Compassion fatigue and burnout in Turkish pediatric emergency nurses during the COVID-19 pandemic

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ABSTRACT

Purpose: This study was conducted to determine compassion fatigue and burnout in nurses working in the pediatric emergency department (PED) during the COVID-19 pandemic in Turkey.
Design and methods: This descriptive and cross-sectional study was conducted with 164 nurses working in the PED and following the social media platforms of the Emergency Nurses Association between September 1, 2020, and January 1, 2021. Data were collected using the online survey method with the Descriptive Data Form, Maslach Burnout Inventory (MBI), and Compassion Fatigue-Short Scale (CF-SS).
Results: Pediatric emergency nurses reported that they experienced high emotional exhaustion (28.25 ± 6.05) and depersonalization (11.89 ± 2.39), low personal accomplishment (17.98 ± 3.12), and moderate compassion fatigue (4.99 ± 1.43).
Conclusion: Pediatric emergency nurses had high levels of burnout and moderate levels of compassion fatigue during the pandemic in Turkey. To prevent any long-term negative effects of the pandemic, addressing the physiological, psychological, and psychosocial needs of nurses should be prioritized.
Practical implications: Compassion fatigue and burnout can affect the quality of care provided by nurses, but also negatively affect their well-being and quality of life during the pandemic. Therefore, the development of interventions to reduce compassion fatigue and burnout can help manage these symptoms.

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Introduction

Coronavirus disease (COVID-19) has spread throughout the world since its outbreak in December 2019 (WHO, 2020). Throughout this ongoing process, there has been an increase in the number of cases in Turkey as well as throughout the world. Early in the pandemic, children were considered less likely to get infected than adults and showed fewer clinical symptoms (Ludvigsson, 2020; She et al., 2020). However, over time, the number of children diagnosed with COVID-19 increased and they had a mild or moderate disease course (Dong et al., 2020; Wu et al., 2020).

Patients infected with COVID-19 primarily visit the emergency department of a hospital (Kocher & Macy, 2020). Emergency nurses are front-line healthcare professionals directly involved in the diagnosis, care, treatment, and management of COVID-19 patients. This causes them to be susceptible to infection and to experience high levels of stress (Butera et al., 2021). In addition to working in a high-risk environment, the additional burdens brought by the pandemic, stress experienced while caring for special patients, long-term use of protective equipment, long shifts, increased workload, disruptions in sleep and work-life balance, and physical and mental fatigue may cause burnout (An et al., 2020) and compassion fatigue in nurses (Alharbi et al., 2020).

Compassion fatigue (CF) is defined by Joinson as "a unique form of burnout that affects caregivers." (Joinson, 1992). CF, or secondary traumatic stress, occurs when nurses get to know patients experiencing trauma and pain closely, identify with patients' conditions, use all their energy to care for the patients, and consequently neglect their own needs (Gallagher, 2013). As a result, nurses suffer physical, emotional, social, and spiritual burnout and experience a decline in compassion, empathy, willingness to care, skills, and energy (Coetzee & Klopper, 2010).

Burnout is defined by Maslach as "feelings of fatigue, helplessness, and hopelessness, the development of a negative self-concept, negative attitudes towards the profession, and other people, and physical, emotional, and mental exhaustion syndrome." (Maslach et al., 2001). Burnout has three dimensions: emotional exhaustion (EE), depersonalization (DP), and a decrease in personal accomplishment (PA). The

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being overburdened by work and physically and emotionally exhausted. Individuals feel tired and emotionally burned-out. They lose their desire to care for their patients. Nurses who display DP exhibit attitudes and behaviors devoid of emotion toward their patients. During this period, there is a common sense of boredom. Nurses carry out work in a mechanical fashion. Inadequate PA is the inability of nurses to perform their duties properly because they feel inadequate and powerless (Maslach et al., 2001; Rios-Risquez & García-Izquierdo, 2016).

In the literature, nurses who care for patients and display an empathetic approach during the pandemic experience burnout (Arpacıoglu et al., 2021; Chen et al., 2021) and CF (Labrague & Santos, 2021). These changes in the mental health of nurses can negatively affect their professional and moral values (Hooper et al., 2010). Job dissatisfaction, inappropriate decision making, loss of empathy, decrease in helping capacity (Hooper et al., 2010), not showing the necessary attention to the patient, and an increase in the tendency to make medical mistakes can be seen in nurses (Nantsupawat et al., 2016).

Nurses who work with children, one of the vulnerable and sensitive groups during the COVID-19 pandemic, also face the difficulties caused by the pandemic and experience many emotions such as fear, stress, and anxiety (Góes et al., 2020). This situation also poses a risk for them to experience CF and burnout. Pediatric emergency department (PED) nurses, one of the pediatric nurse groups working on the front lines during the pandemic, are the health professionals who first meet, care for, and treat patients infected with a new infectious disease. Therefore, they are at risk of developing CF and burnout and may need psychological support or interventions to help them manage their condition (Lai et al., 2020). During the COVID-19 pandemic, which continues to affect the world, it is particularly important to know the situation of PED nurses, who provide critical and emergency care services. The aim of this research was to explore CF and burnout in PED nurses during the COVID-19 health crisis in Turkey.

Materials and methods

The research is a descriptive and cross-sectional study to determine the prevalence of CF and burnout in PED nurses during the COVID-19 pandemic. The universe of the study was planned to be all PED nurses working in Turkey between 1 September and 31 December 2020. Because of the pandemic conditions, social media platforms were thought to be the most effective way to reach the universe. The Turkish Emergency Nurses Association was contacted, and their support was received for publishing the survey on social media platforms. The sample was 400 nurses who were active on social media and represented approximately 950 PED nurses working in Turkey. The sample size was calculated as 170 individuals using Cochran's sample size formula with an alpha error of 0.05 at the 95% confidence level ($n0 = Z^2 \times p \times q / e^2$) (Singh & Masuku, 2014). According to the known population sample formula, at least 145 nurses were needed for this study [$n = n0 / [1 + \{(n0-1) / N\}]$ (Singh & Masuku, 2014). This study's participants included 164 nurses. The power of the research was 97%.

Data collection tools

Descriptive Information Form, Maslach Burnout Inventory (MBI), and Compassion Fatigue-Short Scale (CF-SS) were used to collect data.

Descriptive information form

This form was developed by the researchers according to the relevant literature (An et al., 2020) and was evaluated by two experts in the field of pediatric nursing. The form contained 19 multiple choice questions (Table 1) to determine the descriptive characteristics of the nurses.

Table 1
Nurses' descriptive characteristics (N = 164).

Descriptive Characteristic	n	%
Gender		
Female	103	62.8
Male	61	37.2
Age		
20–30 years	96	58.6
31–40 years	51	31.1
≥41 years	17	10.4
Education status		
High school	31	18.9
Associate degree	22	13.4
Undergraduate	101	61.6
Postgraduate	10	6.1
Working time in PED		
0–1 years	52	31.7
2–10 years	87	53
≥11 years	25	15.2
Work shift		
Day shift	26	15.9
Night shift	138	84.1
Predominant shift time		
08.00–16.00	26	15.9
16.00–08.00	42	25.6
08.00–08.00	96	58.5
Average number of patients given daily care (suspected or diagnosed with COVID-19)		
≤5	59	36
6–15	72	43.9
≥16	33	20.1
Contact with someone suspected and/or diagnosed with COVID-19		
No	63	38.4
I don't know	17	10.4
Yes	84	51.2
Nurse or a loved one diagnosed with COVID-19		
No	89	54.3
Yes	75	45.7
Worried about getting COVID-19 in the department		
No	35	21.3
Yes	129	78.7
Worried about infecting someone with COVID-19		
No	33	20.1
Yes	131	79.9
Opinion about break times during the pandemic		
I'm insufficient	87	53
I'm undecided	36	22
I'm sufficient	41	25
Opinion about measures in the work environment		
I find it insufficient	69	42.1
I'm undecided	14	8.5
I find it enough	81	49.4
Used PPE in the department		
Mask	154	93.9
Glasses	59	36
Glove	159	97
Face Shield	97	59.1
Overalls	19	11.6
Bonnet	50	30.5
Opinion about PPE to protect from COVID-19		
No	57	34.7
I'm undecided	17	10.4
Yes	90	54.8
Fear of working during the pandemic		
No	65	39.6
Yes	99	60.4
Considered quitting the job during the pandemic		
No	68	41.5
I'm undecided	10	6.1
Yes	86	52.4
Most needed during the pandemic		
Healthy eating	54	32.9
Quality sleep	53	32.3
Accommodation place	44	26.8
Cleaning/Hygiene	70	42.7
Financial support	111	67.6
Psychological support	120	73.2
More flexible working hours	57	34.8

Table 1 (continued)

Descriptive Characteristic	n	%
Opinion about the gradual transition to normal life		
I find it early	82	50
I think it's too late	28	17.1
I don't think precautions were taken properly	81	49.4
I don't think that precautions are fully followed	47	28.7
If the measures are followed, I think it will be positive	17	10.4

Maslach Burnout Inventory (MBI)

The MBI is a seven-point Likert-type scale developed by Maslach and Jackson (1981). This measurement tool consists of 22 items and three subscales. Of these subscales, the emotional exhaustion (EE) section consists of 9 items, depersonalization (DP) 5 items, and personal accomplishment (PA) 8 items. Scale items are scored as "1 = never" to "7 = always." The three subscale scores were calculated separately and categorized as low, moderate, or high levels of burnout (EE, low: ≤18, moderate: 19 to 26, high: ≥27; DP, low: ≤5, moderate: 6 to 9, high: ≥10; PA, low: ≤33, moderate: 34 to 39, high: ≥40) (Maslach & Jackson, 1981). The validity and reliability of the Turkish version of the MBI was performed by Ergin (1992), and the reliability coefficients were 0.83 for EE, 0.65 for DP, and 0.72 for PA. The scale, which was a 7-point Likert in its original form, has been changed to a 5-point Likert ("1 = never" to "5 = always") in the Turkish form (Ergin, 1992). In the present study, Cronbach-α coefficients were 0.90 for EE, 0.76 for DP, and 0.78 for PA.

Compassion Fatigue-Short Scale (CF-SS)

The CF-SS was developed by Adams et al. (2006). The scale is a 13-item self-reported questionnaire. Participants are asked to rate the frequency of how often each item applies to themselves on a 10-point Likert scale ranging from 1 to 10 points ("1= rarely/never, 10 = very often"). A higher mean score indicates a higher degree of CF (Adams et al., 2006). The Turkish validity and reliability study was carried out by Dinc and Ekinci (2019). In the study of Dinc and Ekinci, the Cronbach-α coefficient of the scale was 0.87 (Dinc & Ekinci, 2019). It was 0.91 in this study.

Data collection

Data were collected between 1 September and 31 December 2020 using the online survey method on the social media platforms of the Turkish Emergency Nurses Association. The researcher (AA) is a member of the platforms and answered the questions of those who wanted to participate in the research online. Filling out the online questionnaire took approximately 10 min.

Analysis and evaluation of data

Evaluation of the data was done using the SPSS 24 package program. Frequency, percentage, minimum-maximum, and mean and standard deviation were used for the presentation of the descriptive data. For the statistical analysis, the parametric test conditions were examined and the compatibility of the data with a normal distribution was investigated with the Kolmogorov-Smirnov test. In cases where parametric test conditions were met, the Student's t-test was used to compare two groups and One Way Analysis of Variance was used to compare three or more groups. The Tukey test was used for further analysis. Pearson correlation was used to evaluate the relationship between the scales. The significance level was accepted as $p < 0.05$ in all statistical analyses.

Results

Descriptive characteristics

One hundred sixty-four pediatric emergency nurses participated in this study. Nurses were predominantly female ($n = 103$, 62.8%) and over half were between 20 and 30 years of age ($n = 96$, 58.6%) and had completed an undergraduate education ($n = 101$, 61.6%). Most nurses had worked between 2 and 10 years in the PED ($n = 87$, 53%) and night shifts ($n = 138$, 84.1%) and 24-h shifts ($n = 96$, 58.5%) and cared for approximately 6–15 patients per day ($n = 72$, 43.9%). More than half of nurses found PPE sufficient to protect from COVID-19 ($n = 90$, 54.8%), but most nurses reported being worried about getting COVID-19 in the department ($n = 129$, 78.7%) and infecting someone with it ($n = 131$, 79.9%). PED nurses most needed financial ($n = 111$, 67.6%) and psychological support ($n = 120$, 73.2%) during the pandemic. The demographic characteristics of the nurses are reported in Table 1.

Mean scores of Nurses' Maslach burnout inventory sub-dimensions

Table 2 shows the prevalence of burnout among nurses. In general, nurses in this study reported high levels of EE ($n = 84$, 51.4%) and DP ($n = 97$, 58.9%) but low levels of PA ($n = 147$, 89.6%).

Comparison of the MBI and CF-SS mean scores of the nurses in terms of their descriptive characteristics

There was no significant difference in the scores of the MBI sub-dimensions of DP and PA according to the descriptive characteristics of PED nurses ($p > 0.05$). However, the mean EE scores were significantly influenced by gender, age, time working in the PED, shift worked, shift time, fear of working during the pandemic, worry about getting COVID-19 in the department, and worry about infecting someone with COVID-19 ($p < 0.05$) (Table 3).

The mean CF-SS score of the nurses was 4.99 ± 1.43. No significant differences were found for CF-SS scores based on education status, worry about getting COVID-19 at work, and worry about infecting someone with COVID-19 ($p > 0.05$). However, the effects of gender, age, time working in the PED, shift worked, shift time, and fear of working during the pandemic did significantly influence the mean CF-SS scores ($p < 0.05$) (Table 3).

Table 2

Prevalence of burnout among pediatric nurses (N = 164).

MBI Sub-Dimension	Mean	SD	Range	Level of Burnout					
				Low		Moderate		High	
				n	%	n	%	n	%
EE	28.25	6.05	10–45	14	9.1	66	40.5	84	51.4
DP	11.89	2.39	5–22	23	14.4	44	26.7	97	58.9
PA	17.98	3.12	14–39	147	89.6	17	10.4	-	-

Table 3
Comparison of the MBI and CF-SS Mean Scores of the Nurses in terms of Their Descriptive Characteristics (N = 164).

Descriptive Characteristics	Maslach Burnout Inventory (MBI) Sub-Dimensions												Compassion Fatigue Short Scale (CF-SS)			
	Emotional exhaustion				Depersonalization				Personal accomplishment							
	Mean	SD	test	p	Mean	SD	test	p	Mean	SD	test	p	Mean	SD	test	p
Gender																
Female	29.14	6.11	t = 0.303	**0.048**	11.91	2.44	t = 0.157	0.877	18.02	3.19	t = 0.200	0.842	5.21	1.44	t = 2.575	**0.011**
Male	28.44	6			11.85	2.32			17.91	3.02			4.62	1.35		
Age																
20–30 years	30.70 [a]	5.53	F = 8.364	**0.001*** a > b > c	11.98	2.54	F = 1.230	0.295	18.12	3.25	F = 0.845	0.432	6.20 [a]	1.12	F = 9.873	**0.001*** a > c, 0.024* a > b
31–40 years	29.58 [b]	6.58			11.5	2.27			18.01	2.81			5.19 [b]	1.15		
≥41 years	26.71 [c]	5.79			12.47	1.69			17.05	3.24			4.67 [c]	1.49		
Education status																
High school	30.51	7.1	F = 2.308	0.079	11.83	3.07	F = 1.232	0.874	18.9	3.2	F = 3.737	0.532	5.18	1.48	F = 4.138	0.057
Associate degree	28.45	7.14			12.27	1.57			18.86	3.35			5.15	1.57		
Undergraduate	27.77	5.45			11.81	2.36			18	3.23			5.08	1.36		
Postgraduate	25.7	4.32			12	2			17.8	2.85			4.89	0.81		
Working time in PED																
0–1 years	31.60 [a]	5	F = 6.399	**0.001*** a > c, **0.041*** b > c	12.15	2.67	F = 0.524	0.593	18.13	3.2	F = 0.340	0.712	6.00 [a]	1.02	F = 7.942	**0.001*** a > b > c
2–10 years	28.34 [b]	5.89			11.72	2.29			18.02	3.11			5.08 [b]	1.35		
≥11 years	26.50 [c]	6.18			11.92	2.13			17.52	3.05			4.81 [c]	1.54		
Work shift																
Day shift	25.8	5.3	t = −2.275	**0.024**	11.88	2.3	t = −0.113	0.909	18.07	2.86	t = −1.143	0.88	4.3	1.24	t = 0.726	**0.02**
Night shift	28.71	6.09			11.89	2.41			17.96	3.17			5.03	1.46		
Predominant shift time																
08.00–16.00	25.80 [a]	5.3	F = 3.291	**0.035*** c > a	11.88	2.3	F = 0.754	0.994	18.07	2.86	F = 0.676	0.51	4.70 [a]	1.24	F = 2.858	**0.045*** c > a
16.00–08.00	27.80 [b]	4.82			11.85	2.38			17.8	3.31			4.88 [b]	1.27		
08.00–08.00	29.11 [c]	6.55			11.9	2.44			18.16	3.11			5.29 [c]	1.54		
Worried about getting COVID-19 in the department																
No	26.17	5.73	t = −2.326	**0.021**	11.91	2.66	t = 0.105	0.947	17.85	2.85	t = 0.267	0.791	5.06		t = 0.870	0.096
Yes	28.82	6.04			11.88	2.32			18.01	3.2			5.1	1.42		
Worried about infecting someone with COVID-19																
No	26.42	6.47	t = −1.960	**0.042**	12.27	2.73	t = 1.027	0.306	18.18	2.83	t = 0.411	0.682	4.94	1.41	t = 0.387	0.073
Yes	28.71	5.88			11.79	2.3			17.93	3.2			5.02	1.53		
Fear of working during the pandemic																
No	26.98	4.93	t = −2.203	**0.029**	11.61	2.23	t = −1.193	0.234	17.63	3.14	t = 1.167	0.245	4.93	1.14	t = 0.821	**0.013**
Yes	29.09	6.58			12.07	2.48			17.21	3.1			5.16	1.6		

SD: Standard deviation, t: t-test, F: ANOVA, * Tukey-Posthoc, the group from which the significance originates.

Table 4
Relationship Between Compassion Fatigue-Short Scale and Maslach Burnout Inventory Mean Scores.

Scale	Maslach Burnout Inventory		
	Emotional Exhaustion	Depersonalization	Personal Accomplishment
Compassion Fatigue			
r	0.557	0.341	−0.112
p	0.001	0.001	0.154

r: Pearson correlation, $p < 0.05$.

Relationship between compassion fatigue-short scale and maslach burnout inventory mean scores

The EE and DP sub-dimensions of burnout had a positive and significant relationship with CF ($p < 0.05$). Although there was a negative relationship between PA and CF, it was not significant ($p > 0.05$) (Table 4).

Discussion

This is the first study to determine CF and burnout in nurses working in the PED during the COVID-19 pandemic. The data of the study were collected during the high incidence of COVID-19 cases in Turkey (TC Ministry of Health, 2021). There is no study evaluating CF and burnout in PED nurses before the pandemic in Turkey. Therefore, the literature on nurses working in adult and pediatric services was used for discussion. Approximately 50% of nurses had moderate CF and burnout before the pandemic(Berger et al., 2015; Hunsaker et al., 2015; O'Callaghan et al., 2020). For the pandemic comparison, studies evaluating CF and burnout in adult nurses were used. These nurses have moderate to high levels of CF and burnout (Butera et al., 2021; Erkin et al., 2021; Labrague & Santos, 2021; Ruiz-Fernández et al., 2020) This finding is similar to that of this study. The unpredictable and rapidly spreading nature of COVID-19 has created a great burden on all healthcare professionals, as it causes high morbidity and mortality (Hores and Brown, 2020). This situation led to an increase in the already existing levels of CF and burnout in nurses.

In fact, PED nurses are trying to adapt to new ways of working and protocols due to a crowded and stressful environment, high workload, increased patient circulation (Galehdar et al., 2020), and more exposure to infected patients and families with COVID-19 in the PED (Cinar et al., 2021). Therefore, they might have more CF and burnout than adult nurses. In addition to working in an emotional, stressful, and intense environment during the pandemic, caring for children who cannot express themselves and report their contact history, who need someone else to meet their personal care needs (Góes et al., 2020), and witnessing the suffering of parents can negatively affect (Kellogg et al., 2014) emergency nurses both physically and mentally and contribute to their CF and burnout.

The findings of this study revealed that there are some factors affecting the status of CF and burnout in PED nurses working during the pandemic. One of these factors was gender. Female nurses had higher mean EE and CF scores. Similar to this study, there are studies stating that female nurses who worked during the COVID-19 pandemic had higher EE (Arpacıoglu et al., 2021; Barello et al., 2020; Brera et al., 2021; Chen et al., 2021) and CF scores (Orrù et al., 2021) than male nurses did. Because women might experience feelings of loss of control (Lai et al., 2020), fear, and anxiety more intensely than men (Arpacıoglu et al., 2021), they might be more prone to experiencing the EE caused by COVID-19 stressors. In addition, female nurses can experience CF as a result of placing a high value on nurse-patient relationships and experiencing high levels of empathy with patients (Brera et al., 2021). This may negatively affect the attitudes of female nurses toward pediatric patients and their clinical performance may decrease.

Nurses between the ages of 20 and 30 who worked in the PED for <1 year had higher mean EE and CF scores. Similar to this study, the mean EE (Zhang et al., 2020) and CF scores of (Labrague & Santos, 2021) young nurses with less work experience were higher during the COVID-19 pandemic. In this study, young nurses who worked in an intense and stressful environment such as a PED and who were new to the profession may experience EE due to the additional workload brought about by the pandemic. They might also have less experience coping with different stressors (Garcia-Martin et al., 2021). It is thought that CF develops in PED nurses because the pandemic affected the communication methods with patients and the way of providing care (Brown, 2020). Thus, the ability to make clinical decisions to meet the care needs of infected patients is limited (Garcia-Martin et al., 2021). This may result in nurses' inability to adapt to the tempo of the emergency service and inability to maintain their professional care for children with complex nursing needs such as COVID-19 during the ongoing pandemic.

PED nurses working shifts and mostly 24-h shifts had high EE and CF. Similar to this study, nurses working long hours during the COVID-19 pandemic have higher mean EE (Zhang et al., 2020) and CF scores (Orrù et al., 2021). The pandemic has caused nurses to work long hours with protective equipment that makes it difficult to work but still has a high risk of infection due to long-term contact with patients (Galanis et al., 2021). Furthermore, there has been a change of care practices such as the inability to use therapeutic touches, gestures, and facial expressions and subsequent worry about not being able to provide adequate care (Brown, 2020). While the long shifts of nurses are a risk factor for exhaustion (Witkoski Stimpfel et al., 2012), the pandemic also brought additional workloads to PED nurses and increased their working hours. This can increase their physical and mental fatigue (Wendekier & Kegerreis, 2020), which is associated with CF and EE. It can also affect their overall health, leading to a lack of motivation, distractions, job dissatisfaction, and alienation from the profession (Labrague, 2021).

Although most nurses used PPE for protection from infection and found the precautions in the working environment sufficient, they were worried that they would be infected with COVID-19 and subsequently infect their relatives. Nurses who experienced this anxiety and were afraid of working during the pandemic had high average EE scores. The high patient density and circulation in the emergency department caused the nurses to experience anxiety and stress about being infected and transmitting the disease because of the high viral load in this environment and the rapidly spreading nature of the COVID-19 virus even though full PPE was provided (Cinar et al., 2021). This anxiety and stress may contribute to the development of EE. Furthermore, nurses during the pandemic were negatively affected by the loss of infected colleagues (Atac & Kaplan, 2021). Having this same risk for themselves and their families as well as fear of death and loss may cause them to experience EE. As a result, nurses may experience difficulties in achieving and maintaining work-life balance.

Practical implications

The COVID-19 pandemic is an unprecedented global public health problem, and its impact continues. PED nurses experienced CF and burnout like nurses working in adult clinics. However, no study was found in which CF and burnout levels were discussed in PED nurses during the pandemic. This may be due to the more severe course of COVID-19 in adult patients and the almost complete focus on adult care in the delivery of health services. This study provides an important contribution by raising awareness about the problems faced by PED nurses during the pandemic and illuminating future studies on this issue. CF and burnout affected the quality of care provided by nurses, but also negatively affected their well-being and quality of life during the pandemic. Therefore, the development of interventions to reduce CF and burnout can help reduce and manage these symptoms during the pandemic.

Limitations

This study has several limitations. First, it was carried out during the most intense period of the pandemic in Turkey. The timing of data collection during the pandemic might have an impact on the results of this study. Finally, the impact of COVID-19 on the findings needs to be interpreted with caution, as there were no data on PED nurses' CF and burnout status before the COVID-19 pandemic in Turkey. A future follow-up study is needed to fully understand the impact of the pandemic on PED nurses.

Conclusion

COVID-19, which has lasted for a long time and affected the world, negatively affected nurses working in all services including PED nurses. The pandemic has demonstrated how necessary and important it is to invest in health systems. PED nurses provide clinical care to pediatric patients in a busy environment at an intense pace. The role of PED nurses, who first encounter pediatric patients and provide their nursing care, is very important and they need support. If the health of children is to be secured, the health of nurses must be protected first. Therefore, within the scope of the findings of this study, it is necessary to protect and maintain the mental health of all nurses, especially female, young, and less experienced PED nurses. Also, to prevent long-term effects of the pandemic, the physiological and psychosocial needs of nurses should be prioritized. To create a high-quality nursing workforce, safe working environments should be created in health institutions, nurses' working hours should be organized considering their roles and responsibilities in their daily lives, and employee rights should be improved (salary, leave, rest and break times, etc.). Nurses should be supported to develop strategies to cope with the psychosocial problems they experience during the pandemic.

Data availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

CREDIT Statement

Aylin Arikan: Conceptualization, Methodology, Investigation, Resources, Data curation, Formal analysis, Writing – original draft, Writing – review & editing, Project administration. **Figen Işık Esenay:** Conceptualization, Methodology, Data curation, Formal analysis, Writing – review & editing, Supervision, Project administration.

Declaration of Competing Interest

The authors declared no potential conflicts of interest.

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