

FEAR, BURNOUT, AND HEALTH PROFILE IN HEALTHCARE PROFESSIONALS CONTACTING PATIENTS WITH COVID-19: A COMPARATIVE STUDY

COVID-19'LU HASTALARLA TEMASTA BULUNAN SAĞLIK PERSONELLERİNDE KORKU, TÜKENMİŞLİK VE SAĞLIK PROFİLİ: KARŞILAŞTIRMALI BİR ÇALIŞMA

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ABSTRACT

Aim: The aim of this study is to compare the fear, burnout and healthcare profile of healthcare professionals who are in contact with patients with COVID-19 by comparing them with those who are not.

Methods: The fear, burnout and health profiles of the participants were created by filling out the COVID-19 Fear Scale, Maslach Burnout Scale and Nottingham Health Profile to the healthcare professional from all professions who came into contact with patients with COVID-19 in health institutions across the country using online methods. The data obtained were compared with the data obtained by the same evaluation method of healthcare professional from every occupational group working in health institutions across the country, but who have never been in contact with patients with COVID-19.

Results: A total of 300 participants (Study group n=150, Control group n=150) with a mean age of 37.87±8.80 years (22-60 years) were included. in our study. There was no statistically significant difference between the groups in terms of fear of COVID-19 (p>0.05), however, burnout was higher (p<0.05) and quality of life was lower in the group that was in contact with patients with COVID-19 (p<0.05).

Conclusion: Intense working conditions brought by the pandemic and the fear of a disease encountered for the first time in the world the burnout and social isolation of healthcare professionals have further increased and their quality of life has further decreased. Since they are constantly in the hospital environment, healthcare professionals who are not in contact with a patient with COVID-19 also experience fear of COVID-19.

Keywords: Burnout, COVID-19, Fear, Health Profile, Healthcare Professionals.

ÖZET

Amaç: Bu çalışmanın amacı, COVID-19'lu hastalarla temas halinde olan sağlık çalışanlarını, temas halinde olmayanlarla karşılaştırarak korku, tükenmişlik ve sağlık profilini karşılaştırmaktır.

Yöntem: Ülke genelindeki sağlık kurumlarında COVID-19 hastalarıyla temas eden tüm mesleklerden sağlık profesyonellerine COVID-19 Korku Ölçeği, Maslach Tükenmişlik Ölçeği ve Nottingham Sağlık Profili çevrimiçi yöntemlerle doldurularak katılımcıların korku, tükenmişlik ve sağlık profilleri oluşturulmuştur. Elde edilen veriler, ülke genelinde sağlık kurumlarında çalışan ancak hiç COVID-19'lu hasta ile teması olmayan her meslek grubundan sağlık profesyonelinin aynı değerlendirme yöntemleriyle elde edilen verilerle karşılaştırıldı.

Bulgular: Çalışmamıza yaş ortalaması 37.87±8.80 yıl (22-60 yıl) olan toplam 300 katılımcı (Çalışma grubu n=150, Kontrol grubu n=150) dâhil edildi. COVID-19 korkusu açısından gruplar arasında istatistiksel olarak anlamlı fark yoktu (p>0.05), ancak COVID-19 hastalarıyla temas eden grupta tükenmişlik daha yüksek (p<0.05), yaşam kalitesi daha düşüktü (p<0.05).

Sonuç: Pandeminin getirdiği yoğun çalışma koşulları ve dünyada ilk kez karşılaşılan bir hastalık olmasının getirdiği korku, sağlık çalışanlarının tükenmişliğini ve sosyal izolasyonunu daha da artmış ve yaşam kalitelerini daha da düşürmüştür. Sürekli hastane ortamında buldukları için COVID-19'lu bir hastayla teması olmayan sağlık çalışanları da COVID-19 korkusu yaşamaktadır.

Anahtar Kelimeler: COVID-19, Sağlık Profesyonelleri, Sağlık Profili, Tükenmişlik, Korku.

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Bu makaleye atf yapmak için / Cite this article: Şen Tekin Ş, Yazar F, Tekin F. (2022). Fear, Burnout, and Health Profile in Healthcare Professionals Contacting Patients with COVID-19: A Comparative Study. *Gevher Nesibe Journal of Medical & Health Sciences*, 7(20), 165-175. <http://dx.doi.org/10.5281/zenodo.7133638>

INTRODUCTION

A significant number of healthcare professionals in our country, as well as all over the world, have worked in direct contact with COVID-19 (Coronavirus Disease-2019) patients, even during the periods when the disease itself and its effects were not fully known and feared the most. During the epidemic intensifying, healthcare professionals worked for more than normal hours, their leave was canceled, and they were even prohibited from resigning from time to time. All these processes, as understood from the literature, created a feeling of fear (Yakut, et al., 2020.) and burnout (Arpacioğlu, et al., 2021) in healthcare professional and reduced their quality of life (Suryavanshi, et al., 2020; Guida & Carpentieri, 2021). However, in the current literature, the situation of these parameters in healthcare professionals who are facing these patients and those who do not have been compared. For this reason, results could not be obtained independent of the fear and burnout caused by being healthcare professional, and the effect of reduced quality of life.

The aim of this study is to compare the fear, burnout and healthcare profile of healthcare professionals who are in contact with patients with COVID-19 by comparing them with those who are not.

MATERIALS AND METHODS

This study was carried out at the Faculty of Physical Therapy and Rehabilitation of Pamukkale University, in the light of data obtained by online methods, between January and February 2022. Compliance of the study with ethical principles was accepted by the University Medical Ethics Committee with the date 28.12.2021 and number E-60116787-020-149483.

Study design

The fear, burnout and health profiles of the participants were created by filling out the COVID-19 Fear Scale, Maslach Burnout Scale and Nottingham Health Profile to the healthcare professional from all professions who came into contact with patients with COVID-19 in health institutions across the country using online methods. The data obtained were compared with the data obtained by the same evaluation method of healthcare professional from every occupational group working in health institutions across the country, but who have never been in contact with patients with COVID-19.

Demographic data form

It is the form that contains information such as age, gender, occupation and unit of work of the participants.

The Fear of COVID-19 Scale

Developed by Ahorsu et al. (2020) and aims to determine the level of fear in the pandemic process. The level of fear is scored based on the answers given to the questions in the scale consisting of 7 questions, higher scores indicate more fear of COVID-19 (Ahorsu et al., 2020; Satici et al., 2021). The Turkish adaptation of the scale was made by Seller et al. (2020).

Maslach Burnout Inventory

The first original version of this inventory was published by Christina Maslach and Susan E. Jackson in 1981 (Maslach & Jackson, 1981). Its Turkish adaptation was made by Ergin (Ergin, 1992). Maslach Burnout Scale consists of 22 items. It measures burnout in three dimensions: Emotional Exhaustion (high scores mean high burnout), Depersonalization (high scores mean high burnout), and Personal Success (low scores mean high burnout). Likert type scaling was used in scoring, with the lowest being “Never=0” and the highest “Always=4”. Separate scoring is obtained for each subscale.

Nottingham Health Profile

It is a valid and frequently used general scale in the evaluation of health-related quality of life (Hunt, et al., 1981). Turkish validity and reliability were determined by Küçükdeveci et al. made by (Küçükdeveci, et al., 2000). NHP questions the health problems perceived by the person and the effects of the problems on daily life. There are 6 subscales in the questionnaire, which consists of a total of 36 items. Each item is scored as yes/no. Each subscale score is calculated between 0-100 with a special formula considering the item weights. Low scores are indicative of high quality of life.

Statistical analysis

Power analysis, performed by similar studies in the literature, showed that 90% power would be reached with 95% confidence when at least 194 participants (97 participants in each group) were included in the study (Barut, et al., 2021). Statistical analyzes were performed using SPSS v25.0 software. Continuous variables were defined as mean ± standard deviation, and categorical variables were defined as numbers and percentages. Independent Groups t-test was used to compare the groups, as the data fit the normal distribution. p value ≤ 0.05 was considered statistically significant.

RESULTS

A total of 300 participants (Study group n=150, Control group n=150) with a mean age of 37.87±8.80 years (22-60 years) were included in our study. The mean professional experience of the participants was 16.28±9.34 (1-35 years) years. Demographics shown in Table 1.

Table 1. Demographic Information

		Study Group		Control Group	
		n	%	n	%
Gender	Male	36	24	27	18
	Female	114	76	123	82
Occupation	Physiotherapist	15	10	49	32.7
	Nurse	89	59.3	59	39.3
	Physician	15	10	2	1.3
	Technician	25	16.7	21	14
	Medical secretary	6	4	19	12.7
Unit	Department	25	16.7	58	38.7
	Policlinic	13	8.7	29	19.3
	Inpatient	32	21.3	11	7.3
	Intensive Care	17	11.3	2	1.3
	Family Medicine	63	42	50	33.4

In Table 2, the mean and minimum-maximum values of the participants' COVID-19 Fear Scale, Maslach Burnout Scale and Nottingham Health Profile scores are given.

According to Table 2, the COVID-19 fears of both groups are very close to each other. In addition, whether or not they have received a patient with COVID-19, healthcare professionals face the problem of burnout and their health-related quality of life decreases.

Table 2. Evaluation Results of the Participants

		Study Group			Control Group		
		X±SD	Min	Max	X±SD	Min	Max
The Fear of COVID-19 Scale		17.98±7.80	7	35	17.97±7.02	8	35
Maslach Burnout Inventory	Emotional Exhaustion	22.07±9.79	0	36	19.08±9.04	0	36
	Depersonalization	7.83±4.94	0	20	6.64±4.57	0	20
	Personal Accomplishment	13.30±5.33	3	28	16.80±5.98	0	27
	Total	43.20±15.12	8	84	42.52±16.24	0	82
Nottingham Health Profile	Pain	39.81±32.99	0	100	35.00±32.73	0	100
	Emotional Reaction	41.09±5.76	0	100	36.21±30.96	0	100
	Sleeping	42.92±33.74	0	100	38.45±35.02	0	100

Social Isolation	17.87±26.03	0	100	16.67±26.13	0	100
Physical Activity	32.41±28.58	0	100	29.84±28.64	0	100
Energy Level	31.95±30.57	0	100	27.01±27.63	0	100
Total	202.09±145.98	0	600	183.20±143.90	0	600

X: Mean SD: Standard Deviation

In Table 3, COVID-19 fears, burnout and health-based quality of life of the groups were compared.

According to Table 3, there was no significant difference for fear of COVID-19 ($p>0.05$).

Emotional burnout and depersonalization of healthcare professional who have been in contact with patients with COVID-19 are higher than those of healthcare professional who have not been in contact with these patients, and this difference is significant ($p<0.05$). In terms of personal achievement, the healthcare professionals in the study group are behind ($p<0.05$).

Emotional reactions, sleep, social isolation and energy-based health-based quality of life of the participants in the study group were significantly lower than the participants in the control group ($p<0.05$). There was no significant difference between the groups in pain and physical activity-based health-based quality of life ($p>0.05$).

Table 3. Comparison of Evaluation Results between Groups

		F	t	df	p
The Fear of COVID-19 Scale		2.825	0.016	298	0.129
Maslach Burnout Inventory	Emotional Exhaustion	1.658	2.831	298	0.018*
	Depersonalization	2.085	1.340	298	0.047*
	Personal Accomplishment	2.138	-3.291	298	0.045*
	Total	1.290	3.031	298	0.037*
Nottingham Health Profile	Pain	1.026	2.004	298	0.871
	Emotional Reaction	7.834	2.005	298	0.015*
	Sleeping	1.805	1.876	298	0.030*
	Social Isolation	1.012	1.066	298	0.013*
	Physical Activity	1.011	1.477	298	0.215
	Energy Level	2.434	2.170	298	0.020*
	Total	1.290	3.009	298	0.031*

DISCUSSION

In general, according to the findings obtained in our research; healthcare professionals are faced with the problem of burnout and there have been significant changes in their health-related quality of life. COVID-19 fears were found to be very close to each other in both groups. Emotional exhaustion and depersonalization of healthcare professionals who were in contact with patients with COVID-19 were found to be higher than those of healthcare professional who had not been in contact with these patients. In personal achievement, the healthcare professional in the study group were found to be more unsuccessful.

In a study, it was reported that 19% of 500 participants experienced depression, 14% experienced anxiety, and 25.4% experienced emotional burnout (Choi, et al., 2020). In a study conducted with 1210 participants during the COVID-19 epidemic in China, it was found that women were more negatively affected by the psychological outcomes of the epidemic compared to men; it was determined that the scores they obtained from the measures of stress, anxiety and depression were significantly higher (Wang, et al., 2020).

In our study, we did not use a special assessment method for anxiety and depression, but the fact that the burnout questionnaire and quality of life questionnaires we used had questions close to these two parameters showed that anxiety and depression were also present in our cases.

In the study, in which the relationship between fear of COVID-19 and burnout syndrome was examined and 244 cases were included, it was revealed that the participants experienced a moderate fear of COVID-19. Healthcare professionals are more vulnerable to psychological symptoms such as fear, anxiety, depression and burnout. Because they are facing with COVID-19 positive cases and/or definitive diagnosis, or in the same environment with such patients/patient relatives. In addition, excessive workload, isolation, lack of protective equipment and high infection rates can increase such psychological burdens (Kang, et al., 2020).

It was found that healthcare professionals who had to use the same protective equipment for a week had a higher level of fear of COVID-19 in Bangladesh (Sakib, et al., 2021). In another study in China, it was reported that more than 70% of healthcare professionals experienced fear in pandemic process (Lu, et al., 2020). Various studies report an above-average and high level of fear of COVID-19 (Bakioglu, et al., 2021; Labrague, et al., 2021; Ozgunay, et al., 2021). Therefore, we think that they differ from the national and international literature in general.

There was no significant difference between the descriptive qualities of the hospital workers within the scope of our study, consisting of gender, age, marital, education, professional title, and the Covid-19 fear scale. Therefore, this situation is important in that it indicates that different descriptive variables can be considered in terms of fear of COVID-19 for the sample group under consideration. Thus, no difference was observed for COVID-19 fear in both groups. We think that the reason for this is that the pandemic is no longer as intense as it was in the first beginning and that healthcare professionals are approaching more professionally. We show parallelism with the literature on burnout syndrome. In our results, people with burnout syndrome were found to be higher in the group that had contact with COVID-19 cases and worked intensively. The healthcare professionals in that group have devastating life experiences such as intense work pace, encountering death cases every day, witnessing the death of their loved ones or relatives we think as the reason of this.

In a study conducted on physicians in Egypt, it was reported that 20% of the participants had a high level of emotional exhaustion, 71% had a high level of depersonalization, and 39% had a low level of personal achievement (Abdelghani, et al., 2020). In our study, personal achievement was found to be lower in the study group. This because of the process is abrasive in our opinion. Thus, it is possible to state that there are similar and different research results with the results of the current study in the literature.

In their study, Zhang et al. (2020) detected insomnia symptoms during the COVID-19 pandemic of more than 1/3 of healthcare professional. In many studies in the literature, it has been determined that a significant portion of healthcare professionals exhibit insomnia at the clinical level (Lai, et al., 2020; Liu, et al., 2020; Rossi, et al., 2020; Zhang, et al., 2020). Similarly, we found that the COVID-19 fear affected the energy level, emotional reaction, social isolation, sleep sub-dimensions and total quality of life of quality of life.

There is no consistency in the studies on physical activity, which is one of the factors that can affect the pain that individuals may experience. There was no significant difference in pain and physical activity in both groups. This may not only related to the pandemic period, but that both groups have a history in terms of pain and physical activity.

Our study is the first to examine the relationship between fear of COVID-19, burnout and quality of life comparatively among healthcare professionals. Our limitation is the lack of group homogeneity for the titles of healthcare professionals.

CONCLUSION

In conclusion, although there is no pandemic process, healthcare professionals are faced with burnout and their quality-of-life decreases. When the intense working conditions brought by the pandemic and the fear of a disease encountered for the first time in the world are added to this, the burnout and social isolation of healthcare professionals have further increased and their quality of life has further decreased. Since they are constantly in the hospital environment, healthcare professionals who are not facing a patient with COVID-19 also experience fear of COVID-19.

Acknowledgement

The authors would like to thank the participants who voluntarily participated in the study.

Conflict of Interest

The authors have no conflicts of interest to declare.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

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