

DETERMINING LEVELS OF FEAR OF COVID-19 IN 112 HEALTHCARE PROFESSIONALS

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ABSTRACT

Objective: The purpose of the study is to assess the levels of fear of Covid-19 in 112 healthcare professionals.

Material-Method: This descriptive study was conducted with 171 healthcare professionals working at 112 Emergency Healthcare Services in Mardin, Turkey. A descriptive characteristics form and the Covid-19 fear scale were used to collect data.

Results: Most of the participants stated that protective equipment was sufficient, they had received preventive trainings on Covid-19, some of their colleagues were infected with Covid-19, and they were still as concerned about Covid-19 as they were when it first broke out. The fear of Covid-19 mean scores of the professionals were 18.53±6.43 (moderate level).

Conclusion: In the research, it was determined that the fear levels of 112 healthcare workers were affected during the Covid-19 pandemic process. In this process, in order to protect and improve the mental health of healthcare professionals, psychotherapy, methods of coping with stress and anxiety, etc., can be supported by providing online training and sessions.

Keywords: Covid-19, Fear, 112 Healthcare Professionals

112 SAĞLIK ÇALIŞANLARININ COVID-19 KORKU DÜZEYLERİNİN BELİRLENMESİ

ÖZ

Amaç: Araştırmanın amacı, 112 sağlık çalışanlarının Covid-19 korku düzeylerini değerlendirmektir.

Materyal-Metot: Tanımlayıcı tipte yapılan araştırma Mardin ili 112 Acil Sağlık hizmetlerinde çalışan 171 sağlık çalışanı ile yapıldı. Verilerin toplanmasında Tanıtıcı Özellikler Formu ve Covid-19 Korku Ölçeği kullanıldı.

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Bulgular: Araştırmaya katılan sağlık çalışanlarının çoğu koruyucu ekipmanın yeterli olduğunu, Covid-19'a yönelik koruyucu eğitimler aldıklarını, çalışma arkadaşlarından Covid-19'a yakalanan olduğunu, Covid-19 ile ilgili ilk gün kadar endişe duyduklarını ifade etti. Araştırma da sağlık çalışanlarının Covid-19 korku ortalamalarının 18.53 ± 6.43 (orta düzey) olduğu belirlendi.

Sonuç: Araştırmada, Covid-19 pandemi sürecinde 112 sağlık çalışanlarının korku düzeylerinin etkilendiği belirlendi. Bu süreçte sağlık çalışanlarının ruh sağlığını korumak ve geliştirmek için psikoterapi, stres ve anksiyete ile baş etme yöntemleri vb. online eğitimler, oturumlar sağlanarak desteklenebilir.

Anahtar Kelimeler: Covid-19, Korku, 112 Sağlık Çalışanı

INTRODUCTION

The new Coronavirus (COVID-19) pandemic, which has spread across the world after its outbreak in Wuhan, China, is one of the biggest threats our planet has faced in recent years (Ovalı, 2020). This infection – which has affected more than 170 countries for over 6 months – continues to affect adversely everything from economy to psychology (Ankaralı et al., 2020). Covid-19 can spread through droplets, cause very severe respiratory diseases, and has a high transmission rate (Ferioli, 2020). Healthcare professionals are at the forefront in fighting against infectious diseases; this puts them at a greater risk of infection (Li, 2018). Healthcare professionals who provide pre-hospital emergency medical care are among the first members of the society who get exposed to infection during pandemics. In particular, recent global events such as severe acute respiratory syndrome (SARS) pandemic indicated that pre-hospital healthcare professionals were one of first healthcare professionals who were infected during such events (Watt et al., 2010). One study involving 112 emergency healthcare professionals (2014) revealed that they experienced stress on the job due to their work system, the risk of disease transmission, insufficient number of staff members and materials, the inability to communicate with their colleagues, the fear of making mistakes, and vital decisions requiring quick thinking (Lanctot and Guay, 2014).

Stress is a potential concern for healthcare professionals (Kushal et al., 2018). Anxiety and depression are common among paramedic and emergency medicine technicians who work in stressful environments due to the nature of their profession and have to act quickly and make quick decisions (Rahimi et al., 2015). Covid-19 increases anxiety, depression, post-traumatic stress disorder (TSSB), and negative social behavior, and therefore poses a serious threat to mental health around the world (Shigemura et al., 2020). Variables such as high mortality, various unknowns in the treatment of Covid-19 patients, and long working hours are associated

with anxiety (Adams and Walls, 2020). Moreover, the ever-growing number of suspicious and confirmed Covid-19 cases put pressure and worry on healthcare workers (Adams and Walls, 2020; Lai et al., 2020). Many experts believe that healthcare professionals need to protect their mental health to better control infectious diseases. However, the issue of how-to best approach during the pandemic remains uncertain (Chen et al., 2020).

Even though pre-hospital emergency medical professionals are among the first to be exposed to infectious diseases during outbreaks, most studies have included nurses, doctors, and even hospital management when examining attitudes and behaviors toward disasters and emergency interventions (Gullion, 2004; Alexander and Wynia, 2003; Cowan et al., 2005; Balicer et al., 2006; Ehrenstein et al., 2006). This study aimed to determine the levels of fear of Covid-19 in 112 healthcare professionals who work in the front line of health services.

1. MATERIALS AND METHODS

Approval from the Scientific Research and Publication Ethics Committee of Health Sciences in Artuklu University (APPROV NO: 2020/4-6) and legal permission from the related institution were obtained in order to conduct the study. The population of this descriptive study consisted of 318 healthcare professionals working in 112 emergency health services in Mardin, Turkey. It was aimed to reach the whole population without using sample selection. 100 healthcare professionals were excluded on the grounds that they disagreed to participate in the study. 47 healthcare professionals were also excluded since they failed to fully fill out the data collection forms. Therefore, the study was conducted on the remaining 171 healthcare professionals.

A descriptive characteristics form and the Covid-19 fear scale were used for the purposes of data collection.

Descriptive Characteristics Form: This form features 15 questions that ask the participants about their age, gender, marital status, working year, chronic illness, level of education, personal protective equipment, how they approach Covid-19 patients, and whether or not they were still concerned about Covid-19 as they were when it first broke out.

Covid-19 Fear Scale: The scale was developed by Ahorsu et al., (Ahorsu et al., 2020), Haktanır et al., adapted this scale into Turkish (Haktanır et al., 2020). Being a five-point Likert type scale, it consists of seven questions. Total score of all of the items gives the *Fear of Covid-19 Total Score*. Total score varies between 7 and 35 points. High scores obtained from the scale

indicate high level of Fear of Covid-19. Cronbach's alpha coefficient of the scale was calculated as 0.86. In this study, the Cronbach's alpha coefficient of the scale was determined to be 0.90.

The researcher collected all of the data online. The data collection tools were also prepared online. It took 15 and 20 minutes to fill the forms out.

SPSS 26.0 was used to analyze the data. $p < 0.05$ was accepted as significant. Descriptive statistics (percentage, mean) alongside Kruskal-Wallis, Analysis of Variance, Mann-Whitney-U test, and independent samples t-test for comparison of the descriptive characteristics with the scale mean scores were used.

2. RESULTS

In the study, 45.6% of the participants were aged between 18 and 25 years, 54.4% were male, 53.2% were single, 52.6% had an associate degree, 41.5% were working for 1-5 years, and 89.5% did not suffer from any chronic disease. 65.5% of the participants expressed that the protective equipment they used was sufficient when dealing with Covid-19 patients. 71.3% stated that they received in-service training about Covid-19. 53.2% stated that they knew some colleagues who were infected with Covid-19, in their institution. 30.4% expressed that they provided directly care to Covid-19 patients. 50.3% expressed that they were still concerned about Covid-19 as when it first broke out (Table 1).

The participants' Covid-19 fear scale total score was 18.53 ± 6.43 . Based on total mean score of the scale, the fear of Covid-19 of the pre-hospital healthcare professionals were at moderate level (Table 2).

When the descriptive characteristics of the participants were compared with total mean scores of Covid-19 fear scale, it was determined that there was a statistically significant difference between their gender, presence of chronic disease, the concern over Covid-19 as when it first broke out, and Covid-19 fear scale total mean score ($p < 0.05$). There was no statistically significant difference between their age, marital status, level of education, working duration, status of receiving Covid-19 training, status of knowing colleagues who were infected with Covid-19, status of providing directly care to Covid-19 patients, and their Covid-19 fear scale total mean scores ($p > 0.05$) (Table 3).

Table 1. Distribution of the Descriptive Characteristics of the Healthcare Professionals (s=171)

Descriptive Characteristics	n	%
Age Groups		
18-25	78	45.6
26-35	69	40.4
36-45	11	6.4
46 and over	13	7.6
Gender		
Female	78	45.6
Male	93	54.4
Working Duration		
Less than 1 year	28	16.4
1-5 years	71	41.5
6-10 years	41	24.0
10 years and more	31	18.1
Marital Status		
Married	80	46.8
Single	91	53.2
Chronic Disease		
Yes	18	10.5
No	153	89.5
Sufficiency of Protective Equipment		
Sufficient	112	65.5
Partially sufficient	51	29.8
Insufficient	8	4.7
Level of Education		
High School	47	27.5
Associate	90	52.6
Undergraduate and Higher	34	19.9
In-service Training on Covid-19 Prevention Methods		
Yes	122	71.3
No	49	28.7
Have any of your colleagues in your institution infected with Covid-19?		
Yes	91	53.2
No	46	26.9
Unknown	34	19.9
Did you provide directly care Covid-19 patients?		
Yes	52	30.4
No	79	46.2
Unknown	40	23.4
Are you still concerned about Covid-19 as when it first broke out?		
Yes	86	50.3
No	85	49.7
TOTAL	171	100.0

Table2. Total Score of Covid-19 Fear Scale

Scale	Min-Max Score	Mean±SD
Covid-19 Fear Scale	7-35	18.53±6.43

Table 3. Comparison of the Descriptive Characteristics and Covid-19 Fear Scale Total Mean Scores of the Pre-hospital Healthcare Professionals

Descriptive Characteristics		n	%	Covid-19 Fear Scale Total Score
Age	18-25	78	45.6	19.22±6.61
	26-35	69	40.4	18.28±6.20
	36-45	11	6.4	16.27±5.79
	46 and above	13	7.6	17.62±7.19
	Test Value Significance			KW=2.293 p=0.514
Gender	Female	78	45.6	20.82±5.97
	Male	93	54.4	16.60±6.20
Test Value Significance			t=4.503 p=0.000	
Marital Status	Married	80	46.8	18.00±6.13
	Single	91	53.2	18.99±6.69
Test Value Significance			t=-1.002 p=0.318	
Working duration	Less than 1 year	28	16.4	18.89±7.40
	1-5 years	71	41.5	18.49±6.18
	6-10 years	41	24.0	18.73±6.39
	10 years and more	31	18.1	18.00±6.43
	Test Value Significance			F=0.148 p=0.931
Chronic Disease	Yes	18	10.5	21.56±6.27
	No	153	89.5	18.17±6.38
Test Value Significance			MWU=954.00 p=0.034	
Level of Education	High school	47	27.5	18.85±7.28
	Associate	90	52.6	18.46±6.03
	Undergraduate and higher	34	19.9	18.26±6.42
	Test Value Significance			F=0.086 p=0.975
Are you still as concerned about Covid-19 as when it first broke out?	Yes	86	50.3	20.49±6.51
	No	85	49.7	16.54±5.74
Test Value Significance			t=4.200 p=0.000	
Status of receiving in-service training on Covid-19 prevention methods	Yes	122	71.3	15.47±4.99
	No	49	28.7	16.46±6.27
Test Value Significance			t=-1.090 p=0.277	
Have any of your colleagues in your institution infected with Covid-19?	Yes	91	30.4	16.01±5.94
	No	46	46.2	15.68±5.29
	Unknown	34	23.4	15.57±4.94
	Test Value Significance			F=0.090 p=0.914
Have you provided directly care to Covid-19 patients?	Yes	52	30.4	15.42±5.05
	No	79	46.2	15.84±5.29
	Unknown	40	23.4	19.87±8.99
	Test Value Significance			F=2.592 p=0.078

4. DISCUSSION

Undoubtedly, healthcare professionals are among the most affected groups by the coronavirus pandemic, which has affected not only Turkey but the entire world. This pandemic has caused serious mortality in many countries and has affected their respective societies psychologically. Likewise, healthcare professionals who are at the forefront in the fight against this pandemic – are also mentally affected. This study, which was conducted to determine the fear levels of the 112 Healthcare Professionals during Covid-19 pandemics, was discussed with the literature.

In this study, most of the participants were aged between 18 and 25 years, male, single, were working for 1- 5 years, and had an associate degree. Moreover, most of them did not suffer from any chronic disease, they received in-service training about Covid-19, they experienced fear when implementing intubation/Artificial Manual Breathing Unit (AMBU), and they were still as concerned about Covid-19 as when it first broke out.

One study conducted with operating room workers revealed that 73.6% of the participants had no chronic disease, and 55.4% received training about Covid-19 (Köksal et al., 2020). In a study conducted with healthcare professionals in China, it was determined that 74.2% of the participants were single, 32.8% were male, and 30.8% were working for less than 5 years (Xiaoa et al., 2020). In their study, Du et al. stated that 32.1% of the healthcare professionals had an associate degree (Du et al., 2020). In their study, Liu et al., stated that 75.39% of the healthcare professionals were aged between 18 and 39 years and 36.13% were single (Liu et al., 2020). The data of the present study are compatible with those reported in the literature.

Another study featuring 230 physicians and nurses working in the front line revealed that 23% of the participants suffered from clinical anxiety symptoms and 27.4% developed PTSD (post-traumatic stress disorder) (Huang et al., 2020). In a study conducted on 1,257 employees, depression (minor level, 35.6%) and anxiety (mild level, 32.2%) were both observed (Lai et al., 2020). Another study investigating the workload of 180 clinical nurses reported that the participants' stress levels were high (Mo et al., 2020). In another study featuring the professionals working in Covid-19 units in China it was found that psychological problems developed more among nurses than physicians, and more among women than men (Huang et al., 2020). In their study, Temsah et al. found that 20% of healthcare professionals suffered from moderate level of anxiety (Temsah et al., 2020). Xiaoa et al., determined in their study that anxiety levels of female healthcare professionals were higher than their male counterparts (Xiaoa et al., 2020). In their study, Koksak et al., revealed that anxiety levels were significantly

higher among female healthcare professionals who suffered from at least one chronic illness (Köksal et al., 2020). The results of the study are compatible with those reported in the literature.

Most of the studies have been conducted with hospital staff. The number of studies conducted on pre-hospital healthcare professionals during the Covid-19 pandemic is limited. It can be asserted that pre-hospital healthcare professionals who have been working on the field during the pandemic tend to experience high anxiety. This is because that it remains unknown if the patient who is intervened in the field is diagnosed with Covid-19. It is determined mostly if suspected patients treated in hospital environment get a definite diagnosis as a result of the tests performed in hospital. Therefore, this uncertainty is likely to cause pre-hospital healthcare professionals to suffer from more anxiety and fear. All healthcare professionals are afraid of being infected with this disease and then infecting those in their immediate circle. Many of them remain separate from their families and children for weeks. This in turn causes them to experience more stress. In their study, Du et al. found that healthcare professionals experienced fear and concerns due to the possibility of being infected with virus and infecting their friends and their families (Du et al., 2020).

CONCLUSION

To conclude, undoubtedly, healthcare professionals work under very intense and stressful working conditions. As it stands, they already endure extreme stress under normal circumstances; however, this stress has doubled during the Covid-19 pandemic. They can be considerably motivated especially through conducting necessary practices for them during the pandemic to protect and develop their mental health, supporting them with practices such as financial promotions, regulating working conditions and hours, ensuring the sufficiency of protective equipment and establishing an effective communication with people working in management units.

Author Contributions

Concept SYC, BDB; Design SYC, BDB; Materials SYC, BDB; Data Collection&/or Processing SYC, BDB; Analysis/ Interpretation SYC, BDB; Literature Search SYC, BDB; Writing SYC, BDB.

Conflict of Interest

There is not conflict of interest.

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