

PAPER DETAILS

TITLE: Perceived Stress and Coping Strategies of Nurses Working in the Emergency Service During the Covid-19 Pandemic

AUTHORS: Nurgül KARAKURT, Pinar Sevda GÜL

PAGES: 550-562

ORIGINAL PDF URL: <https://dergipark.org.tr/tr/download/article-file/2483797>

RESEARCH ARTICLE

DOI: 10.19127/mbsjohs.1130111

Perceived Stress and Coping Strategies of Nurses Working in the Emergency Service During the Covid-19 Pandemic

Nurgül Karakurt¹(ID), Pınar Sevda Gül²(ID)

¹Department of Psychiatric Nursing, Faculty of Health Sciences, Erzurum Technical University, Erzurum, Turkey.

²Department of Nursing, Clinical Nurse, Erzurum City Hospital, Erzurum, Turkey

Received: 13 June 2022, Accepted: 09 September 2022, Published online: 30 November 2022

© Ordu University Institute of Health Sciences, Turkey, 2022

Abstract

Objective: This study aims to investigate the perceived stress and coping styles of the nurses working in the emergency service during the COVID-19 pandemic.

Methods: The study population consisted of the nurses in the emergency service of the A Hospital, who met the research inclusion criteria between April 15th, 2021, and May 1st, 2021 (N:179). Without any sample selection, 156 nurses who agreed to participate voluntarily in the research were included in the study sample. Research data were collected using the survey program online, taking into account the COVID-19 conditions and the intensity of work in the emergency service. Permission of the Ministry of Health and approval of the ethics committee (no:B.30.2.ATA.0.01.00/) were obtained before conducting the study.

Results: The Perceived Stress Scale scores of the nurses working in the emergency service were found to be above the average (avg.value:26). In addition, of the Ways of Coping Questionnaire sub-scales, the Optimistic Approach, Self-Confident Approach, Seeking Social Support Approach sub-scale scores were found to decrease with the increase in the Perceived Stress Scale scores, whereas the Helpless Approach and Submissive Approach sub-scale scores were found to increase significantly with increasing Perceived Stress Scale scores ($p<0.05$). In addition, the study suggests that there is a positive and significant relationship between the Perceived Stress Scale scores and the Ways of Coping Questionnaire scores of the nurses ($p<0.05$).

Conclusions: The perceived stress level score of the emergency service nurses was found to be above average, and the Optimistic Approach, Self-Confident Approach, Seeking Social Support Approach sub-scale scores were found to decrease with the increase in the Perceived Stress Scale scores, but the Helpless Approach and Submissive Approach sub-scale scores were found to increase with increasing Perceived Stress Scale scores.

Keywords: Nurse, COVID-19, Emergency Service, Coping with Stress

Suggested Citation: Karakurt N, Gül P S. Perceived Stress And Coping Strategies of Nurses Working In The Emergency Service Service During The Covid-19 Pandemic. Mid Blac Sea Journal of Health Sci, 2022;8(4): 550-562.

Copyright@ Author(s) - Available online at <https://dergipark.org.tr/en/pub/mbsjohs>

Content of this journal is licensed under a Creative Commons Attribution-NonCommercial 4.0 International

License.



Address for correspondence/reprints:

Name and Surname: Nurgül Karakurt

Telephone number: +90 (505) 566 73 99

E-mail: nurgul.karakurt@erzurum.edu.tr

Note: This article is based on the master thesis of Atatürk University Institute of Health Sciences, Department of Psychiatric Nursing

INTRODUCTION

According to World Health Organization reports, infectious diseases that spread very quickly, and affect the entire world, causing many people to experience serious health problems or even die, are called pandemics (1). Although symptoms vary, fever, cough, respiratory distress, and fatigue are the most common symptoms of COVID-19, caused by the new type of coronavirus called SARS-CoV-2, which is considered a severe public health problem that concerns many people at the point of fighting against the disease (2).

During the pandemic, which is of international importance, the workload of healthcare professionals working at the forefront is also increasing every day since they exert superior efforts in the diagnosis, treatment, and care of the disease (3).

In particular, this increases the responsibilities of an emergency nurse, who is in close contact with the patients during their hospital admission, who performs their transfer, performs first interventions, and who plays an influential role in dealing with crisis situations. In order not to disrupt the service, it is very important to protect and improve the physical and mental health of nurses of emergency working at an intensive work pace (4).

According to the studies conducted so far, it is noteworthy that the anxiety levels of healthcare professionals increase, and their motivation decreases considerably with the

increased workload (5). Studies report that severe insomnia, fatigue, and weakness affect the immune system, and deteriorate physical health and mental health, which in turn increase a person's stress factors that emphasize the severity of the situation (6). Working in an infected environment for long hours, with close one-on-one contact with the patients, leads to a constant increase in anxiety levels and fear in healthcare professionals (7).

Considering the condition of healthcare professionals in outbreaks in past years, it was determined that they felt inadequate in terms of knowledge and skills, especially in protecting themselves and their closest relatives from the epidemic, and that the level of fear and anxiety caused by insufficient knowledge of the disease was quite high (8).

The study conducted in the name of proper management of the process, prevention of physical and mental health problems, and improvement of mental state is noteworthy, especially because of the limited practices regarding health care professionals. In light of all this information, it is important to identify the stress experienced by the emergency nurse who is the first responder to the patient throughout the pandemic and to manage the methods of coping with the stress.

METHODS

The study population consisted of the nurses in the emergency service of the A Hospital, who met the research inclusion criteria between

April 15th, 2021, and May 1st, 2021 (N:179). Without any sample selection, 156 nurses who agreed to participate voluntarily in the research were included in the study sample (Table 1).

Table 1. Introductory characteristics of nurses included in the study (n=156)

	n	%
Gender		
Female	90	57.7
Male	66	42.3
Age		
18-24	44	28.2
25-30	76	48.7
31-35	36	23.1
Marital status		
Single	104	66.7
Married	52	33.3
Having Children		
Yes	22	14.1
No	134	85.9
Education status		
High school graduate	18	11.5
Bachelor's degree	114	73.1
Postgraduate	24	15.4
People Lived Together		
Alone	71	45.5
Living with friends	17	10.9
Living with family	40	25.6
Living with spouse and children	28	17.9
Presence of Chronic Diseases		
Yes	40	25.6
No	116	74.4
Working Time		
1-3 years	67	42.9
3-5 years	32	20.5
5 years and above	57	36.5
Corona virus infection		
Yes	104	66.7
No	52	33.3
Corona virus infection in the family		
Yes	106	67.9
No	50	32.1
Working in the emergency service willingly		
Yes	54	34.6
No	102	65.4
Manner of Working		
Daytime Only	38	24.4
In shifts	118	75.6

Data Collection Instruments

'Personal Information Form', 'Perceived Stress Scale', and Ways of Coping Questionnaire' were used.

Personal Information Form

The form prepared by a literature review consists of 12 items on personal information.

Perceived Stress Scale

It was developed by Cohen et al. The scale is designed to measure the stress perceived by a person in his/her life (9). It is a 5-point Likert-type scale, scored between "Never (0)" to "Very frequently (4)". Seven of the items with positive expressions are reverse-coded. The Turkish adaptation of the scale was conducted by Baltaş et al. a score between 11-26 corresponds to a low-stress level, 27-41 corresponds to a moderate stress level, and 42-56 corresponds to a high-stress level (10).

Ways of Coping Questionnaire (WCQ)

The scale, developed by Folkman and Lazarus, is a 4-point Likert-type scale, consisting of 30 items (11). The validity and reliability study of the WCQ was conducted by Şahin and Durak (12). The internal consistency coefficient calculated for the WCQ sub-scales was 0.68 for the Optimistic Approach sub-scale, 0.80 for the Self-Confident approach sub-scale, 0.73 for the Helpless Approach sub-scale, 0.70 for the Submissive Approach sub-scale, and 0.47 for the Seeking Social Support Approach sub-scale. In this study, Cronbach's Alpha internal consistency coefficient was found to be 0.942 for the Optimistic Approach sub-scale, 0.967 for the Self-Confident Approach sub-scale, 0.910 for the Helpless Approach sub-scale, 0.871 for the Submissive

Approach sub-scale, and 0.364 for the Seeking Social Support Approach sub-scale.

The scale has two dimensions problem-focused effective approaches, and emotions-focused ineffective approaches, which are grouped under 5 sub-scales. The total score from each sub-scale is divided by the number of items related to that sub-scale, resulting in an average score. The increase in the total score for each sub-scale indicates frequent use of the coping style in question.

Data Collection

The data were collected using an online survey program, after obtaining the necessary permissions. It took 5-10 minutes for the participants to answer questions. Before the data collection, emergency service nurses were informed about the content of the research. The principle of confidentiality was followed within the scope of the study.

Statistical analysis

In the data analysis, 10 different statistical analyses (frequency, percentage, Pearson product-moment correlation analysis, Linear Regression Analysis, t-test, one-way analysis of variance, Kruskal Wallis H test, Mann Whitney U test, LSD Post Hoc test, Cronbach's Alpha analysis) were used, and the analyses were performed by SPSS 22.00 statistical program.

RESULTS

Looking at Table 1, 57.7% of the nurses surveyed were female, 48.7% were 25-30 years old, 66.7% were single, 85.9% had no children,

73.1% had a Bachelor's degree, 45.5% were living alone, 74.4% had no any chronic condition, 42.9% was working for 1-3 years, 66.7% had COVID-19, 67.9% had a relative who had COVID-19, 65.4% was not working voluntarily in the emergency service, and 75.6% was working in shifts.

Table 2. Arithmetic mean and standard deviation values for the Perceived Stress Scale and Ways of Coping Questionnaire scores of the nurses

	Minimum	Maximum	Arithmetic mean	S.D.
Perceived Stress Scale	14	52	34.47	11.41
Problem-Focused Effective Approaches Sub-Scale				
Optimistic Approach Sub-Scale	.00	2.80	1.33	.87
Self-Confident Approach Sub-Scale	.00	3.00	1.46	.94
Seeking Social Support Sub-Scale	.38	1.13	.68	.24
Emotion-Focused Ineffective Approaches Sub-scale				
Helpless Approach Sub-Scale	1.17	4.00	2.57	1.01
Submissive Approach Sub-Scale	.50	4.25	2.55	1.19

Looking at Table 2, the average Perceived Stress Scale score was 34.47 ± 11.41 , the Optimistic Approach sub-scale average was 1.33 ± 0.87 , the Self-Confident Approach sub-scale score average was 1.46 ± 0.94 , the Seeking Social Support Approach sub-scale score average was 0.68 ± 0.24 , the Helpless Approach sub-scale score average was 2.57 ± 1.01 , and the

Submissive Approach sub-scale score average was 2.55 ± 1.19 .

Of the nurses included in the study, 21.8% had a low-stress level, 47.4% had a moderate stress level, and 30.8% had a high level of stress (Table 3).

Table 3. Perceived level of stress of the nurses

	n	%
Low level of stress	34	21.8
Moderate level of stress	74	47.4
High level of stress	48	30.8

While the correlation between the Perceived Stress Scale score and the Optimistic Approach sub-scale, Self-Confident Approach sub-scale, and Seeking Social Support Approach sub-scale scores was negatively significant at $p < 0.05$ level of significance, the correlation with the Helpless Approach sub-scale score, and Submissive Approach sub-scale score was positively significant at $p < 0.05$ level of significance (Table 4).

The Perceived Stress Scale scores significantly correlate with the Ways of Coping Questionnaire scores ($R = .904$, $R^2 = .817$, $p < 0.05$). The Ways of Coping Questionnaire score explains 82% of the total variance of perceived stress levels of the nurses. Looking at the t-test results on the significance of regression coefficients, it's seen that the Seeking Social Support Approach sub-scale, Helpless Approach sub-scale, and Submissive Approach sub-scale variables were significant

predictors of the stress that nurses perceive (Table 5).

According to the nurses' genders, the t values of the differences between the Perceived Stress Scale, Optimistic Approach, Self-Confident, Seeking Social Support, and Helpless Approach sub-scales scores were found to be significant at $p < 0.05$ level (Table 6).

According to the marital status of the nurses, the t values of the differences between them were significant at $p < 0.05$ level in terms of self-confident approach sub-scale scores (Table 6).

According to the nurses' educational status, the differences between the Perceived Stress Scale, Optimistic Approach, Self-Confident, and Helpless Approach sub-scales scores were found to be significant at $p < 0.05$ level. The LSD Post Hoc test was performed to reveal the difference between the nurses in terms of their education (Table 6).

Table 4. The correlation between Perceived Stress Scale and Ways of Coping Questionnaire scores and the related correlation values

		Perceived Stress Scale
Optimistic Approach	r	-.652**
Sub-Scale	p	.000
Self-Confident Approach	r	-.708**
Sub-Scale	p	.000
Seeking Social Support	r	-.660**
Sub-Scale	p	.000
Helpless Approach Sub-Scale	r	.859**
	p	.000
Submissive Approach	r	.745**
Sub-Scale	p	.000

**, $P < 0.01$

Table 5. Results of the linear regression analysis on how the coping styles of nurses predict their perceived level of stress

Variable	B	Standard Error	Beta	t	p
Constant	25.271	2.471		10.229	.000
Optimistic Approach Sub-Scale	-.546	.295	-.207	-1.853	.066
Self-Confident Approach Sub-Scale	-.019	.218	-.011	-.085	.932
Seeking Social Support Sub-Scale	-1.095	.290	-.187	-3.770	.000
Helpless Approach Sub-Scale	1.604	.158	.848	10.145	.000
Submissive Approach Sub-Scale	-.569	.195	-.238	-2.921	.004
R=.904		R ² =.817			
F _(5,150) =134.177		p=.000			
a. Dependent variable: Perceived Level of Stress					

As a result of the LSD Post-Hoc test, the differences between the Perceived Stress Scale scores and Helpless Approach sub-scale scores of the nurses with graduate degrees were higher and significant at $p<0.05$ level of significance than the nurses with Bachelor's degree and high school degree, and the differences between Optimistic Approach sub-scale and Self-Confident Approach sub-scale scores of the nurses with high school and Bachelor's degrees were higher and significant at $p<0.05$ level of significance than that of the nurses with graduate degrees (Table 6).

The KW values of the differences between the Perceived Stress Scale scores of the nurses were significant at $P<0.05$ level in terms of who they lived together with. LSD Post Hoc test was used to find the difference between the nurses

in terms of the people they lived together (Table 6).

According to the result of the LSD Post-Hoc test, the differences between the Perceived Stress Scale scores of the nurses living with their spouses and children were higher and significant at $p<0.05$ level of significance, compared to the nurses living alone and living with their family (Table 6).

According to the nurses' working times, the F values of the differences between Perceived Stress Scale, Optimistic Approach, Self-Confident, Seeking Social Support, Helpless Approach, and Submissive Approach sub-scales scores were found to be significant at $p<0.05$ level. The LSD Post Hoc test was performed to reveal the difference between the nurses in terms of their working times (Table 6).

According to the LSD Post-Hoc test results, the Perceived Stress Scale scores of the nurses working for 3-5 years were higher than the nurses which were working for 1-3 years and 5 years and above ($p<0.05$); and, the Optimistic Approach sub-scale scores of the nurses working for 5 years and above were significantly higher than that of nurses working for 1-3 years ($p<0.05$); Seeking Social Support Approach sub-scale scores of the nurses working for 1-3 years and 5 years and above were significantly higher than that of the nurses working for 3-5 years ($p<0.05$); and Helpless Approach and Submissive Approach sub-scale

scores of the nurses working for 3 years and above were significantly higher than the nurses working for 1-3 years ($p<0.05$) (Table 6).

The t values of the differences between the Perceived Stress Scale, Self-Confident Approach sub-scale, and Seeking Social Support scores of the nurses were significant at $p<0.05$ level in terms of being infected with the coronavirus (Table 6).

According to the COVID-19 infection status in the family of the nurses, the t values of the differences between the Perceived Stress Scale, Optimistic Approach, Self-Confident Approach, Helpless Approach sub-scale, and Submissive Approach scores were found to be significant at $p<0.05$ level (Table 6).

Table 6. The differences between Perceived Stress Scale scores and Ways of Coping Questionnaire scores of the nurses according to their descriptive characteristics

		Perceived Level of Stress	Optimistic Approach	Self-confident Approach	Seeking Social Support Approach	Helpless Approach	Submissive Approach
		X \pm S.D.	X \pm S.D.	X \pm S.D.	X \pm S.D.	X \pm S.D.	X \pm S.D.
Gender	Female	37.44 \pm 11.161	1.08 \pm .854	1.21 \pm .939	.63 \pm .263	2.74 \pm 1.040	2.54 \pm 1.383
	Male	30.42 \pm 10.528	1.65 \pm .774	1.79 \pm .849	.74 \pm .198	2.34 \pm .914	2.56 \pm .884
	TEST	t=4.011 p=.000	t=-4.337 p=.000	t=-4.002 p=.000	t=-3.008 p=.003	t=2.519 p=.013	t=-.089 p=.929
Age	18-24	35.00 \pm 11.054	1.14 \pm .763	1.33 \pm .886	.62 \pm .225	2.59 \pm .998	2.47 \pm 1.285
	25-30	35.53 \pm 12.027	1.34 \pm .931	1.46 \pm .982	.70 \pm .272	2.65 \pm 1.024	2.58 \pm 1.191
	31-35	31.61 \pm 10.244	1.50 \pm .819	1.61 \pm .937	.70 \pm .185	2.40 \pm .983	2.58 \pm 1.113
	TEST	F=1.514 p=.223	F=1.756 p=.176	F=.824 p=.441	F=1.951 p=.146	F=.754 p=.472	F=.135 p=.874
Marital status	Single	34.19 \pm 10.938	1.23 \pm .809	1.32 \pm .870	.67 \pm .235	2.54 \pm 1.025	2.51 \pm 1.221
	Married	35.04 \pm 12.383	1.51 \pm .948	1.72 \pm 1.036	.70 \pm .260	2.63 \pm .973	2.63 \pm 1.148
	TEST	t=-.436 p=.664	t=-1.967 p=.051	t=-2.526 p=.013	t=-.872 p=.384	t=-.505 p=.614	t=-.544 p=.587
Having Children	Yes	36.09 \pm 10.433	1.39 \pm .859	1.56 \pm .964	.68 \pm .210	2.86 \pm .856	2.66 \pm 1.283
	No	34.21 \pm 11.573	1.31 \pm .869	1.44 \pm .944	.68 \pm .249	2.53 \pm 1.023	2.53 \pm 1.183
	TEST	U=1343.500 p=.502	U=1337.000 p=.480	U=1377.000 p=.618	U=1470.000 p=.983	U=1125.000 p=.073	U=1332.500 p=.466
Education status	High school graduate	31.44 \pm 11.470	1.36 \pm .753	1.59 \pm .895	.72 \pm .256	2.22 \pm 1.051	2.26 \pm 1.177
	Bachelor's degree	33.89 \pm 11.015	1.42 \pm .850	1.54 \pm .903	.69 \pm .231	2.53 \pm .968	2.51 \pm 1.163
	Postgraduate	39.50 \pm 12.176	.83 \pm .888	.95 \pm 1.047	.58 \pm .275	3.03 \pm 1.036	2.95 \pm 1.306
	TEST	KW=7.094 p=.029	KW=7.527 p=.023	KW=8.066 p=.018	KW=4.264 p=.119	KW=7.222 p=.027	KW=4.412 p=.110
	Difference	3>1-2	1-2>3	1-2>3	-	3>1-2	-
People Lived Together	Alone	33.85 \pm 12.472	1.31 \pm .899	1.52 \pm 1.023	.71 \pm .265	2.55 \pm 1.075	2.54 \pm 1.281
	Living with friends	36.35 \pm 9.293	1.21 \pm .723	1.31 \pm .789	.67 \pm .229	2.39 \pm .941	2.28 \pm 1.166
	Living with family	30.88 \pm 10.358	1.26 \pm .721	1.34 \pm .812	.65 \pm .224	2.61 \pm 1.011	2.74 \pm 1.009
	Living with spouse and children	40.07 \pm 9.084	1.50 \pm 1.048	1.55 \pm 1.014	.66 \pm .225	2.70 \pm .875	2.48 \pm 1.247
	TEST	KW=17.646 p=.001	KW=2.310 p=.511	KW=4.668 p=.198	KW=2.291 p=.514	KW=1.083 p=.781	KW=2.700 p=.440
	Difference	4>1-3	-	-	-	-	-

According to willingness in working in emergency service, the *t* values of the differences between Perceived Stress Scale scores and seeking social support sub-scale scores were found to be significant at $p < 0.05$ level (Table 6).

DISCUSSION

The findings of the study, which was conducted to investigate the perceived stress and coping strategies of the nurses working in the emergency service during the COVID-19 pandemic, were discussed in accordance with the relevant literature.

In the study, it was found that nurses working in the emergency service had an average Perceived Stress Scale score of 34.47 ± 11.41 , indicating a moderate level of perceived stress (Table 2). In the literature review on the studies discussing the perceived stress during the COVID-19 process, it was found that the average score of the perceived stress level was approximately moderate, which parallels our research findings (13).

Of the nurses included in the study, 21.8% had a low-stress score average, 47.4% had a moderate stress score average, and 30.8% had a higher stress score average (Table 3).

Looking at the literature, the fact that 71.5% of healthcare professionals experienced stress with a high score average during the pandemic emphasizes the importance of the issue (3). In another study, which investigated the perceived stress level in health care professionals, it was

found that the perceived stress scale score was above the average (14). In the study, in which the sources of stress experienced by the nurses were identified, factors such as the insufficient number of nurses in institutions, lack of effective communication between colleagues and managers, inadequate physical facilities in the work environment, and excessive working hours were found to cause problems. In addition, nurses reported that their post-stress mood was quite negatively affected and that they felt unhappy, angry, and aggressive (15). There have also been studies reporting that exposure to verbal and physical violence in emergency services increases perceived stress (16). In this context, the research findings are in line with the literature.

In the research findings, the Ways of Coping Questionnaire results were evaluated together with its sub-scales. Of the effective coping styles, the Optimistic Approach sub-scale score average was 1.33 ± 0.87 , the Self-Confident Approach sub-scale score average was 1.46 ± 0.94 , and the Seeking Social Support Approach sub-scale score average was 0.68 ± 0.24 . Of the ineffective coping styles, the Helpless Approach sub-scale score average was 2.57 ± 1.01 , and the Submissive Approach sub-scale score average was 2.55 ± 1.19 , which were above the average (Table 3).

As the perceived level of stress increases, the scores of the Optimistic Approach, Self-Confident Approach, and Seeking Social

Support Approach sub-scales decrease, whereas the Helpless Approach and Submissive Approach sub-scale scores increase (Table 4). Looking at the findings, it is noteworthy that the Ways of Coping Questionnaire Helpless Approach sub-scale average was higher than that of other sub-scale averages.

A study found that the Seeking Social Support sub-scale score of the Ways of Coping Questionnaire was higher in nurses (17). In another study, it was found that the Ways of Coping Questionnaire self-confident approach, optimistic approach, and seeking social support sub-scale scores were higher in nurses (18). It was found that the psychological impact of the COVID-19 pandemic was much greater than expected (19). An increase in anxiety and stress was inevitable during the current pandemic and in past epidemics. Concerns of healthcare professionals about their ability to meet expected service in human health increase their job responsibility, affecting their stress factors and way of dealing with stress (20). As a result of the study, it is noteworthy that the higher Ways of Coping Questionnaire Helpless Approach sub-scale score average shows the helplessness experienced by the nurses during the pandemic.

In the study, the Optimistic Approach, Self-Confident Approach, and Seeking Social Support Approach sub-scale scores were found to decrease with the increase in the Perceived Stress Scale scores, but the Helpless Approach

and Submissive Approach sub-scale scores were found to increase with increasing Perceived Stress Scale scores (Table 4).

Looking at the literature, it was found that there were limited studies on how health workers cope with stress throughout the pandemic. A study found that in the early stages of the coronavirus outbreak, people preferred the optimistic approach, seeking social support, and the self-confident approach more. It was found that individuals who soothe themselves by collecting information about the process using the self-confident approach exhibit more positive behaviors, it is easier to be patient and to accept the changing conditions using the optimistic approach, and the support of family and friends were found to be beneficial in getting rid of the stress caused by the outbreak, as well as protecting health (21).

In the study, the Perceived Stress Scale scores were found to significantly correlate with the Ways of Coping Questionnaire scores ($p < 0.05$). It's seen that the Seeking Social Support Approach sub-scale, Helpless Approach sub-scale, and Submissive Approach sub-scale variables were significant predictors of the stress that nurses perceive (Table 5). In one study, it was found that the Self-Confident Approach, Optimistic Approach, and Seeking Social Support Approach resorted during stress reduces the effect of the stress, whereas the Helpless Approach and Submissive Approach were found to increase their stress (18).

Factors such as social isolation after the COVID-19 pandemic, fear of transmission and infection, and witnessing losses in the close circle are known to increase intolerance. It is believed that while media awareness activities yield positive results, emphasizing that young people have a high risk of spreading the disease and resulting in death seriously affects stress levels. As stated in the studies, the increase in boredom due to continuous lockdown negatively affected the psychological health of people, causing them unable to use their way of coping with stress (22), which explains higher average scores in the Helpless Approach and Submissive Approach sub-scales of the Ways of Coping Questionnaire.

According to the nurses' genders, the *t* values of the differences between the Perceived Stress Scale, Optimistic Approach sub-scale, Self-Confident sub-scale, Seeking Social Support sub-scale, and Helpless Approach sub-scale scores were found to be significant at $p < 0.05$ level and Perceived Stress Scale scores of the females were found to be higher than that of males (Table 6).

Looking at the literature, there were studies reporting that the level of stress perceived by women who experienced intense fear of infecting their families and children during the epidemic was higher (13). In this context, the results of the study are in line with the results in the literature, indicating that the average score of the perceived stress level in the COVID-19

pandemic was higher in females. According to the marital status of the nurses, the *t* values of the differences between them were significant at $p < 0.05$ level in terms of self-confident approach sub-scale scores (Table 6). Findings indicate a difference between Self-Confident Approach scores in terms of marital status, in favor of married people, suggesting that married people prefer the Self-Confident Approach, among the effective coping strategies, compared to single people, which may be due to psychological support from the spouses or living together with children.

According to the nurses' educational status, the differences between the Perceived Stress Scale, Optimistic Approach sub-scale, Self-Confident sub-scale, and Helpless Approach sub-scale scores were found to be significant at $p < 0.05$ level (Table 6).

As the level of education increased, the Perceived Stress Scale and Helpless Approach sub-scale scores were found to increase, while as the level of education decreased, the Optimistic Approach and Self-Confident Approach sub-scale scores were found to increase. It may be concluded that an increase in educational level changes people's expectations and perspectives, which in turn can affect the results.

The KW values of the differences between the Perceived Stress Scale scores of the nurses were significant at $p < 0.05$ level in terms of who they lived together with (Table 6). People living

with their spouses and children were found to have a higher perceived stress scale score than people living alone and with their families. It is believed that these findings may be due to nurses' fear of infecting their children and spouses during the pandemic. It is also noteworthy that living alone will decrease such fear but living together with family can increase psychological support.

According to the nurses' working times, the F values of the differences between Perceived Stress Scale, Optimistic Approach sub-scale, Self-Confident sub-scale, Seeking Social Support sub-scale, Helpless Approach sub-scale, and Submissive Approach sub-scale scores were found to be significant at $p < 0.05$ level (Table 6).

The Perceived Stress Scale scores of the nurses working for 3-5 years were higher than the nurses which were working for 1-3 years and 5 years and above; and, the Optimistic Approach sub-scale scores of the nurses working for 5 years and above were significantly higher than that of nurses working for 1-3 years; Seeking Social Support Approach sub-scale scores of the nurses working for 1-3 years and 5 years and above were significantly higher than that of the nurses working for 3-5 years; and Helpless Approach and Submissive Approach sub-scale scores of the nurses working for 3 years and above were significantly higher than the nurses working for 1-3 years ($p < 0.05$). The differences between the

scale scores indicate that the nurses' working time can be effective in perceived stress levels and their strategies in coping with stress.

The t values of the differences between the Perceived Stress Scale, Self-Confident Approach sub-scale, and Seeking social Support scores of the nurses were significant at $p < 0.05$ level in terms of being infected with the coronavirus (Table 6). This indicates that there is a difference in disfavor of those who suffer from the COVID-19 disease.

According to the COVID-19 infection status in the family of the nurses, the t values of the differences between Perceived Stress Scale, Optimistic Approach sub-scale, Self-Confident Approach sub-scale, Helpless Approach sub-scale, and Submissive Approach scores were found to be significant at $p < 0.05$ level (Table 6). These findings suggest that the uncertainty of how relatives of nurses will survive the disease and the thought that their relatives may have the very same severe course seen in patients brought in with a coronavirus infection in the emergency service may also increase stress.

According to willingness in working in emergency service, the t values of the differences between Perceived Stress Scale scores and seeking social support sub-scale scores were found to be significant at $p < 0.05$ level. These findings may indicate that the willingness of the nurses can affect perceived stress.

CONCLUSION

The perceived stress level score of the emergency service nurses was found to be above the average, and the Optimistic Approach, Self-Confident Approach, Seeking Social Support Approach sub-scale scores were found to decrease with the increase in the Perceived Stress Scale scores, but the Helpless Approach and Submissive Approach sub-scale scores were found to increase with increasing Perceived Stress Scale scores.

Ethics Committee Approval: In this study, the Ethics Committee approval from the Faculty of Medicine and the institutional permission from the relevant institution was obtained to conduct the study (no:B.30.2.ATA.0.01.00/), in accordance with the ethical principles set out in the Helsinki Declaration.

Peer-review: Externally peer-reviewed.

Author Contributions:

Concept, Design, Literature search, Data Collection and Processing, Analysis or Interpretation, Writing- NK, PSG

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study hasn't received no financial support.

REFERENCES

1. Available from: URL: <https://tr.wikipedia.org/wiki/Pandemi> access date: June 2022
2. Til UDA. What you need to know about the new coronavirus disease. Detail Magazine. 2020;8(85):54-56.
3. Lai J, Ma S, Wang Y, Cai Z, Hu J, Wei N, et al. Factors Associated with Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease. Journal of the American Medical Association. 2019;3(3).
4. Söyük S, Kurtuluş SA. Evaluation of the problems experienced in the emergency services from the eyes of the employees. Gumushane University Journal of Health Sciences. 2017;6(4):44-56.
5. Saquib N, Zaghloul MS, Saquib J, Alhomaidan HT, Al-Mohaimeed A, Al-Mazrou A. Association of cumulative job dissatisfaction with depression, anxiety and stress among expatriate nurses in Saudi Arabia. J Nurs Manag. 2019;27(4):740-748.
6. Cox RC, Olatunji BO. Sleep in the anxiety-related disorders: A meta-analysis of subjective and objective research. Sleep Med Rev. 2020;51:101282.
7. Kang L, Li Y, Hu S, Chen M, Yang C, Yang BX, et al. Mental health of healthcare workers dealing with the 2019 novel coronavirus in Wuhan, China. Lancet Psychiatry 2020;7(3):e14.
8. Ives J, Greenfield S, Parry JM, Draper H, Gratus C, Petts JI, et al. Healthcare workers' attitudes to working during pandemic influenza: a qualitative study. BMC Public Health. 2009;9(1):1-13.
9. Cohen S, Kamarck T, Melmerstein R. A Global Measure of Perceived Stress. Journal of Health and Social Behavior. 1983;24:385-396.
10. Baltaş Z, Atakuman Y, Duman Y. Standardization of the Perceived Stress Scale: Perceived Stress in Turkish Middle Managers, Stress and Anxiety Research Society, 19th International Conference: İstanbul. 1998
11. Folkman, S. and Lazarus, RS. If It Changes, It Must Be a Process: Study of Emotion and Coping During Three Stages of College Examination. Journal of Personality and Social Psychology. 1985;50:992-1003.
12. Şahin NH, Durak A. The scale of coping styles with stress: Adaptation for university students. Turkish Journal of Psychology. 1995;10(34):56-73.
13. Göksu Ö, Kumcağız H. Perceived stress level and anxiety levels in individuals in the Covid-19 Outbreak. Electronic Turkish Studies. 2020;15(4).

14. Aşkın A. Analysis of the relationship between the time of participation in leisure activities, perceived stress levels, and psychological resilience of healthcare professionals (doctors and nurses). Siyami Ersek Chest Cardiovascular Surgery Training and Research Hospital example. Istanbul: Gelisim University Institute of Health Sciences. 2019.
15. Özdaş İ, Kızılkaya M. Stress sources perceived by emergency room nurses: A qualitative study. *Journal of Health Academics*. 2021;8(1):64-70.
16. Altıntaş N. Determination of violence against nurses working in health institutions, Istanbul: Istanbul University Institute of Health Sciences. 2006.
17. Ferreira JS, Ribeiro KV, Caromuru PS, Hanzelmann RS, Velasco AR, Passos JP. Stress and coping strategies in workers of nursing of a family health unit. *Cuidado e Fundamental*. 2017;9(3):818-823.
18. Avcı GG, Öztürk G, Azaklı N, Çekinmez ST. Determination of work-related tension levels and coping styles of nurses working in a private group hospital. *Izmir Katip Celebi University Faculty of Health Sciences Journal*. 2018;3(1):1-7.
19. Shigemura J, Ursano RJ, Morganstein JC, Kurosawa M, Benedek DM. Public responses to the novel 2019 coronavirus (2019-nCoV) In Japan: mental health consequences and target populations. *Psychiatry And Clinical Neurosciences*. 2020;74(4):281- 282.
20. DüNDAR Y. Sen Tanrı mısın? ISBN: 978-605-88309-8-1 Ankara, 2016.
21. Hatun O, Dicle AN, Demirci İ. Psychological reflections of the coronavirus epidemic and coping with it. *Electronic Turkish Studies*. 2020;15(4).
22. Bilge Y, Bilge Y. Investigation of the effects of the coronavirus epidemic and social isolation on psychological symptoms in terms of resilience and coping styles with stress. *Journal of Clinical Psychiatry* 2020;23.