Original Article

Emotional Labor Behavior and Compassion Fatigue in Nurses Caring for Individuals with COVID-19: A descriptive Cross-Sectional Study

Gonca Ustun, PhD
Assistant Professor, Amasya University Faculty of Health Sciences, Department of Nursing, Amasya, Turkey

Nurhan Dogan, PhD
Assistant Professor, Amasya University Faculty of Health Sciences, Department of Nursing, Amasya, Turkey

Correspondence: Gonca Ustun, Address: Amasya University Faculty of Health Sciences, Department of Nursing, 05100 Amasya, Turkey E-mail: gonca_ustun@hotmail.com

Abstract

Background: Nurses, who constitute the vast majority of the health sector and are an important part of the sector, have continued to provide care during uncertainties such as increased workload during the COVID-19 pandemic, uncertainty about the mechanism of the virus, difficult decisions, inadequate supply of protective equipment, fear of getting infected and infecting their relatives, witnessing the deaths of their patients, and meeting the complex needs of patients.

Aims: This study was carried out to determine the emotional labor behavior and compassion fatigue of nurses who cared for individuals with COVID-19 during the pandemic, determine the factors affecting these two concepts, and examine the relationship between these concepts.

Method: This research used a descriptive cross-sectional study design. Reporting of this study has been verified in accordance with the STROBE checklist. This study was carried out in hospitals in Turkey who were reached through online surveys between July and August 2020. The sample group consisted of 180 nurses who were directly involved in COVID-19 patient care. Research data were collected using a personal information form, the Emotional Labor Behavior Scale for Nurses, and the Compassion Fatigue-Short Scale. The participating nurses completed the online survey forms.

Results: In-depth and sincere behavior scores of nurses under the age of 30 were significantly higher than nurses aged 30 and over, and female nurses' compassion fatigue, secondary trauma, and professional burnout scores were significantly higher than male nurses' scores (p<0.05). The compassion fatigue and its sub-dimension scores of the nurses who cared for individuals with COVID-19 longer than three months were significantly higher than those who cared for a shorter time (p<0.05). Although there was no significant difference between the total scale and sub-dimension scores of the nurses diagnosed with COVID-19, the secondary trauma score of those who had COVID-19 was significantly higher than those who did not (p<0.05). A negative, significant, and very weak relationship was found between superficial behavior and compassion fatigue and its sub-dimensions (p<0.05).

Conclusions: Young nurses reflected their feelings deeply and sincerely. Female nurses and nurses who cared for individuals with COVID-19 longer experienced more compassion fatigue, secondary trauma, and professional burnout. As the nurses' level of superficial behavior increased, compassion fatigue, secondary trauma, and occupational burnout decreased.

Keywords: Compassion Fatigue, COVID-19, Emotional Labor, Job Burnout, Nurse, Secondary Trauma

Introduction

COVID-19 is an important public health problem that has infected many people around the world and increased the need for health and hospital resources as it spreads. A large number of individuals became infected in a short time causing an increase in patient care needs, once again highlighting the importance of such care, which is the main purpose of nursing (Hachisu & Suzuki, 2018; Pedrazza et al., 2018; Cevirme & Kurt, 2020). Nursing care, a multi-dimensional concept, evaluates the human as a whole, while

emotional labor involves nurses' care and professional behavior by seeing their patients as human beings at the highest level (Watson, 2006; Dogan & Tasci, 2019). Nurses' emotional labor behavior has positive effects such as job satisfaction, increased motivation, psychological and physiological health, success in business relationships, emotional commitment to the profession, an increase in self-confidence, and self-efficacy (Ashforth & Humphrey, 1993; Oguz & Ozkul, 2016; Dogan & Tasci, 2019). However, in cases where the emotional labor process cannot be managed properly, negative consequences such as burnout syndrome, work-related stress, work-family conflict, alienation, tendency to quit work, exposure to mobbing, decrease in sense of trust, and economic loss can emerge (Bagci & Mohan Bursali, 2015; Oguz & Ozkul, 2016; Dogan & Tasci, 2019).

Feeling safe while performing professional duties is one of the most important factors enabling one to do their job willingly and be professionally motivated. Nurses who care for individuals with COVID-19 in the clinic have faced many professional risks during the pandemic (Yucel & Gormez, 2019; Choi, Skrine Jeffers, & Cynthia Logsdon, 2020; Huang et al., 2020). Nurses risk becoming infected as well as risk infecting their relatives (Ozisik, 2020; Smith, Ng, & Li, 2020). In this period when everyone is afraid of approaching each other, nurses continue to do their profession lovingly, touch people, and care for human life as long as they feel safe, as they have always done (Hachisu & Suzuki, 2018; Pedrazza et al., 2018). However, nurses can also be worn out during this process and be negatively affected physically, socially, and mentally. A study conducted by Kang et al. (2020) reported that 36.3% of nurses read books written on mental health, 50.4% tried activities that strengthen coping ability from social media, and 17.5% received professional psychological support during the COVID-19 pandemic.

Nurses, who constitute the vast majority of the health sector and are an important part of the sector, have continued to provide care during uncertainties such as increased workload during the pandemic, uncertainty about the mechanism of the virus, difficult decisions, inadequate supply of protective equipment, fear of getting infected and infecting their relatives, witnessing the deaths of their patients, and meeting the complex needs of patients. These negative consequences of the pandemic can lead to compassion fatigue in nurses (Nolte et al., 2017; Pehlivan & Guner, 2018; Ozisik, 2020). Compassion fatigue is the negative reflection of helping individuals who have experienced traumatic events, pain, or suffering on the person who provides aid. Compassion fatigue, which is a very important concept for health institutions, is also seen as a natural result of the care between two people (Pehlivan & Guner, 2018). Moreover, compassion fatigue is a secondary traumatic stress response arising from the desire to help individuals suffering from both physical and traumatic events such as COVID-19 (Pehlivan & Guner, 2018; Ozisik, 2020). One should not confuse compassion fatigue with burnout related to job dissatisfaction or frustration with the system. Compassion fatigue is a "unique form of burnout affecting caregivers", which develops due to the sensitivity of people involved in caring professions and where nurses internalize the traumatic stress of the individuals they care for with an empathetic approach (Joinson, 1992; Dikmen & Aydin, 2016; Pehlivan & Guner, 2018; Yilmaz & Ustun, 2018).

Nurses may experience compassion fatigue while caring for individuals and their relatives who have suffered or have died their lives due to COVID-19. There are very few studies in the literature on emotional labor and compassion fatigue and their importance often is disregarded in the clinic (Pehlivan & Guner, 2018; Dogan & Tasci, 2019). This study aimed to determine the emotional labor behavior and compassion fatigue of nurses who cared for individuals with COVID-19 during the pandemic, determine the factors affecting these two concepts, and examine the relationship between these concepts.

Answers to the following questions were sought in the research:

•   Do nurses' personal, professional, and COVID-19 related characteristics affect emotional labor behavior?

•   Do nurses' personal, professional, and COVID-19 related characteristics affect the level of compassion fatigue?

•   Is there a relationship between emotional labor and compassion fatigue in nurses who care for individuals with COVID-19?

Method

Type of the Study: This research used a descriptive-correlational research design, a quantitative research method.

Location and Period of the Study: This research was conducted in hospitals that could be accessed through online surveys in Turkey. It was completed in two months, July and August 2020.

Population and Sample of the Study: No sample selection was made in the study, which was conducted via Google Forms; all nurses who met the criteria and fully completed the questionnaires formed the sample of the study. The inclusion criterion for the nurses in the sample group was being directly involved in COVID-19 patient care. The researchers reached 183 nurses who met the inclusion criterion. The study was carried out with 180 participants, as three nurses did not agree to participate.

Data Collection Tools: Research data were collected using a personal information form prepared by the researchers, the Emotional Labor Behavior Scale for Nurses, and the Compassion Fatigue-Short Scale.

Personal Information Form: This is a questionnaire consisting of 14 questions, which included the sociodemographic characteristics of the nurses, their working conditions, and data on COVID-19.

Emotional Labor Behavior Scale for Nurses (ELBN): This measurement tool was developed by Degirmenci Oz and Baykal (2018) to determine the emotional labor behavior of nurses. The scale comprises 24 items to which responses are given according to a five-point Likert-type scale. Responses to the items of the scale are scored as 1=strongly disagree, 2=disagree, 3=partially agree, 4=agree, and 5=strongly agree. It consists of three subscales: superficial behavior (items 1, 5, 8, 10, 12, and 17), in-depth behavior (items 2, 3, 4, 7, 9, 11, 14, 15, 16, 18, 21, 22, and 23), and sincere behavior (items 6, 13, 19, 20, and 24). In evaluating the scores obtained from the scale, the total score obtained from each sub-dimension is divided by the number of items in the sub-dimension and its arithmetic mean is obtained. An increase in the mean subscale scores indicates that the behavior is displayed. In the original version of the scale, the Cronbach's alpha reliability coefficient was 0.90 for the whole scale and 0.75, 0.86, and 0.75 for the superficial behavior, in-depth behavior, and sincere behavior sub-dimensions,

respectively. In this study, the Cronbach's alpha reliability coefficient was 0.97 for the whole scale and 0.88, 0.96, and 0.90 for the superficial behavior, in-depth behavior, and sincere behavior sub-dimensions, respectively.

Compassion Fatigue-Short Scale (CF-SC): This scale was developed by Adams et al. (2006); its Turkish validity, reliability, and adaptation study was conducted by Dinc and Ekinci (2019) on nurses. It is a self-report assessment tool that asks participants to indicate to what extent each scale item reflects their experiences. It is a 10-point Likert-type scale ranging from rarely/never (1) to very often (10). The scale consists of two sub-dimensions: secondary trauma and occupational burnout. Items "c, e, h, j, and l" measure secondary trauma and items "a, b, d, f, g, i, k, and m" measure occupational burnout. The minimum score is 13 and the maximum score is 130. As the scores obtained from the scale increase, the level of compassion fatigue experienced by individuals also increases. The Cronbach's alpha coefficients of the subscales range from 0.80 to 0.90 (Adams, Boscarino, & Figley, 2006). In the Turkish adaptation study of the scale, the Cronbach's alpha coefficient was 0.87 for the entire scale, 0.74 for the secondary trauma sub-dimension, and 0.85 for the burnout sub-dimension (Dinc & Ekinci, 2019). In the current study, the Cronbach's alpha coefficient was 0.88 for the entire scale, 0.78 for the secondary trauma sub-dimension, and 0.81 for the burnout sub-dimension.

Procedure of the Study: Data collection forms were made accessible on the internet using social media channels via Google Forms. Volunteer nurses who met the research inclusion criteria completed the data collection forms. The forms were completed online by the nurses themselves. The data collection process continued for two months.

Data Analysis: The data were evaluated using the IBM SPSS Statistics Version 20 software program. Descriptive statistics were calculated for the classification of study data and explanation of their characteristics. Because the variables were not normally distributed, the Mann-Whitney U test was used for the comparison of two groups and the Kruskal-Wallis H test was used for the comparison of three or more groups. When there was a significant difference between more than two groups, multiple comparisons were carried out using the Mann–Whitney U test to determine the

source of the significance. The relationship between dependent variables was evaluated using the Spearman Correlation test. For the evaluation of the results, the significance level was accepted as 0.05: $p<0.05$ indicated a significant difference. **Ethical Considerations:** The Ministry of Health (date: 11.06.2020, consent code: T19_56_23) and The Amasya University Clinical Research Ethics Committee (date: 25.06.2020, consent code: 74) granted permission for the study. Participants were provided with an obligatory informed consent form before they accessed the questionnaire forms.

Results

Results regarding the demographic characteristics of the 180 nurses participating in the study and the total mean ELBN sub-dimension, CF-SC, and its sub-dimension scores are given in Table 1. The mean age of the participants was 30.05±7.17 (min=20, max=56), 78.9% were female, and 73.9% were undergraduate graduates.

When the ELBN sub-dimension mean scores were compared in terms of some demographic characteristics of the nurses, there was no significant difference between the groups in terms of gender, marital status, having children, and educational level ($p>0.05$, Table 1). In-depth behavior and sincere behavior sub-dimension scores of nurses younger than 30 years were significantly higher compared to those over 30 years old ($p<0.05$, Table 1). When CF-SC and sub-dimension total mean scores were compared in terms of some demographic characteristics of the nurses, there was no significant difference between the groups in terms of age, marital status, and educational level ($p>0.05$, Table 1). CF-SC and its subscale scores of female nurses were significantly higher than those of male nurses were ($p<0.05$, Table 1). The level of secondary trauma was significantly higher in nurses who did not have children than those who had children ($p<0.05$, Table 1).

Results regarding the characteristics of the nurses regarding the work and COVID-19 and the total mean scores of ELBN sub-dimensions, CF-SC, and CF-SC sub-dimensions are given in Table 2. Nurses worked in five separate units, mostly in shifts, with COVID-19 cases (Table 2). They had

been working for an average of 7.93±7.56 (min=1, max=37) years and were directly responsible for the care of COVID-19 patients for an average of 61.03±52.31 (min=2, max=200) days. During the care for patients with COVID-19, 84 (46.7%) of the nurses reported that they had a COVID-19 test and 5 (2.8%) reported their results were positive (Table 2).

When the ELBN sub-dimension mean scores of the nurses were compared in terms of some variables, there was no significant difference between the groups ($p>0.05$, Table 2). When the total mean CF-SC and its sub-dimension scores were compared in terms of some variables, there was no significant difference between the groups in the unit being worked, working style, and work experience ($p>0.05$, Table 2). Compassion fatigue, secondary trauma, and occupational burnout sub-dimension scores of nurses who cared for COVID-19 patients longer than three months were significantly higher than nurses who provided care for a shorter period ($p<0.05$, Table 2).

Although there was no significant difference in the total scale and sub-dimension scores of the nurses diagnosed with COVID-19, the secondary trauma sub-dimension score of those who had a COVID-19 test was significantly higher than those who did not ($p<0.05$, Table 2).

The nurses' ELBN sub-dimension mean scores and CF-SC mean scores are given in Table 3. When the relationship between ELBN sub-dimensions and CF-SC and its sub-dimensions was examined, there was a negative, very weak, significant relationship between superficial behavior and CF-SC and its sub-dimensions ($p<0.05$, Table 3).

When nurses provided care to individuals with COVID-19, the situations most affecting them were the way they work with protective clothing (75.6%), infecting/worry of infecting (76.1%), being infected/worry of being infected (75.0%), and heavy workload (51.7%). Nurses had expectations such as ending the epidemic (87.8%), salary bonus (72.2%), being provided adequate equipment for protective measures (57.2%), and psychosocial support (51.1%) while providing care to individuals with COVID-19 (Table 4).

Table 1. Total mean scores and comparisons of ELBN sub-dimensions, CF-SC, and CF-SC sub-dimensions according to the nurses' demographic characteristics

Variables		n (180)	% (100)	Superficial behavior Mean±SD	Mean rank	In-depth behavior Mean±SD	Mean rank	Sincere behavior Mean±SD	Mean rank	CF-SC Mean±SD	Mean rank	Secondary trauma Mean±SD	Mean rank	Job burnout Mean±SD	Mean rank
Age	Below 30	105	58.3	3.77±0.74	96.83	3.92±0.78	99.35	3.90±0.85	98.73	69.46±22.89	91.64	26.95±10.09	92.41	42.51±14.92	90.48
	30 and over	75	41.7	3.45±1.04	81.63	3.48±1.13	78.11	3.46±1.14	78.97	68.38±22.79	88.91	25.84±10.25	87.82	42.54±13.84	90.53
				Z=-1.938, p=0.053		Z=-2.699, **p=0.007**		Z=-2.518, **p=0.012**		Z=-0.347, p=0.729		Z=-0.584, p=0.559		Z=-0.007, p=0.994	
Gender	Female	142	78.9	3.63±0.88	90.35	3.76±0.96	92.05	3.71±1.00	89.31	71.89±22.20	97.04	27.88±9.68	97.41	44.01±14.31	96.06
	Male	38	21.1	3.64±0.91	91.07	3.66±0.97	84.72	3.75±1.02	94.96	58.26±22.02	66.07	21.28±10.30	64.68	36.97±13.71	69.74
				Z=-0.076, p=0.940		Z=-0.770, p=0.441		Z=-0.596, p=0.551		Z=-3.255, **p=0.001**		Z=-3.441, **p=0.001**		Z=-2.767, **p=0.006**	
Marital status	Single	92	51.1	3.56±0.96	87.90	3.66±1.04	88.24	3.66±1.09	89.73	71.04±22.35	94.96	27.42±9.82	94.96	43.61±14.26	94.11
	Married	88	48.9	3.72±0.80	93.22	3.82±0.87	92.86	3.77±0.90	91.30	66.89±23.18	85.84	25.51±10.44	85.84	41.38±14.63	86.72
				Z=-0.687, p=0.492		Z=-0.594, p=0.552		Z=-0.203, p=0.839		Z=-1.175, p=0.240		Z=-1.176, p=0.240		Z=-0.952, p=0.341	
Status of having children	Yes	71	39.4	3.63±0.92	89.82	3.71±0.99	88.57	3.69±1.01	89.73	65.23±22.59	81.11	24.49±9.91	80.70	40.74±14.37	83.82
	No	109	60.6	3.64±0.87	90.94	3.75±0.95	91.76	3.73±1.00	91.00	71.47±22.69	96.62	27.78±10.13	96.89	43.68±14.43	94.85
				Z=-0.141, p=0.888		Z=-0.401, p=0.688		Z=-0.160, p=0.873		Z=-1.953, p=0.051		Z=-2.039, **p=0.041**		Z=-1.388, p=0.165	
Educational level	High school	11	6.1	3.30±1.52	88.36	3.44±1.45	90.86	3.40±1.45	86.14	73.90±25.60	103.05	31.72±12.28	116.77	42.18±15.34	88.18
	Associate	19	10.6	3.40±0.95	70.50	3.67±1.08	87.26	3.63±1.12	83.39	65.31±23.57	83.66	23.10±9.20	73.71	42.21±16.38	91.42
	Undergraduate	133	73.9	3.69±0.82	93.18	3.75±0.90	89.55	3.74±0.94	90.62	69.06±23.02	90.39	26.51±10.14	90.58	42.54±14.53	90.40
	Postgraduate	17	9.4	3.68±0.80	93.29	3.88±1.00	101.32	3.87±1.01	100.35	69.64±19.23	90.91	26.64±9.01	91.65	43.00±11.91	91.74
				χ²=3.247, p=0.355		χ²=0.854, p=0.837		χ²=1.047, p=0.790		χ²=0.967, p=0.809		χ²=4.785, p=0.188		χ²=0.038, p=0.998	

Z: Mann–Whitney U test value χ²: Kruskal–Wallis H test value Bold values denote statistical significance at the p<0.05 level.

Table 2. Characteristics of the nurses regarding the work and COVID-19 and the total mean scores of ELBN sub-dimensions, CF-SC, and CF-SC sub-dimensions

Variables		n (180)	% (100)	Superficial behavior Mean±SD	Mean rank	In-depth behavior Mean±SD	Mean rank	Sincere behavior Mean±SD	Mean rank	CF-SC Mean±SD	Mean rank	Secondary trauma Mean±SD	Mean rank	Job burnout Mean±SD	Mean rank
Work unit	Pandemic clinic	56	31.1	3.56±0.88	83.04	3.60±1.02	81.04	3.60±1.04	82.90	74.58±22.87	103.69	28.75±10.26	101.63	45.83±14.52	102.90
	Intensive care unit	46	25.6	3.63±0.82	85.78	3.85±0.87	96.07	3.90±0.95	100.43	71.67±22.07	95.76	28.21±10.24	98.26	43.45±14.21	92.85
	Emergency room	32	17.8	3.76±0.90	103.11	3.77±0.88	90.48	3.71±0.92	88.88	62.90±26.56	78.67	22.90±11.20	73.75	40.00±17.11	83.81
	Outpatient care units	8	4.4	3.22±1.43	83.44	3.43±1.52	91.38	3.35±1.46	84.38	60.87±20.92	70.50	23.12±7.98	74.25	37.75±13.41	73.25
	Other inpatient services	38	21.1	3.73±0.83	98.08	3.83±0.93	97.53	3.76±0.96	92.33	64.44±18.58	78.87	24.78±8.30	82.22	39.65±11.58	78.64
				χ²=4.390, p=0.356		χ²=3.069, p=0.546		χ²=3.075, p=0.545		χ²=8.781, p=0.067		χ²=8.634, p=0.071		χ²=6.643, p=0.156	
Workstyle	Always daytime	21	11.7	3.39±1.18	83.57	3.62±1.28	94.57	3.62±1.27	93.60	68.00±16.05	88.02	26.23±7.89	90.36	41.76±9.59	86.48
	Always night	6	3.3	3.83±1.24	110.58	3.73±1.26	102.00	3.56±1.25	84.92	58.50±19.72	66.42	24.66±10.94	80.17	33.83±9.96	56.50
	Shifts	153	85.0	3.66±0.82	90.66	3.75±0.91	89.49	3.73±0.96	90.29	69.56±23.67	91.78	26.59±10.44	90.92	42.97±15.06	92.39
				χ²=1.276, p=0.528		χ²=0.479, p=0.787		χ²=0.147, p=0.929		χ²=1.423, p=0.491		χ²=0.247, p=0.884		χ²=2.883, p=0.237	
Work experience	Less than 1 year	44	24.4	3.75±0.82	96.28	3.87±0.80	96.86	3.87±0.82	94.83	68.77±24.01	89.75	27.77±11.42	96.89	41.00±14.54	84.92
	1-10 years	90	50.0	3.64±0.91	92.87	3.76±1.00	93.33	3.74±1.07	95.02	70.24±21.86	94.15	26.71±8.99	91.56	43.53±14.56	94.93
	More than 10 years	46	25.6	3.52±0.90	80.33	3.56±1.02	78.88	3.53±1.01	77.52	66.84±23.72	84.08	24.82±10.98	82.33	42.02±14.27	87.17

		n	%	Mean±SD		Mean±SD		Mean±SD		Mean±SD		Mean±SD		Mean±SD	
				χ²=2.505, p=0.286		χ²=3.216, p=0.200		χ²=3.864, p=0.145		χ²=1.150, p=0.563		χ²=1.833, p=0.400		χ²=1.343, p=0.511	
Duration for caring for COVID-19 patients	Less than 1 month	62	34.4	3.75±0.83	96.03	3.89±0.82	97.26	3.83±0.89	96.89	63.61±21.39	78.90	24.20±9.82	79.57	39.40±13.75	80.60
	1-3 months	68	37.8	3.45±0.94	79.74	3.55±1.07	81.51	3.52±1.09	80.24	68.11±24.70	88.13	26.44±10.97	89.99	41.67±15.36	87.55
	More than 3 months	50	27.8	3.75±0.85	98.28	3.81±0.95	94.35	3.84±0.97	96.54	76.94±19.80	108.10	29.38±8.73	104.75	47.56±12.82	106.79
				χ²=4.759, p=0.093		χ²=3.349, p=0.187		χ²=4.276, p=0.118		χ²=8.920, **p=0.012** Multiple comparisons (1-3), (2-3)		χ²=6.483, **p=0.039** Multiple comparisons (1-3)		χ²=7.351, **p=0.025** Multiple comparisons (1-3)	
Have you had a COVID-19 test?	Yes	84	46.7	3.71±0.82	93.73	3.85±0.88	96.46	3.87±0.88	97.91	72.01±23.44	97.51	28.45±10.46	100.58	43.55±14.94	93.97
	No	96	53.3	3.57±0.94	87.67	3.64±1.03	85.29	3.58±1.08	84.02	66.39±21.99	84.36	24.77±9.58	81.68	41.62±14.00	87.46
				Z=-0.782, p=0.434		Z=-1.437, p=0.151		Z=-1.792, p=0.073		Z=-1.689, p=0.091		Z=-2.429, **p=0.015**		Z=-0.836, p=0.403	
Have you been diagnosed with COVID-19?	Yes	5	2.8	4.13±0.41	123.50	4.18±0.44	114.80	4.08±0.41	107.40	75.40±23.90	108.70	30.20±8.84	108.20	45.20±15.18	102.90
	No	175	97.2	3.62±0.89	89.56	3.72±0.97	89.81	3.71±1.01	90.02	68.83±22.80	89.98	26.38±10.18	89.99	42.45±14.46	90.15
				Z=-1.443, p=0.149		Z=-1.059, p=0.290		Z=-0.738, p= 0.460		Z=-0.792, p=0.428		Z=-0.771, p=0.441		Z=-0.540, p=0.589	

Z: Mann–Whitney U test value   χ²: Kruskal–Wallis H test value Bold values denote statistical significance at the p<0.05 level.

Table 3. Total mean scores and correlation values of ELBN sub-dimensions and CF-SC total and sub-dimension scores

Scale and sub-dimensions	Superficial behavior	In-depth behavior	Sincere behavior
Mean±SD	3.63±0.89	3.74±0.96	3.72±1.00
CF-SC 69.01±22.79	r=-0.205, **p=0.006**	r=-0.089, p=0.233	r=-0.101, p=0.176
Secondary trauma 26.48±10.14	r=-0.160, **p=0.032**	r=-0.015, p=0.845	r=-0.061, p=0.414
Job burnout 42.52±14.44	r=-0.221, **p=0.003**	r=-0.140, p=0.060	r=-0.124, p=0.097

r: Correlation coefficient
Bold values denote statistical significance at the p<0.05 level.

Table 4. Situations and expectations that nurses were affected by while providing care to individuals with COVID-19

What are the most affecting situations when you care for individuals with COVID-19? *	n (180)	% (100)
Lack of knowledge about COVID-19	50	27.8
Working style with protective clothing	136	75.6
Lack of enough equipment	70	38.9
Heavy workload	93	51.7
Being infected/Worry of being infected	135	75.0
Infecting/Worry of infecting	137	76.1
Being unable to go home/being separated from family for a long time	86	47.8
What are your expectations when giving care to individuals with COVID-19? *	**n (180)**	**% (100)**
Being informed about COVID-19	67	37.2
Providing adequate equipment for protective measures	103	57.2
Nurses rotation	87	48.3
Salary bonus	130	72.2
Going home/being with family	79	43.9
Psychosocial support	92	51.1
Ending of the pandemic	158	87.8

*Multiple options were marked and the percentages were calculated over the sample size.

Discussion

Compassion is one of the most basic features that individuals who practice nursing should have. Ensuring satisfaction while providing care to the patient is indispensable (Karadag Arli & Bakan, 2018; Pehlivan & Guner, 2018). Many factors affect compassion. Some studies report that gender does not play a role in the compassion levels of nurses (Karadag Arli & Bakan, 2018; Arkan, Yilmaz, & Duzgun, 2020); however, others report that gender does affect the level of compassion (Hacikelesoglu & Kartopu, 2017; Polat & Erdem, 2017; Cingol et al., 2018). Polat and Erdem (2017) noted that compassion fatigue was more common among female nurses. In this study, a significant difference was found between gender and compassion fatigue. Scores for compassion fatigue and its sub-dimensions, secondary trauma and occupational burnout, of female nurses who cared for COVID-19 patients were higher than those of male nurses. Similar to the current study, a study conducted by Buselli et al. (2020) on healthcare workers who were exposed to COVID-19 found that females experienced more secondary trauma than males. This result may be because women show a more emotional approach to events and are more prone to empathy compared to men.

Another factor that affects compassion is the unit where nurses work and the duration of work. In Dikmen and Aydin's (2016) study, nurses working in clinics such as intensive care, oncology, and surgery experienced more compassion fatigue. As with such chronic diseases, nurses who care for individuals with COVID-19, which takes a long time to fight, are both psychologically and socially affected by the pandemic, face burnout, and experience secondary trauma risk as they witness the disease and death (Kackin et al., 2021). In a study conducted with healthcare professionals during the COVID-19 pandemic in Italy, nurses had the highest rates of burnout and secondary trauma (Franza et al., 2020). In the current study, as the duration of providing care to individuals with COVID-19 increased, the nurses' compassion fatigue, secondary trauma, and occupational burnout levels increased. Although there was no significant difference, the compassion fatigue scores of nurses working in pandemic clinics and intensive care units were higher than those working in other units.

The secondary trauma score of nurses who were not only caring for individuals with COVID-19, but also faced the possibility of being diagnosed with COVID-19 and had the COVID-19 test were significantly higher than those who did not take the test. In line with these results, four important factors affect the development of compassion fatigue: inadequate coping and self-care, unresolved trauma, inability to control job stress, and a decrease in job satisfaction (Yilmaz & Ustun, 2018). These factors should be evaluated in detail for nurses and other healthcare personnel who care for individuals with COVID-19. Moreover, the study results showed that half of the nurses needed psychosocial support. An online survey was conducted in Australia during the COVID-19 outbreak to evaluate the support needs of nurses who provided primary health care services. The results of the survey showed that nurses needed support in personal protective equipment, communication, financing, industrial problems, self-care, workplace factors, and the value given to nurses (Halcomb et al., 2020). Similarly, in this study, the majority of the nurses stated that they had financial expectations and expected sufficient protective equipment.

Nurses are expected to display attentive care behavior in the correct emotional labor behavior to alleviate patients' distress, rather than work-oriented automatic approaches to provide effective care. However, emotional labor that is not shown correctly causes unwanted situations for nurses (Dogan & Tasci, 2019). Employees who demonstrate the superficial behavior of emotional labor experience more emotional exhaustion and negative moods, decreased job satisfaction, and increased burnout levels (Oral & Kose, 2011; Kammeyer-Mueller et al., 2013). The current study, however, showed that the levels of compassion fatigue, secondary trauma, and occupational burnout decreased in nurses displaying superficial behavior. Superficial behavior is when nurses pretend as if they feel a certain way by changing their behaviors even though they do not feel that way (Degirmenci Oz & Baykal, 2018). As in-depth behavior may require more effort, individuals are more likely to resort to superficial behavior. Moreover, the less individual roles are adopted, the more likely it is to display superficial behavior (Humphrey, Ashforth, & Diefendorff, 2015). The superficial behavior that nurses frequently refer to can be caused by the difficulties in performing their roles (working with difficult patients, not having

sufficient equipment, overtime, increased workload, stress, etc.), especially during the pandemic. This behavior, which is not in-depth and sincere, may be enabling nurses to approach events more calmly and express their emotions in a more controlled manner while providing care to individuals with COVID-19. This situation can cause nurses to experience less compassion fatigue and burnout and to be exposed to less secondary trauma.

Limitations: This is a cross-sectional study and has some limitations. Data collection was carried out in the internet environment, which is suitable for rapid evaluation. Therefore, the nurses included in the sample group were limited to those using social media, and the homogeneity of the group by region could not be achieved. In this research, many parameters could have been evaluated with other variables that were not measured. However, only two important concepts were discussed considering that the questionnaires would be applied online. The number of questions was limited to minimize the participants' time and because access to an internet connection might be limited. Emotional labor behaviors and compassion fatigue of nurses caring for COVID-19 patients were compared in terms of some factors within a single sample group. The lack of a comparison group other than the study group is another limitation of this study.

Conclusions and Recommendations: Young nurses reflected their feelings more deeply and sincerely. Female nurses and those who cared for individuals with COVID-19 for a longer time experienced more compassion fatigue, secondary trauma, and professional burnout. Nurses who had the COVID-19 test were exposed to more secondary trauma. As the nurses' level of superficial behavior increased, compassion fatigue, secondary trauma, and occupational burnout decreased.

Furthermore, when nurses cared for individuals with COVID-19, the most affecting situations for them were the way they work with protective clothing, infecting/worry of infecting, being infected/worry of being infected, and heavy workload. Nurses stated that while they were providing care to individuals with COVID-19, they had more expectations such as ending the epidemic, salary bonus, providing adequate equipment for protective measures, and psychosocial support.

Based on these results, all protective equipment for COVID-19 in hospitals should be provided, its effective use should be ensured, the risk of contamination should be minimized, personnel should be recruited to reduce the heavy workload, and appropriate rotation plans within the units should be made. In addition, nurses who are in close contact with patients for the longest time should be supported to maintain therapeutic communication with individuals with COVID-19. Therefore, it is recommended that psychological strengthening programs within the team that will increase motivation and reduce the level of burnout be organized. Prevention strategies should also be planned for future pandemics.

References

Adams RE. Boscarino JA. & Figley CR. (2006) Compassion fatigue and psychological distress among social workers: A validation study. American Journal of Orthopsychiatry 76(1):103-108.

Arkan B. Yilmaz D. & Duzgun F. (2020) Determination of compassion levels of nurses working at a University Hospital. Journal of Religion and Health 59(1):29-39.

Ashforth BE. & Humphrey RH. (1993) Emotional labor in service roles: The influence of identity. Academy of Management Review 18(1):88-115.

Bagci Z. & Bursali YM. (2015) The impact of emotional labor on work performance: An empirical research in service sector in Denizli. The Journal of KAU IIBF 6(10):69-90.

Buselli R. Corsi M. Baldanzi S. Chiumiento M. Del Lupo E. Dell'Oste V. Bertelloni CA. Massimetti G. Dell'Osso L. Cristaudo A. & Carmassi C. (2020) Professional quality of life and mental health outcomes among health care workers exposed to SARS-CoV-2 (COVID-19). International Journal of Environmental Research and Public Health 17(17):6180.
doi.org/10.3390/ijerph17176180

Cevirme A. & Kurt A. (2020) COVID-19 pandemisi ve hemsirelik meslegine yansimalari. ASEAD 7(5):46-52.

Choi KR. Skrine Jeffers K. & Cynthia Logsdon M. (2020) Nursing and the novel coronavirus: Risks and responsibilities in a global outbreak. Journal of Advanced Nursing 76:1486-1487.

Cingol N. Celebi E. Zengin S. & Karakas M. (2018) The investigation of compassion level of nursing students in a health college. Journal of Clinical Psychiatry 21(1):61-67.

Degirmenci Oz S. & Baykal U. (2018) Developing in the Scale of Emotional Labor Behavior for Nurses. International Refereed Journal of Nursing Researches 12:119-139.

Dikmen Y. & Aydin Y. (2016) Compassion fatigue in nurses: What? How? What to do. Journal of Human Rhythm 2:13-21.

Dinc S. & Ekinci M. (2019) Turkish adaptation, validity and reliability of compassion fatigue short scale. Current Approaches in Psychiatry 11(Suppl 1):192-202. doi: 10.18863/pgy.590616

Dogan N. & Tasci S. (2019) Emotional Labor Concept in Nursing Care. Turkiye Klinikleri J Nurs Sci 11(4):417-26. doi: 10.5336/nurses.2019-64790

Franza F. Basta R. Pellegrino F. Solomita B. & Fasano V. (2020) The role of fatigue of compassion, burnout and hopelessness in healthcare: Experience in the time of COVID-19 outbreak. Psychiatria Danubina 32(Suppl 1):10-14.

Hachisu T. & Suzuki K. (2018) Tactile apparent motion through human-human physical touch. In International Conference on Human Haptic Sensing and Touch Enabled Computer Applications 163-174. doi.org/10.1007/978-3-319-93445-7_15

Hacikelesoğlu H. & Kartopu S. (2017) Compassion and religiosity: An empirical research on university students. The Journal of Academic Social Science Studies 59:203-227.

Halcomb E. Williams A. Ashley C. McInnes S. Stephen C. Calma K. & James S. (2020) The support needs of Australian primary health care nurses during the COVID-19 pandemic. Journal of Nursing Management 28:1553-1560.

Huang C. Wang Y. Li X. Ren L. Zhao J. Hu Y. Zhang L. Fan G. Xu J. Gu X. Cheng Z. Yu T. Xia J. Wei Y. Wu W. Xie X. Yin W. Li H. Liu M. Xiao Y. Gao H. Guo L. Xie J. Wang G. Jiang R. Gao Z. Jin Q. Wang J. & Cao B. (2020) Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. The Lancet 395(10223):497-506.

Humphrey RH. Ashforth BE. & Diefendorff JM. (2015) The bright side of emotional labor. Journal of Organizational Behavior 36(6):749-769.

Joinson C. (1992) Coping with compassion fatigue. Nursing 22(4):116-118.

Kackin O. Ciydem E. Aci OS. & Kutlu FY. (2021) Experiences and psychosocial problems of nurses caring for patients diagnosed with COVID-19 in Turkey: A qualitative study. International Journal of Social Psychiatry 67(2):158-167.

Kammeyer-Mueller JD. Rubenstein AL. Long DM. Odio MA. Buckman BR. Zhang Y. & Halvorsen-Ganepola MDK. (2013) A meta-analytic structural model of dispositonal affectivity and emotional labor. Personnel Psychology 66(1):47-90.

Kang L. Ma S. Chen M. Yang J. Wang Y. Li R. Yao L. Bai H. Cai Z. Yang B. Hu S. Zhang K. Wang G. Ma C. & Liu Z. (2020) Impact on mental health and perceptions of psychological care among medical and nursing staff in Wuhan during the 2019 novel coronavirus disease outbreak: A cross-sectional study. Brain, Behavior, and Immunity 87:11-17.

Karadag Arli S. & Bakan AB. (2018) The factors affecting compassion and intercultural sensitivity among the surgical nurses. Sted 27:277-283.

Nolte AG. Downing C. Temane A. & Hastings-Tolsma M. (2017) Compassion fatigue in nurses: A metasynthesis. Journal of Clinical Nursing 26(23-24):4364-4378.

Oguz H. & Ozkul M. (2016) A study on emotional labor sociological factors shape the process: the implementation west Mediterranean. Suleyman Demirel University the Journal of Visionary 7(16):130-154.

Oral L. & Kose S. (2011) A research on phsicians use of emotional labor and the relationship between their job satisfaction and burnout levels. Suleyman Demirel University the Journal of Faculty of Economics and Administrative Sciences 16(2):463-92.

Ozisik L. (2020) Burnout Among Healthcare Professionals During COVID-19 Pandemic. in Ic Hastaliklari ve COVID-19. Ed. Sain Guven, G., Uyaroglu, O. A., 1. Baski. Ankara, Turkihs Clinics, 103-108.

Pedrazza M. Berlanda S. Trifiletti E. & Minuzzo S. (2018) Variables of individual difference and the experience of touch in nursing. Western Journal of Nursing Research 40(11): 1614-1637.

Pehlivan T. & Guner P. (2018) Compassion fatigue: The known and unknown. Journal of Psychiatric Nursing 9(2):129-134.

Polat FN. & Erdem R. (2017) The relationship between the level of compassion fatigue and quality of professional life: The case of medical professionals. Journal of Suleyman Demirel University Institute of Social Sciences 26(1):291-312.

Smith GD. Ng F. & Li WHC. (2020) COVID-19: Emerging compassion, courage and resilience in the face of misinformation and adversity. Journal of Clinical Nursing 29(9-10):1425-1428.

Watson J. (2006) Can an ethic of caring be maintained?. Journal of Advanced Nursing 54(3):257-259.

Yilmaz G. & Ustun B. (2018) Professional quality of life in nurses: Compassion satisfaction and compassion fatigue. Journal of Psychiatric Nursing 9(3):205-211.

Yucel B. & Gormez A. (2019) SARS-Corona Virus Overview. Turkish Journal of Applied Sciences and Technology 2(1):32-39.