

# Analysis of Psychological Distress and Quality of Life in Nurses During Covid-19 Pandemic

## Covid-19 Pandemisi Sürecinde Hemşirelerde Psikolojik Sıkıntı ve Yaşam Kalitesinin İncelenmesi

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### ABSTRACT

Nurses, who play a primary role in the care of patients in this process, face both physical and psychosocial problems due to the risk of transmitting the virus to another person, and long and intense working conditions. Besides, the excessive increase in nurses' workload, the risk of infecting their families, and isolation and restrictions led to an overwhelming level of professional quality of life. This study was conducted to analyze nurses' psychological distress and quality of life during the Covid-19 pandemic. This study was carried out in a descriptive design with 115 frontline nurses who participated in the pandemic. The research data were collected by the Personal Information Form, Professional Quality of Life Scale, and Psychological Distress Scale. In this study, the psychological distress scale scores of males, the married, those who have no fear of themselves or their relatives being diagnosed with Covid-19, the professional distress scores of those who were not diagnosed with Covid-19, professional satisfaction scores of nuclear families and single-parent families, and the burnout scores of those diagnosed with Covid-19 were found to be higher than the other relevant groups. There was a positive, weak, and statistically significant relationship ( $r=0,242$ ;  $p=0,009$ ) between psychological distress scale scores and compassion satisfaction, a moderate and statistically significant ( $p<0.05$ ) negative relationship between burnout and compassion fatigue was determined. Psychological support should be provided, and nurses' workload should be reduced to provide psychological well-being and professional satisfaction in their professional and social lives.

**Keywords:** Covid-19; nurse, pandemic; psychological distress; quality of life

### ÖZET

Hastaların bakımında birincil rol oynayan hemşireler virüsü taşıma riskinin yanı sıra virüsü bir başkasına bulaştırma, uzun ve yoğun çalışma şartları gibi olumsuzluklardan dolayı hem fiziksel hem de psikososyal sorunlarla karşılaşmaktadır. Aynı zamanda, hemşirelerin iş yükünün aşırı artması, enfeksiyon riski, ailelerine hastalık bulaştırma riski, izolasyon ve kısıtlamaların profesyonel yaşam kalitelerinde bunaltıcı bir düzeye gelmelerine sebep olmuştur. Bu çalışma, Covid-19 Pandemisi sürecinde hemşirelerdeki psikolojik sıkıntı ve yaşam kalitesinin incelenmesi amacıyla yapılmıştır. Bu çalışma, İstanbul ili Avrupa bölgesinde bir eğitim ve araştırma hastanesinde pandemi sürecinde görev almış hemşireler ile tanımlayıcı tasarımda gerçekleştirilmiştir. Hastanede pandemi sürecinde görev alan 115 hemşire ile çalışma tamamlanmıştır. Çalışmanın verileri, "Kişisel Bilgi Formu", "Profesyonel Yaşam Kalitesi Ölçeği",

“Psikolojik Sıkıntı Ölçeği” ile toplanmıştır. Çalışmada erkeklerin, evlilerin, kendisinin/yakınının Covid-19 tanısı alma korkusu olmayanların, Covid-19 tanısı almayanların psikolojik sıkıntı ölçeği puanları, çekirdek aile ve tek ebeveynli aile olanların mesleki tatmin puanları, Covid-19 tanısı alanların tükenmişlik puanları daha yüksek bulunmuştur. Psikolojik sıkıntı ölçeği puanları ile mesleki tatmin arasında pozitif yönde, zayıf derecede ve istatistiksel olarak anlamlı ( $r=0,242$ ;  $p=0,009$ ), tükenmişlik ve eş duyum yorgunluğu arasında negatif yönde, orta derecede ve istatistiksel olarak anlamlı ( $p<0,05$ ) bir ilişki tespit edilmiştir. Hemşirelere iş ve sosyal yaşamda psikolojik iyilik ve iş tatmini sağlayabilmek adına psikolojik destek sağlanmalı ve iş yükleri azaltılmalıdır.

**Anahtar Kelimeler:** Covid-19; hemşire; pandemi; psikolojik sıkıntı; yaşam kalitesi

## 1. INTRODUCTION

The novel coronavirus disease 2019 (COVID-19), which is acknowledged by “the World Health Organization (WHO)” as a “pandemic,” has been a serious health problem faced by humanity (WHO, 2020a) and has brought significant economic, social, and public health problems in all countries affected (Bruinen, 2020; Labrague & Los Santos, 2020). In this process, while all countries globally continue to fight the pandemic, all healthcare professionals, especially nurses, who are in the frontlines of care, have taken part in this difficult challenge (Cui et al., 2021). Nursing is the main active element acting to prevent disease in any primary and secondary infectious disease. Regardless of socioeconomic status, it is considered the first-line profession in preventing illness and pain relief throughout and following treatments for any disease, including COVID-19 (Buheji & Buhaih, 2020). However, WHO mark 2020 as “the International Year of the Nurse and the Midwife”, (WHO, 2020b) and the 2020 theme of the International Nursing Council (ICN) is “Nurses: A Voice to Lead – Nursing the World to Health” and both organizations drew attention to the importance of nursing in health indicators (ICN, 2020). With the pandemic, the nursing profession has indeed become visible. Although it is difficult for nurses and health workers to prevent and control infection in the community and acute situations, nurses play a key role and control the process (Chen et. al., 2020) As in many emergencies and disasters, in COVID-19, they are also pioneers in this difficult challenge in providing appropriate care, choosing the right interventions, giving the necessary psychosocial support, training patients/relatives, skills of team leadership, as well as skills of producing creative solutions to problems, management of resources, and communication (Alfred et. al., 2015; Pourvakhshoori, 2017).

Although health workers are at the forefront of epidemic/pandemic diseases, their physiological and mental health is under a high level of risk (Zerbini et. al., 2020). In terms of impacts on mental health, they constitute an at-risk proportion of society because of their high infection risk, higher levels of work-related stress, and their fears regarding contracting the disease and spreading it to their loved ones (Cabarkapa, Nadjidai & Murgier, 2020). It is critical to offer professional, adaptable, and constant psychological interventions for assessing stress in nurses involved in the pandemic relief process, screening them in line with these requests, and protecting their mental health (Blake et. al., 2020).

This study was performed to analyze psychological distress and professional quality of life in frontline nurses struggling with COVID-19.

## **2. MATERIALS AND METHODS**

### **2.1. Participants and Procedures**

This study was conducted using a descriptive design with nurses who took part in the pandemic period in a Research and Training Hospital in the European side of Istanbul. The sample consisted of 115 nurses working at the aforementioned hospital during the pandemic period. The data were obtained using a “Personal Information Form”, “the Professional Quality of Life Scale”, and “the Psychological Distress Scale”.

### **2.2. Data Collection Tools**

The data of the study were collected using a Personal Information Form, the Professional Quality of Life Scale, and the Psychological Distress Scale.

“The Personal Information Form” that was created by the researcher consisted of 14 questions prepared to collect the personal information of the participants (Labrague & Los Santos, 2020; Tercan et. al., 2020).

“The Professional Quality of Life Scale (ProQOL)” was developed by Stamm and consists of the dimensions of compassion satisfaction, compassion fatigue, and burnout (Mantelou & Karakasidou, 2019). The Turkish version of the scale, which was adapted by Yeşil et al. (2010) consists of thirty items and three dimensions. Support or assistance is recommended for those who score high on this scale (Duarte, 2017). In this study, the Cronbach’s alpha internal consistency coefficients of the scale, indicating reliability, were found as 0.910 for compassion satisfaction, 0.859 for compassion fatigue, and 0.759 for burnout.

“The Psychological Distress Scale (K10)” was created by Kessler et al. (2013) It assesses the frequency of the observation of symptoms like as feeling nervous, hopeless, sad, worthless, and fatigued by participants. High scores on the scale signify more psychological distress. The scale was adapted into Turkish by Altun et al. (2019). In this study, the Cronbach’s alpha coefficient of the scale was determined as 0.921.

### **2.3. Statistical analysis**

The statistical analyses were performed using a statistical package software. Frequency tables and descriptive data were utilized in the interpretation of the results. For measurement values suitable for normal distribution, parametric analysis techniques consisting of t-test, analysis of variance (ANOVA), and Tukey’s test were used, while nonparametric analysis techniques consisting of the Mann-Whitney U test, Kruskal-Wallis H test, Bonferroni correction, and Spearman’s correlation analysis were employed for the variables that were not normally distributed.

### **2.4. Ethical Considerations**

To implement this study, ethics approval was obtained from Ethics Committee of the Research and Training Hospital with the decision dated 05.08.2020 and numbered 139, and permissions to use the scales were obtained from the researchers who developed these scales. After the necessary approvals and permissions were obtained, written consent was received from all participants before they were included in the study.

## **3. RESULTS**

The mean age of the nurses is found to be  $27.57 \pm 4.51$  (years), and 38.3% of the nurses were in the 25-27 age group. While it was found that 67.8% of the nurses were female, 67% were single, 80% had a nuclear family type, 66.7% had 1 child, and 45.8% cared for a child with their spouse. It was found that 55.7% of the nurses had income levels equivalent to their expenditure levels, 66.1% had

undergraduate degrees, 49.6% had been working for 2-5 years, 54.8% had less than 5 patients in their unit (Table 1).

**Table 1. Distribution of Findings of Nurses**

Variable (n=115)	n	%
<b>Age [ <math>\bar{X} \pm S.S. \rightarrow 27,57 \pm 4,51</math> (year) ]</b>		
<25	27	23.5
25-27	<b>44</b>	<b>38.3</b>
28-30	22	19.1
>30	22	19.1
<b>Gender</b>		
Female	<b>78</b>	<b>67.8</b>
Male	37	32.2
<b>Marital status</b>		
Married	38	33.0
Single	<b>77</b>	<b>67.0</b>
<b>Family type</b>		
Nuclear family	<b>92</b>	<b>80.0</b>
Extended family	14	12.2
Single parent family	9	7.8
<b>Number of children</b>		
1	<b>16</b>	<b>66.7</b>
2	7	29.1
3	1	4.2
<b>Cared of child</b>		
With parents	8	33.3
With spouse	<b>11</b>	<b>45.8</b>
By one's own	2	8.3
Nursery	3	12.6
<b>Economic status</b>		
Income less than expenses	34	29.6
Income equal to expense	<b>64</b>	<b>55.7</b>
Income more than expenses	17	14.7
<b>Education</b>		
Health vocational high school	16	13.9
Associate degree	14	12.2
License	<b>76</b>	<b>66.1</b>
MSc	7	6.1
Doctorate	2	1.7
<b>Year of study [ <math>\bar{X} \pm S.S. \rightarrow 5,19 \pm 4,29</math> (yil) ]</b>		
1	15	13.0
2-5	<b>57</b>	<b>49.6</b>
More than 5	43	37.4
<b>Number of patients per nurse in the unit</b>		
Less than 5	<b>63</b>	<b>54.8</b>
5-10	29	25.2
More than 10	23	20.0
<b>Separation of homes with family due to Covid-19</b>		
Yes	46	40.0
No	<b>69</b>	<b>60.0</b>
<b>Fear of the person/relative being diagnosed with Covid-19</b>		
Yes	<b>109</b>	<b>94.8</b>
No	6	5.2
<b>Diagnosed with Covid-19</b>		
Yes	25	21.7
No	<b>90</b>	<b>78.3</b>

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<b>Variable (n=115)</b>	<b>n</b>	<b>%</b>
<b>Close presence diagnosed with Covid-19</b>		
Yes	<b>80</b>	<b>69.6</b>
No	35	30.4
<b>Changing the unit during Covid-19</b>		
Yes	45	39.1
No	<b>70</b>	<b>60.9</b>

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It was determined that 40% of the nurses separate their families due to COVID-19 in their routine life, and 94.8% fear that they/their relatives will be diagnosed with COVID-19. It was also indicated that 21.7% of the nurses were diagnosed with COVID-19, 69.6% of their relatives were diagnosed with COVID-19, and 39.1% of them had unit change during COVID-19 (Table 2).

**Table 2. The Comparison of The Scores of The Psychological Distress Scale (K-10) and The Quality of Life Scale According to The Sociodemographic Findings of The Nurses**

Scales	n	Psychological Distress Scale		Quality of Life Scale					
		$\bar{X} \pm S.S.$	Median [IQR]	Compassion satisfaction		Burnout		Compassion fatigue	
Variable (n=115)		$\bar{X} \pm S.S.$	Median [IQR]	$\bar{X} \pm S.S.$	Median [IQR]	$\bar{X} \pm S.S.$	Median [IQR]	$\bar{X} \pm S.S.$	Median [IQR]
<b>Age</b>									
<25 <sup>(1)</sup>	27	25.56±7.94	25.0 [11.0]	27.04±8.85	28.0 [14.0]	25.26±5.71	24.0 [9.0]	17.63±7.48	17.0 [10.0]
25-27 <sup>(2)</sup>	44	29.98±8.90	27.5 [14.0]	30.77±10.93	32.5 [13.5]	20.80±6.45	21.5 [7.8]	17.93±9.21	18.0 [16.8]
28-30 <sup>(3)</sup>	22	28.68±5.95	29.5 [6.8]	28.64±9.76	27.0 [11.3]	21.18±5.49	22.0 [11.0]	17.36±6.11	18.0 [5.5]
>30 <sup>(4)</sup>	22	30.59±9.67	27.5 [16.8]	31.05±7.93	30.0 [16.3]	21.77±6.65	21.0 [10.0]	17.23±8.99	17.0 [15.3]
<b>Statistical analysis *</b>		$\chi^2=6.470$		$\chi^2=4.264$		F=3.500		$\chi^2=0.209$	
<b>Possibility</b>		p=0.091		p=0.234		<b>p=0.018</b>		p=0.976	
<b>Difference</b>						<b>[1-2]</b>			
<b>Gender</b>									
Female	78	27.63±8.05	27.0 [12.3]	29.49±9.57	29.0 [14.0]	22.45±5.88	23.5 [7.3]	17.53±7.56	18.0 [8.5]
Male	37	31.29±8.89	31.0 [14.5]	29.65±10.20	28.0 [15.5]	20.78±7.21	20.0 [11.5]	17.81±9.40	17.0 [17.5]
<b>Statistical analysis</b>		Z=-2.261		t=-0.083		Z=-1.313		t=-0.161	
<b>Possibility</b>		<b>p=0.024</b>		p=0.934		p=0.189		p=0.872	
<b>Marital status</b>									
Married	38	31.13±8.36	30.5 [11.3]	29.89±7.92	29.5 [13.3]	20.82±6.78	20.5 [10.3]	17.71±8.48	17.0 [11.5]
Single	77	27.66±8.33	27.0 [11.5]	29.36±10.56	29.0 [14.0]	22.45±6.10	23.0 [8.0]	17.57±8.06	18.0 [13.5]
<b>Statistical analysis</b>		Z=-2.242		t=0.274		t=-1.305		t=0.086	
<b>Possibility</b>		<b>p=0.025</b>		p=0.785		p=0.194		p=0.932	
<b>Family type</b>									
Nuclear family <sup>(1)</sup>	92	28.73±8.38	27.0 [14.0]	30.26±8.58	30.0 [13.0]	21.73±6.36	22.0 [9.0]	17.87±7.48	17.5 [10.8]
Extended family <sup>(2)</sup>	14	30.50±9.10	30.0 [11.5]	22.14±13.03	22.0 [16.0]	23.36±5.76	24.0 [6.5]	16.79±10.12	21.0 [17.5]
Single parent family <sup>(3)</sup>	9	27.00±8.93	25.0 [13.5]	33.67±10.78	29.0 [21.5]	21.56±7.52	20.0 [13.5]	16.33±11.96	15.0 [23.0]
<b>Statistical analysis</b>		$\chi^2=1.069$		F=5.508		$\chi^2=0.480$		$\chi^2=0.345$	
<b>Possibility</b>		p=0.586		<b>p=0.005</b>		p=0.787		p=0.841	
<b>Difference</b>				<b>[2-1,3]</b>					
<b>Cared of child</b>									
With parents	8	26.50±7.29	26.5 [11.8]	29.25±9.09	26.5 [17.8]	23.13±5.67	24.0 [11.8]	20.38±4.54	19.5 [3.5]
With spouse	11	34.45±7.80	31.0 [12.0]	30.36±8.44	30.0 [13.0]	18.18±7.53	16.0 [15.0]	15.91±8.90	15.0 [15.0]
By one's own/Nursery	5	27.40±6.54	27.0 [13.0]	33.20±1.64	33.0 [2.5]	21.80±3.56	22.0 [5.5]	18.20±4.44	17.0 [8.0]
<b>Statistical analysis</b>		F=3.167		$\chi^2=1.595$		F=1.526		$\chi^2=2.652$	
<b>Possibility</b>		p=0.063		p=0.450		p=0.241		p=0.266	

\* t=Independent Sample-t test F=ANOVA test, Z=Mann-Whitney U test,  $\chi^2$ =Kruskall-Wallis H test

There was a statistically significant difference in terms of burnout subdimension scores of ProQOL according to age ( $F=3.500$ ;  $p=0.018$ ). In the Tukey's paired comparisons that were made by considering the homogeneity of the variances to identify from which group the significant difference came, it was determined that the statistically significant difference was between the participants in the <25 age group and the participants in the 25-27 age group.

According to gender, a significant difference was detected in K10 scores of the participants ( $Z=-2.261$ ;  $p=0.024$ ). The scale scores of the male participants were significantly higher than those of the female participants.

K10 scores of the participants differed significantly based on their marital statuses ( $Z=-2.242$ ;  $p=0.025$ ). The scale scores of the married participants were significantly higher than those of the single participants.

Based on the family types of the participants, their ProQOL professional satisfaction dimension scores varied significantly ( $F=5.508$ ;  $p=0.005$ ). In the Tukey's paired comparisons made by considering the homogeneity of the variances to determine the groups that showed the significant variation, it was determined that this significant difference was between the participants with extended families and those with nuclear and or single-parent families.

ProQOL compassion fatigue dimension scores of the participants varied significantly based on their financial statuses ( $\chi^2=10.572$ ;  $p=0.005$ ). In the pairwise comparisons that were carried out with Bonferroni correction to identify the groups that displayed this significant difference, it was observed that this difference was between the participants whose income was less than their expenses and those whose income was equal to their expenses (Table 3).



**Table 3. The Comparison of The Scores of The Psychological Distress Scale (K-10) and The Quality of Life Scale According to The Findings of The Nurses' Working Processes.**

Scales	n	Psychological Distress Scale		Quality of Life Scale					
		$\bar{X} \pm S.S.$	Medyan [IQR]	Compassion satisfaction		Burnout		Compassion fatigue	
				$\bar{X} \pm S.S.$	Medyan [IQR]	$\bar{X} \pm S.S.$	Medyan [IQR]	$\bar{X} \pm S.S.$	Medyan [IQR]
<b>Variable (n=115)</b>									
<b>Economic Status</b>									
Income less than expenses	34	29.29±9.42	27.0 [15.8]	31.41±11.49	33.0 [15.3]	20.91±6.97	21.0 [10.3]	14.35±9.43	14.0 [9.3]
Income equal to expense	64	27.67±7.90	27.0 [14.0]	29.53±9.11	28.5 [14.8]	22.28±5.92	24.0 [9.0]	19.39±6.92	19.0 [8.5]
Income more than expenses	17	31.76±8.21	30.0 [11.0]	25.82±7.35	27.0 [9.5]	22.53±6.81	23.0 [6.0]	17.47±8.18	17.0 [18.5]
<b>Statistical analysis *</b>		$\chi^2=3.196$		$\chi^2=4.496$		$\chi^2=1.264$		$\chi^2=10.572$	
<b>Possibility</b>		p=0.202		p=0.106		p=0.531		<b>p=0.005</b>	
<b>Difference</b>								<b>[1-2]</b>	
<b>Year of study</b>									
1	15	31.47±11.70	29.0 [25.0]	28.60±13.81	33.0 [15.0]	23.07±7.19	24.0 [6.0]	14.73±9.17	15.0 [8.0]
2-5	57	27.87±7.15	27.0 [13.0]	29.12±9.48	28.0 [14.0]	22.26±5.98	23.0 [9.0]	18.23±6.94	18.0 [9.5]
More than 5	43	29.12±8.78	27.0 [14.0]	30.42±8.51	29.0 [12.0]	21.05±6.58	20.0 [10.0]	17.81±9.22	18.0 [17.0]
<b>Statistical analysis</b>		F=1.115		$\chi^2=0.453$		F=0.730		F=1.111	
<b>Possibility</b>		p=0.332		p=0.797		p=0.484		p=0.333	
<b>Changing the unit during Covid-19</b>									
Yes	45	29.16±8.77	27.0 [14.5]	30.60±9.44	32.0 [13.0]	21.33±6.32	22.0 [11.0]	17.33±6.89	18.0 [12.0]
No	70	28.59±8.32	27.5 [13.5]	28.86±9.92	28.0 [14.0]	22.29±6.39	23.5 [8.3]	17.80±8.92	18.0 [14.5]
<b>Statistical analysis *</b>		Z=-0.141		t=0.937		t=-0.783		t=-0.298	
<b>Possibility</b>		p=0.888		p=0.351		p=0.435		p=0.766	
<b>Separation of homes with family due to Covid-19</b>									
Yes	46	27.91±8.30	27.0 [12.3]	28.33±11.63	28.0 [16.3]	23.09±6.76	24.0 [8.0]	18.63±9.09	19.0 [15.3]
No	69	29.40±8.58	28.0 [14.5]	30.35±8.23	29.0 [12.5]	21.13±5.99	21.0 [9.0]	16.94±7.48	17.0 [12.0]
<b>Statistical analysis *</b>		Z=-1.015		t=-1.092		Z=-1.790		t=1.088	
<b>Possibility</b>		p=0.310		p=0.277		p=0.073		p=0.279	
<b>Fear of the person/relative being diagnosed with Covid-19</b>									
Yes	109	28.38±8.35	27.0 [12.5]	29.44±9.76	29.0 [14.0]	22.13±6.34	23.0 [9.0]	17.81±8.26	18.0 [13.0]
No	6	36.67±7.03	37.0 [13.0]	31.33±9.89	29.5 [20.8]	18.00±5.69	17.0 [10.5]	14.17±5.49	16.0 [10.3]
<b>Statistical analysis *</b>		Z=-2.374		t=-0.462		t=1.559		t=1.065	
<b>Possibility</b>		<b>p=0.018</b>		p=0.645		p=0.122		p=0.289	
<b>Diagnosed with Covid-19</b>									
Yes	25	25.64±6.24	25.0 [9.5]	30.32±10.26	29.0 [18.0]	24.16±4.91	24.0 [7.0]	20.08±4.81	20.0 [6.5]
No	90	29.69±8.81	28.0 [14.0]	29.32±9.63	29.0 [12.5]	21.29±6.59	22.0 [10.0]	16.93±8.77	17.0 [13.5]



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Statistical analysis *	Z=-2.037	Z=-0.122	t=2.026	Z=-1.786
Possibility	<b>p=0.042</b>	p=0.903	<b>p=0.045</b>	p=0.074

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\*\* t=Independent Sample-t test F=ANOVA test, Z=Mann-Whitney U test,  $\chi^2$ =Kruskall-Wallis H test

It was determined that K10 scores of the participants differed to a statistically significant extent based on their fears of being diagnosed or their loved ones being diagnosed with COVID-19 ( $Z=-2.374$ ;  $p=0.018$ ). The scale scores of those who were not afraid were significantly compared to those who were afraid.

There was a statistically significant difference in K10 scores of the participants based on their statuses of being diagnosed with COVID-19 ( $Z=-2.037$ ;  $p=0.042$ ). The scale scores of who had not tested positive for COVID-19 were significantly higher than the scores of those who had (Table 3).

ProQOL burnout dimension scores of the participants showed a statistically significant difference based on their COVID-19 diagnosis statuses ( $t=2.026$ ;  $p=0.045$ ). The burnout dimension scores of the participants who had been diagnosed with COVID-19 were significantly greater than the scores of the participants who had not been diagnosed with COVID-19.

A positive, weak, and statistically significant correlation was determined between K10 scores and professional satisfaction ( $r=0.242$ ;  $p=0.009$ ) (Table 4).

**Table 4. Examining the Relationship of The Scales with One Another**

<b>Correlation * (n=115) Quality of Life Scale</b>	<b>Psychological Distress Scale</b>	
	<b>r</b>	<b>p</b>
Compassion satisfaction	0.242	<b>0.009</b>
Burnout	-0.536	<b>0.000</b>
Compassion fatigue	-0.507	<b>0.000</b>

\*r= Spearman's correlation coefficient

A negative, moderate, and statistically significant relationship was identified between psychological distress scale scores and burnout and compassion fatigue ( $p<0.05$ ).

#### **4. DISCUSSION**

Psychosocial causes have negative effects on professional satisfaction, and they cause burnout. Ensuring the quality of life of individuals is largely dependent on the quality of their professional life (Soto- Rubio, Gímez-Espert & Prado- Gasco, 2020).

Başkale et al. (2016) found nurses' professional satisfaction and secondary trauma stress to be lower, and burnout was found to be higher. In this study, professional satisfaction scores ( $29.54\pm 9.73$ ) were found higher than burnout ( $21.91\pm 6.35$ ) and compassion scores ( $17.62\pm 8.16$ ) (Table 3). During COVID-19, nurses actively fulfilled all their roles in the profession, used their powers to the fullest, and even learned new information and practices. It can be thought that these conditions lead to an increase in job satisfaction levels.

Hu et al. (2020) revealed a positive association between age, emotional exhaustion and burnout, personal accomplishment and depression, a negative relationship between burnout and desensitization, anxiety and fear. In this study, there was a statistically significant difference in the burnout dimension scores of the participants based on their ages ( $F=3.500$ ;  $p=0.018$ ). The participants who were younger than 25 years old had a statistically significantly higher mean burnout score than the participants in the 25-27 age group. This indicates that as age increases, burnout decreases due to the increase in emotional tolerance.

In this study, the professional satisfaction dimension scores of the participants differed significantly depending on their family types ( $F=5.508$ ;  $p=0.005$ ), and the professional satisfaction scores of nuclear families and single-parent families were significantly higher than the scores of the participants with extended families.

Professional burnout syndrome causes problems such as an increase in depressive complaints, impaired quality of life, sleep disturbances, job dissatisfaction, and prevention of professionalism (Khammissa et. al., 2022; Steffey et. al., 2023). In this study, professional satisfaction ( $30.42\pm 8.51$ ) in those with a professional experience of more than 5 years, compassion fatigue ( $18.23\pm 6.94$ ) in those with 2-5 years, and burnout ( $23.07\pm 7.19$ ) in those with a professional experience of 1 year scores were found to be high. This indicates that as the professional experience increase, the burnout and professional satisfaction experienced by nurses increase.

Trumello et al. (2020) concluded that burnout, stress, and secondary trauma scores were significantly higher in nurses working with patients diagnosed with COVID-19. Working in the frontline increases the risk of getting sick and burnout. In this study, there was a significant variation in the burnout dimension scores of the participants based on according to their COVID-19 diagnosis statuses ( $t=2.026$ ;  $p=0.045$ ), and the burnout scores of the participants diagnosed with COVID-19 ( $24.16\pm 4.91$ ) were significantly greater than the participants who were not diagnosed with COVID-19 ( $21.29\pm 6.59$ ). In addition to the difficulty of working conditions, it can be thought that being sick or being afraid of being sick also triggers burnout.

According to the systematic review results of 59 studies with 54,707 participants during COVID-19, one or two in every five health workers experienced anxiety, depression, psychological distress, and/or sleep problems, which were primarily associated with increased workload (Cabarkapa, Nadjidai & Murgier, 2020).

When psychological distress scale scores were examined according to marital status in this study, the married participants were determined to have higher K10 scores than those who were single. The reason for this may be that 78% of the nurses are females, and 45.8% of those who are married take care of their children with their spouses. Qureshi et al. (2005) carried out a study with nurses and revealed that child care, transportation problems, and pet care during a disaster are important obstacles to the job.

Many nurses have had to work extra shifts and longer hours due to the increasing number of patients (Shechter et. Al., 2020). Besides, frontline nurses are not only concerned about the COVID-19 but also infecting their families (Maben and Bridges, 2020; Nie et al., 2020). This study determined that 94.8% of nurses were afraid of their/relatives' being diagnosed with COVID-19. This finding coincides with the findings in the literature.

Concerns about infection risk raise fear in the community (Lin, 2020). Labrague and Santos (2020) reported on COVID-19-related fears, psychological distress, job satisfaction, and the intention to turnover in nurses and suggested that as the scores of the COVID-19 Fear Scale increased, K10 scores increased. Satici et al. (2021) stated that COVID-19-related fear increases psychological distress. Similarly, in our study, K10 scores of those who had not been diagnosed with COVID-19 were significantly higher than the participants who had. Experiencing the disease can be thought to reduce psychological distress.

A positive, weak, and statistically significant correlation was determined between K10 scores and professional satisfaction ( $r=0.242$ ;  $p=0.009$ ). As the professional satisfaction scores increase, the scores on the psychological distress scale increase. With the pandemic, the visibility of the profession of nursing, contributing to the recovery of patients at death's door, increases professional satisfaction, while it can be thought that nurses' sacrifice from their social lives increases psychological distress. Yüncü and Yılan (2020) examined the impact of the COVID-19 pandemic

on health workers, and nurses, in particular, reported that the families of the participants were proud of them, but they reproached them for being distanced from them.

The study had two limitations. First, it was conducted in a single center. Additionally, it was carried out in the pandemic period, and all nurses could not be reached due to workload.

## 5. CONCLUSIONS

During the pandemic process, nurses experience psychological problems not only because of the intense work pressure but also because of family, social, and financial issues, and all these factors affect both daily and business life. Psychological distress and professional quality of life also affect whether the person/relative is diagnosed with COVID-19 and the fear of being diagnosed. Moreover, the increase in burnout and compassion fatigue may lead to a decrease in psychological distress due to the acceptance of nurses that they do not have a chance to get away from this situation. In this context, nurses should be provided with psychological support, and their workload should be reduced to provide psychological well-being and professional satisfaction in business and social life. Psychotherapeutic interventions such as planning group therapies under the leadership of mental health and psychiatric nurses can be provided to create a peer support group where employees can share about the process and support motivation, individual coping skills, endurance, and self-compassion.

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