. I think we have had to make some tough decisions.	9.01	1.54	0.18**	0.10	0.25*	0.42**
M10. I think the workload is increasing.	9.60	1.13	0.24**	-0.02	0.01	0.27**

* $p<0.05$, ** $p<0.01$, SD: Standard deviation

increasing"). -M8 ("I think management weakness has increased") among other health personnel. A favorable oriented significant relation was found between burnout and only expressions M5 ("I think a safe the working environment is not provided") and M9 ("I think we have to make difficult decisions") among physicians.

Table 3 contains multiple linear regression analysis findings to examine the role of health workers' perceptions of burnout levels during the pandemic period. Collinearity, normality, autocorrelation, and multicollinearity assumptions were reviewed before moving on to regression analysis. For the collinearity hypothesis, only variables with a significant association in Table 2 were included in the regression analysis. Where the assumption of normality is met is presented in Table 1. Premises have been completed since the Durbin-Watson values for the autocorrelation assumption were between 1-3 and that the viral infectivity factor (VIF) values for the multilink belief were less than 10.

It is seen that the four regression analysis models in Table 3 are also significant. When the values obtained as a result of the regression analysis are examined, it can be seen that the expression M10 ("I think the workload has increased") positively predicts nurses' level of burnout. The expression M5 ("I think a safe working environment is not provided") entirely indicates physicians' level of burnout, and the expression M7 ("I think mobbing has increased"). M8 ("I think management weakness has increased") positively predicts non-health staff's level of burnout. It has been observed that the perceptions of

other medical personnel during the pandemic period have no meaningful role in the story of burnout.

Discussion

The COVID-19 pandemic has affected lives worldwide, leading to unique challenges in all areas of life and all areas of medicine. With the pandemic affecting our lives in many ways, psychological resilience is a challenge that many will continue to face in the coming months. Many other potential triggers such as physical and social isolation, interruption of daily routines, financial problems, food insecurity, and stress are increasing due to the pandemic, creating a situation that threatens individuals' mental well-being and stability. The uncertainty brought on by the pandemic is also likely to increase the frequency and severity of mental health problems worldwide.

Burnout is a prevalent condition in health workers. Burnout levels are also linked to the development levels of countries. For example, in studies from high-income countries, the prevalence of burnout among health care workers ranges from 12.6% to 29.9% (21,22). In Tunisia, one of the low-income countries, the burnout rate was 68% in a study of nurses. Studies on the level of burnout of physicians have shown a high prevalence of burnout among general practitioners. They have shown that a third of physicians experience burnout at specific points during their careers. The burnout rate is even more pronounced among general practitioners. In a recent study in the United States, 45.8% of physicians reported at least one sign of burnout (23). Another research of more than

Table 3. The role of health workers' perceptions on burnout levels

	Nurse			Other health personnel			Physician			Non-health staff		
	Beta	SE	t	Beta	SE	t	Beta	SE	t	Beta	SE	t
Intercept	21.26	8.47	2.51*	26.67	9.39	2.84**	33.21	5.17	6.43***	27.65	5.96	4.64*
M1	-0.43	0.55	-0.79	-	-	-	-	-	-	0.87	0.46	1.89
M2	0.30	0.26	1.16	-	-	-	-	-	-	0.31	0.47	0.67
M3	2.02	1.12	1.81	-	-	-	-	-	-	-0.04	0.75	-0.05
M4	-0.62	0.57	-1.09	-	-	-	-	-	-	-0.01	0.51	-0.02
M5	0.13	0.27	0.47	0.53	0.46	1.15	1.04	0.46	2.28*	0.19	0.41	0.46
M6	0.32	0.71	0.45	1.46	0.98	1.49	-	-	-	-0.73	0.45	-1.62
M7	0.43	0.26	1.64	0.19	0.50	0.39	-	-	-	0.74	0.32	2.31*
M8	0.25	0.27	0.93	0.60	0.38	1.57	-	-	-	0.71	0.35	2.02*
M9	-0.07	0.42	-0.17	-	-	-	0.80	0.59	1.37	0.86	0.51	1.70
M10	1.12	0.56	1.99*	-	-	-	-	-	-	0.02	0.62	0.03
F (df)	F (10.226)=p<0.001			F (4.98)=3.596, p<0.01			F (2.81)=5.398, p<0.01			F (10.102)=6.093, p<0.001		
R, R2	R=0.40, R2=0.16			R=0.36, R2=0.13			R=0.34, R2=0.12			R=0.61, R2=0.37		
VIF	Between 1.33-2.33			Between 1.18-1.53			Between 1.15-1.15			Between 1.50-2.34		
Durbin-Watson	1,766			2,074			1,778			1,909		

*p<0.05, **p<0.01, ***p<0.001, SD: Standard deviation, VIF: Viral infectivity factor, SE: Standard error

500 physicians in the United Kingdom has revealed that at least a third of physicians experienced burnout (24). According to the study of health workers in Turkey, the overall burnout level varies between 35-38% (25,26). In another study of 820 physicians, 42% of physicians described themselves as exhausted, and 26% described themselves as partially bare (27). In this study, the overall burnout level was 51.8%.

The primary purpose of our study is to examine the effect of the COVID-19 pandemic on burnout syndrome, which is already common among health workers. Even if there are not enough studies on this subject yet in Turkey, assignments are available on this subject in the world when the field literature is examined. In a cross-sectional survey of 1,257 health workers working in 34 hospitals serving COVID-19 patients, a significant number of health workers reported experiencing symptoms of depression, anxiety, insomnia. The most affected were those who were particularly female and nurses who were at the forefront of providing nursing care to patients with suspected COVID-19 or directly engaged in providing nursing care to COVID-positive patients (28). Many studies have shown that the COVID-19 pandemic increased burnout in women as gender variables and in nurses on a professional basis (29-31). In this study, burnout scores were statistically significant in the COVID-19 pandemic in women in gender variability and nurses on a professional basis. These findings suggest that health care workers exposed to COVID-19 are at high risk of developing adverse mental health outcomes and may need psychological support or interventions.

The risk of infection is inherent in health care; it has always been and will continue to be for the foreseeable future. Therefore, effective infection prevention practices are essential both to ensure safety and to fight fear. Fear is a powerful emotion, and its impact on health care should not be underestimated. Health care workers are not immune to anxiety and fear, and in fact, levels of fear may be higher than in the general population. According to the results of this study, health workers were found to have a heightened perception of the fear of becoming infected and infecting their families. This perception is significantly higher in nurses and non-health personnel. Burnout symptoms increase as the fear of infection increases. It is thought that greater exposure of nurses and clinical support staff in patient care than physicians and other professional groups increases this fear. In the literature, it has been shown that the fear of infection and the fear of carrying the disease to their families are common in health workers in COVID-19 pandemics and previous pandemics (32,33).

Violence against health workers is a significant problem. Health workers think that the COVID-19 pandemic increases

health violence. Considering the effect on burnout in our study, it is seen that it has a low level of impact. The study conducted by Elhadi et al. (34) and his colleagues has shown that there are increased violence cases, especially on physicians, during the COVID-19 pandemic. The results of the current study are also compatible with the results of this study.

Due to the increased workload during the pandemic process, long working hours, and fear of carrying the infection to their families and loved ones, health workers feel that they cannot spend enough time with their families and cannot meet their needs. Health care providers are hesitant to spend time with family members because of the risk of spreading the infection to their loved ones, and many health care providers isolate themselves at home. Similarly, social distancing makes it more challenging to communicate with friends. The closure of schools and daycare centers such as nurseries and kindergartens is becoming a significant challenge to find someone to care for the child, especially when the health care provider is a single parent or both parents are working. This situation is forcing health workers and causing them to feel that they are not taking care of their families enough. It is essential to get family support at this stage. The study of Shanafelt and his colleagues found that the need for family support from health workers was relatively high (9).

Another stressful factor for health workers who have to deal with many difficulties is working in a safe working environment. According to the results of this study, health workers consider that the environment in which they work is not sufficiently secure. However, health institution managers are obliged to take all measures regarding policies, programs, and practices that protect health workers from COVID-19 and provide open, consistent, transparent, and empathetic communication to all employees from management levels (35). Leaders demonstrate that the organization puts a high priority on employee health and safety, which creates accountability and employee support at all levels of the organization.

The COVID-19 pandemic creates multiple stresses on health care providers, including infection risk, social isolation, and economic consequences. One of these stresses is the financial losses of health workers. The COVID-19 pandemic has also caused several economic implications, such as reduced outpatient incomes and reduced salaries and benefits (36). In this study, we found the relationship between decreasing co-payments and distribution injustices and burnout.

The COVID-19 pandemic creates difficult interdependent decisions for health professionals and the individuals they serve. Findings involving COVID-19 risks raise questions that the professional community needs to

answer and respond to (37). One of the terrible features of the COVID-19 pandemic is that if the disease is not contained or delayed, the sudden increase of patients in need of intensive care will upset even well-equipped health systems. In such a scenario, health workers need to make difficult decisions, including who and how to allocate medical resources, which are already few. For example, who will stay in intensive care beds? Which patients face difficult decisions such as access to a limited number of ventilators (38). Decisions regarding the sharing of resources that arise in the context of COVID-19 are not limited to those directly related to patient care. Health managers may also have to decide the distribution of personal protective equipment for health care workers (39). The sense of fairness and ethical dilemmas make both health workers and health managers very difficult when allocating resources, i.e., making difficult decisions. The access of health workers to personal protective equipment throughout the world caused various difficulties in the early stages of the pandemic. This study has shown that it is very effective for health workers to make difficult decisions on burnout.

The rapid spread of the pandemic has led to increased workload in hospitals. COVID-19 patients are victims of the pandemic, but the second victim of this condition is health workers (40). It is natural for health workers working in such an environment to perceive this situation as mobbing. Since they have perceptions that mobbing is increasing, this is one factor that triggers/increases burnout. Health is a biological problem and a political, social, cultural, and economic problem. Therefore, countries' ability to manage COVID-19 is strongly influenced by their political-economic conditions, which can be considered both an advantage and a threat. This effect occurs on a country-by-country basis as well as on an institution-by-institution basis. Health systems are highly complex systems with structural vulnerabilities. Failure to design these systems well, failure to consider vulnerabilities, and poor health system functioning also cause health workers to be adversely affected (41). Business organization models do not act only as obligations imposed by others. These models serve as individual power mechanisms and mediate through subjectivity processes that suggest their style of action. Thus, health workers normalize their distress by assuming that the work expected of them is "what they need to do." It gives them the strength to cope. According to the results of this study, the perception that the pandemic is not well managed due to administrative weaknesses on an institution-by-institution basis exists in health workers, which affects burnout. A study in Ireland found that lack of government support by health workers, combined with cynicism, increases work-related stress and burnout

(42). Work-related stress disproportionately affects health care workers (43). This situation occurs with excessive workloads, working in environments that require intense sensuality and where demand outweighs capacity. Many health professionals, who were at the forefront of the COVID-19 pandemic, faced many challenges, increased workloads, and stress, which made them vulnerable to exhaustion. Burnout is caused by increased work stress, increased time pressure, increased workload, and poor organizational support. These factors are pretty common despite their differences in health care and socioeconomic structure (44). As a result of this study, the perception of increased workload was naturally high, which is one of the factors affecting burnout.

In this study, the average burnout in the COVID-19 pandemic was 52%. When the field literature is examined, it is seen that health sector burnout rates range from 43% to 48% in previous studies (45). Suggests that the COVID-19 pandemic has increased the burnout of health workers in general. It is possible to find lessons in the literature showing that the COVID-19 pandemic is associated with many factors that increase the likelihood of health workers running out (46,47). In this study, these factors were found as follows: fear of infection, increased violence, fear of carrying diseases to their families, not being able to spend enough time and not seeing their families, not being able to provide a safe working environment, decreased wages they receive without additional payment, increased mobbing, management weaknesses and perceptions of having to make difficult decisions.

Burnout among health care workers can be reduced by health institutions, government, and non-governmental stakeholders targeting potentially modifiable factors. These could include providing additional educational opportunities and psychological support, strengthening institutional support for their physical and emotional needs, supporting family problems (e.g., childcare, transportation, temporary housing, fees), and providing adequate personal protective equipment. To prevent negative psychological consequences, mental health support for health care professionals is critical. Key interventions include access to psychosocial support, including web-based resources, emotional support line, psychological first aid, and personal care strategies.

Study Limitations

The current study has some limitations. First, it was limited in scope. Multi-center studies of this type of work in different countries will ensure better results. This study was conducted in Turkey, one of the countries moderately affected by the COVID-19 pandemic. Comparing this study with countries such as the United States, which

the pandemic has heavily influenced, will strengthen the study. Secondly, the study was carried out for ten days and lacked longitudinal follow-up. Due to the increasingly difficult situation, the mental health symptoms of health workers can become more severe. Therefore, the long-term psychological effects of this population are worth further investigation. The heterogeneity of the study group (nurses, physicians, other healthcare professionals) is a limitation.

Conclusion

In the COVID-19 pandemic, health professionals were anxious and faced excessive workload. In addition to the fear and uncertainty surrounding the control of the spread of the disease, unemployment, potential threats to meet the physiological needs of themselves and their loved ones, and numerous other biopsychosocial stress factors experienced can all pose a threat to the mental well-being of health professionals. In particular, high levels of stress and burnout reduce the psychological resilience of health workers. It is essential to assess the mental health of health care professionals and monitor the long-term effects of dealing with the COVID-19 pandemic. Burnout is thought to cause other persistent problems in the long run if not addressed early. In terms of continuity of health services during the COVID-19 pandemic, it is necessary to provide the required preventive and supportive services to protect the mental health and physical health of health workers.

Authorship Contributions

Concept: H.S., Design: H.S., A.B., Data Collection or Processing: H.S., B.K., Analysis or Interpretation: A.B., Literature Search: H.S., B.K., Writing: H.S., A.B., B.K.

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