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Perception of Coronaphobia, Compassion and Associated Factors Among Nurses During the Outbreak of COVID-19: A Cross-Sectional Study

COVID-19 Salgını Sırasında Hemşirelerde Koronafobi, Şefkat Algısı ve İlişkili Faktörler: Kesitsel Bir Çalışma

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ABSTRACT Objective: With the emergence of the pandemic, many studies have been conducted to measure the psychological and mental well-being of nurses. However, coronaphobia and the perception of compassion in nurses and related factors, is unknown. The purpose of the study is to examine the perception of coronaphobia, compassion and the associated factors affecting these concepts in nurses during the coronavirus disease-2019 (COVID-19) epidemic. **Material and Methods:** This study was conducted as cross-sectional research design. The study sample included nurses working at a hospital in Türkiye between August and November 2020. A Personal Information Form, the Compassion Scale and the COVID-19 Phobia Scale were used for data collection. Univariate and multivariate regression analyses were used to examine the determinants and the influencing factors. **Results:** A total of 152 nurses participated in the study. Gender, family structure, desire to work as a nurse in the clinic and having a chronic disease were found to be associated with coronaphobia. Working in COVID-19 clinics, family structure, and a desire to work in the nursing profession were found to be related to compassion. In addition, a positive correlation was found between coronaphobia and compassion. **Conclusion:** This study showed the levels of coronaphobia and compassion in nurses, and the relation between these concepts and the factors affecting them. It is recommended that accurate and regular information updates, and that psychological support be given to nurses to reduce the phobia and to increase the compassion.

Keywords: Compassion; COVID-19 phobia; COVID-19; nurses; pandemic

ÖZET Amaç: Pandeminin ortaya çıkmasıyla birlikte hemşirelerin psikolojik ve zihinsel iyilik hâllerini ölçmek için birçok çalışma yapılmıştır. Ancak hemşirelerde koronafobi, şefkat algısı ve bu kavramlarla ilişkili faktörler bilinmemektedir. Bu çalışmanın amacı, koronavirüs hastalığı-2019 [coronavirus disease-2019 (COVID-19)] salgını sırasında hemşirelerde; koronafobi, şefkat algısı ve bu kavramları etkileyen ilişkili faktörleri incelemektir. **Gereç ve Yöntemler:** Çalışmada, kesitsel bir araştırma tasarımı kullanıldı. Araştırmanın örneklemini Türkiye'de Ağustos-Kasım 2020 tarihleri arasında bir hastanede çalışan hemşireler oluşturdu. Verilerin toplanmasında; Kişisel Bilgi Formu, Merhamet Ölçeği ve COVID-19 Fobi Ölçeği kullanıldı. Belirleyicileri ve etkileyen faktörleri incelemek için tek değişkenli ve çok değişkenli regresyon analizleri yapıldı. **Bulgular:** Çalışmaya toplam 152 hemşire katıldı. Cinsiyet, aile yapısı, klinikte hemşire olarak çalışma isteği ve kronik bir hastalığın olması koronafobi kavramı ile ilişkili bulundu. COVID-19 kliniklerinde çalışma, aile yapısı ve hemşirelik mesleğini yapma isteği şefkat kavramı ile ilişkili bulundu. Ayrıca koronafobi ile şefkat arasında pozitif bir ilişki olduğu saptandı. **Sonuç:** Bu çalışma, hemşirelerde koronafobi ve şefkat düzeylerini, bu kavramlar arasındaki ilişkiyi ve bu kavramları etkileyen faktörleri ortaya koymuştur. Hemşirelerde koronafobiyi azaltmak ve şefkat düzeylerini artırmak için doğru ve düzenli bilgi güncellemeleri yapılması, psikolojik destek verilmesi önerilmektedir.

Anahtar Kelimeler: Şefkat; COVID-19 fobisi; COVID-19; hemşireler; pandemi

The rapid spread of coronavirus disease-2019 (COVID-19) and the high disease-related mortality rate have become a global problem which greatly affects health, economics and social life.[1] In this extraordinary public health emergency, nurses around the world are working on the front lines as usual.[2] Much evidence has shown that the emergence of COVID-19 significantly affects psychological and mental well-being in nurses, causing burnout, fear, anxiety and depression.[3,4] However, coronaphobia,

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a relatively new concept related to the pandemic and the compassion which has an important place in nursing care, is limited to the outbreak of COVID-19.[5,6]

Phobia is defined as a disproportionate fear response to anxiety or to an object or situation that arouses fear.[7] Coronaphobia is defined as a disproportionate state of anxiety or insistent, uncontrollable fear caused by the coronavirus outbreak, causing a disruption of behavior and psychological wellbeing which interferes with daily life.[8-10] The concept of coronaphobia is seen as a predictor of psychological discomfort in the pandemic process and it is stated to be associated with high depression, generalized anxiety and death anxiety, hopelessness, suicidal thoughts and functional disorders.[9,11,12] During the outbreak of COVID-19, intolerance of uncertainty, perceived vulnerability to disease, psychological fragility, perceived susceptibility to illness, and disproportional anxiety may manifest as coronaphobia.[9] Phobic situations can lead to the development of stress, depression, psychosomatic and psycho-social disorders.[8-10] Determining the COVID-19 phobia level in nurses is thought to be important in providing psychological support and preventing more complex psychiatric disorders.[8] As far as known, the level of phobia for COVID-19 in nurses during the epidemic period has not been revealed yet.

COVID-19 causes people to need hospitalization due to severe pneumonia-type symptoms that cause extreme breathing difficulties.[13,14] Treatment procedures are carried out in isolation conditions. The use of distance and personal protective equipment by nurses during the epidemic may make it difficult for them to use therapeutic touch and facial expressions. Touching the patient and facial expression, which is an important non-verbal communication, is frequently used in providing nursing care to convey compassion. Patients receive compassion through the touch of the nurse and this touch conveys comfort and safety.[15] Compassion has been defined as "the sensitivity to understand another person's suffering, the willingness and encouragement of one's well-being and help".[16] Watson stated that compassion plays a very important role in care.[17] The four basic components of compassion have been described as "wisdom, humanity, love, and empathy".[18] There is no evidence in the literature on how the compassion levels of nurses will be affected by the COVID-19 pandemic. Also, it is not known what kind of an effect coronaphobia might have on compassion levels in nurses. It is thought that the perception of coronaphobia and the compassion levels of nurses should be examined in order to support the psychosocial health of nurses, to make accurate and regular information updates and to increase the quality of nursing care during the pandemic.

MATERIAL AND METHODS

PURPOSE

The purpose of the study is to examine the perception of coronaphobia, compassion and the associated factors affecting these concepts in nurses during the COVID-19 epidemic. Research questions were determined as a) nurses' compassion and COVID-19 phobia level, b) the associated factors that affect compassion and COVID-19 phobia and c) the relationship between COVID-19 phobia and compassion.

DESIGN

The design of this study is a cross-sectional research design.

PARTICIPANTS AND SAMPLING

The sample of the study consisted of all nurses working actively in a public hospital in Antalya, Türkiye. All nurses were included in the study to evaluate nurses' fear of COVID-19 and the perception of compassion and related factors during the pandemic. There were a total of 263 nurses who were working in the hospital during the research process. Nurses who work in the public hospital where the application was made, who took part in patient care and had clinical experience and volunteered to participate in the research were included in the study.

Nurses working in outpatient clinics and other units were not included in this study in order to evaluate the concept of compassion associated with care and the level of coronaphobia in the care process. In

this process, 152 nurses who filled out the scales were included in the study.

DATA COLLECTION

Data were collected from the nurses between August and November 2020. Informed consent was obtained prior to data collection. The Personal Information Form, Compassion Scale and COVID-19 Phobia Scale (C19P-S) were used as measurement tools in the collection of the data. Research data were collected by the researchers by creating an online form and sharing the link of the form with the working nurses. In addition, face-to-face data were collected via questionnaires from nurses who did not have access online. In this process, the scales were filled online by 72 nurses and face-to-face by 80 nurses. The personal information form developed as a result of the literature review consisted of 18 questions about the nurses' sociodemographic characteristics, professional information, and questions about the pandemic process.

The C19P-S assesses the levels of coronavirus phobia caused by the COVID-19 epidemic that is a 20-item questionnaire of five-point Likert-type.[8,10] This scale was developed and initial tests were made for the psychometric properties by Arpacı et al.[10] It is seen that the Cronbach's alpha vary between 0.85 and 0.90 for the subscales, and 0.93 for the total scale. The scale consists of four sub-dimensions: psychological, psychosomatic, economic and social factors, and can be used with various age groups. C19P-S total scores range between 20 to 100, with higher scores indicating more phobia.[10] In our study, C19P-S scale internal consistency coefficent value was found to be 0.93.

The original version of the Compassion Scale used to measure the level of compassion was developed by Pommier (2011). The validity and reliability of the Turkish scale were tested by Akdeniz ve Deniz.[19] The scale consists of 24 items and six sub-dimensions: kindness, indifference, common humanity, separation, mindfulness, and disengagement. The total Compassion Scale score ranges from 26 to 130, with higher scores indicating higher levels of compassion. The Cronbach's alpha of the scale was found to be 0.85 for the whole scale. It was determined that the internal consistency and test-retest results of the scale were also within the accepted limits.[19] In our study, Compassion Scale internal consistency coefficent value was found to be 0.89.

The reason for choosing Compassion Scale and C19P-S in the research process was that the psychometric properties of the scales were appropriate according to COSMIN guideline.[20] The Strengthening the Reporting of Observational Studies in Epidemiology Statement checklist was used for reporting this study.[21]

DATA ANALYSIS

Research data were analyzed using Statistical Package for the Social Sciences (SPSS) Statistics Base v23 version, which was licensed in Turkey. The compliance of the variables to normal distribution was checked with kurtosis and skewness, and data were evaluated for conformity to normal distribution. Sociodemographic characteristics, professional information and questions about the pandemic process data were expressed with descriptive statistics. In the evaluation of the data related to the two scales, univariate and multivariate regression analysis were performed. The variables that were found to be statistically significant in the univariate regression analysis were then included in the multivariate regression analysis. Multivariate regression analysis was applied using the forward step method. In addition, correlation analysis was used to determine the relationship between COVID-19 phobia and compassion. For significance, the p value was accepted as less than 0.05.

ETHICAL CONSIDERATIONS

Since the research was related to the pandemic process, permission first had to be obtained from the Ministry of Health. After these processes had been completed, ethics committee approval was obtained from the Akdeniz University Faculty of Medicine Clinical Research Ethics Committee (date. 08.07.2020 decision no: 519). Later, permission was obtained from the Provincial Health Directorate, and the data collection process started after all approvals were issued. This study was conducted in accordance with the principles of the Declaration of Helsinki.

RESULT

SOCIODEMOGRAPHIC AND PROFESSIONAL CHARACTERISTICS OF THE NURSES

A total of 152 nurses participated in the study. The nurses' sociodemographic and professional characteristics are given in Table 1. It is seen that 80.9% of the participants were female and 35% of them worked in services associated with COVID-19. The majority of the participants were working in the nursing profession willingly; they worked on average for 45.97 hours a week, and 57.9% had worked at least once in the COVID-19 service. The majority of the participants themselves and their relatives did not have COVID-19 infection. However, 21% of the nurses stated that they were unwilling to be working in the clinic where they were currently working, and 50% of the nurses working in the COVID-19 clinic were unwilling to be working there.

THE NURSES' LEVELS OF COVID-19 PHOBIA AND COMPASSION

Total mean C19P-S scale score of the nurses was found to be 52.40±15.58, minimum 20 and maximum 98, and their total mean compassion score was found to be 94.67±12.34, minimum 66 and maximum 125. The mean subscale scores of C19P-S were found to be as follows: psychological 19.70±5.97, psychosomatic 10.48±3.87, social 14.13±4.55, and economic 8.09±3.19. The mean subscale scores of compassion were found to be: kindness 15.61±3.20, indifference 7.81±2.40, common humanity 14.64±3.58, mindfulness 15.91±3.23, separation 7.88±2.49 and disengagement 7.82±2.62.

THE RELATIONSHIP BETWEEN COVID-19 PHOBIA AND ITS DETERMINANTS

Table 2 shows the multivariate regression analysis of the relationship between COVID-19 phobia and related factors. The psychophobia mean scores of those with nuclear families and those who were unwilling to work as nurses in the clinic where they were working were found to be higher. Somophobia, sociophobia, ecophobia and total scale score averages were found higher in nurses who do not desire to work as a nurse in clinic. The ecophobia mean scores was found higher of the nurses who have a chronic disease. In addition, the sociophobia and total scale score averages of women were found to be higher than those of men.

THE RELATIONSHIP BETWEEN COMPASSION AND ITS DETERMINANTS

Table 3 shows the multivariate regression analysis of the relationship between compassion and related factors. Nurses who lived in nuclear families had higher mean scores on the kindness, common humanity, mindfulness and separation subscales. Nurses who had worked in COVID-19 clinics at least once had higher mean scores on the common humanity subscale and the total compassion scale. The mindfulness mean scores of the nurses who had had a COVID-19 diagnosis in the their family were found to be higher. The mean scores on the indifference, separation and disengagement subscales of the nurses who were working in the nursing profession unwillingly were found to be higher.

THE RELATIONSHIP BETWEEN COVID-19 PHOBIA AND COMPASSION

Table 4 shows the relationship between the Compassion Scale and the C19P-S. A statistically significant correlation was found between the Compassion Scale and the C19P-S ($r=0.241$, $p=0.003$). In addition, a statistical relationship was found between the kindness subscale and all subscales except the economic subscale of the C19P-S scale. A low level of positive correlation was found between the mindfulness and common humanity subscales and the psychological and social factors and the total phobia scale.

DISCUSSION

The aim of this study was to investigate the levels of coronaphobia and compassion in nurses and to determine the factors affecting coronaphobia and the perception of compassion. As far as we know, this study is the first to investigate the levels of coronaphobia and compassion, factors affecting them, and the relation between these concepts. It will serve as a guide in providing new information on the concepts of coronaphobia and compassion in nurses in the pandemic. The innovative aspect of this study is that it

TABLE 1: Sociodemographic and professional characteristics of the nurses.

Characteristics (n=152)	n (%)
Gender	
Female	123 (80.9)
Male	29 (19.1)
Age	34.14±7.36 (minimum: 22 maximum: 47)
Marital status	
Married	93 (61.2)
Single	59 (38.8)
Education level	
Health vocational school	24 (15.8)
Associate degree	16 (10.5)
Undergraduate	104 (68.4)
Master's degree	8 (5.3)
Family structure	
Nuclear family	142 (93.4)
Extended family	10 (6.6)
Clinics where nurses are working	
COVID-19 service	54 (35.5)
Surgery service and operating room	39 (25.7)
Pediatric service	9 (5.9)
Maternity service	23 (15.1)
Intensive care, palliative and internal medicine service	24 (15.8)
Emergency service	3 (2)
Desire to work in the nursing profession	
Yes	122 (80.3)
No	30 (19.7)
Time of the worked in the nursing profession	
Less than 1 year	17 (11.2)
1-5 years	32 (21.1)
6-10 years	36 (23.7)
11-15 years	23 (15.1)
16 years and above	44 (28.9)
Desire to work as a nurse in her/his clinic	
Yes	120 (78.9)
No	32 (21.1)
Working style in the clinic	
Daytime	9 (5.9)
Night	3 (2)
Both of them	140 (92.1)
Working hours/a week	45.97 (minimum: 32 maximum: 72)
Having a chronic illness of herself/himself	
Yes	33 (21.7)
No	119 (78.3)
Having chronic illness in their family	
Yes	111 (73)
No	41 (27)
Working in COVID-19 clinics at least once during the pandemic	
Yes	88 (57.9)
No	64 (42.1)
COVID-19 diagnosis	
Positive	2 (1.3)
Negative	150 (98.7)
COVID-19 diagnosis one of the her/his family members	
Positive	25 (16.4)
Negative	127 (83.6)

TABLE 2: Multivariate regression analysis of the relationship between COVID-19 phobia and its determinants.

	Psychological			Psychosomatic			Social factors			Economic			Total		
Characteristics	**Beta**	**t value**	**p value**	**Beta**	**t value**	**p value**	**Beta**	**t value**	**p value**	**Beta**	**t value**	**p value**	**Beta**	**t value**	**p value**
Gender	-	-	-	-	-	-	-0.174	-2.179	**0.031***	-	-	-	-0.212	-2.169	**0.032**
Family structure	-0.226	-2.821	**0.005***	-	-	-	-	-	-	-	-	-	-	-	-
Desire to work as a nurse in her/his clinic	0.206	2.575	**0.011***	0.249	3.153	**0.002***	0.158	1.987	**0.049***	0.240	3.023	**0.003***	0.225	2.823	**0.005***
Working hours/a week	-0.334	-0.422	0.674	-	-	-	-	-	-	-	-	-	-	-	-
Desire to work in the nursing profession	-	-	-	0.101	1.230	0.221	-	-	-	-	-	-	-	-	-
Age	-	-	-	-0.022	-0.271	0.787	-0.050	-0.622	0.535	-	-	-	-0.033	-0.412	0.681
Having a chronic disease	-	-	-	-	-	-	-	-	-	-0.178	-2.072	**0.040**	-	-	-
Clinics where nurses are working	-	-	-	-	-	-	0.139	1.675	0.096	-0.030	-0.369	0.712	-	-	-

Shaded bold values denotes p values are <0.05; *Multivariate regression analysis was performed separately for four subscales of COVID-19 Phobia Scale and total scale scores.

TABLE 3: Multivariate regression analysis of the relationship between compassion and its determinants.

	Kindness			Indifference			Common humanity			Separation			Mindfulness			Disengagement			Total		
Characteristics	**Beta**	**t value**	**p value**	**Beta**	**t value**	**p value**	**Beta**	**t value**	**p value**	**Beta**	**t value**	**p value**	**Beta**	**t value**	**p value**	**Beta**	**t value**	**p value**	**Beta**	**t value**	**p value**
Gender	-0.120	-1.535	0.127	-	-	-	-0.125	-1.564	0.120*	-	-	-	-0.128	-1.645	0.102	-	--		-0.138	-1.732	0.085
Age	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.159	2.001	0.047
Family structure	-0.324	-4.208	**0.000***	-	-	-	-0.183	-2.340	**0.021**	-0.180	-0.268	**0.025***	-0.347	-4.533	**0.000***	-	-	-	-	-	-
Clinics where nurses are working	0.082	0.854	0.394	-	-	-	-	-	-	-	-	-	-0.061	-0.787	0.433	-	-	-	0.084	0.828	0.409
Working hours	-0.059	-0.688	0.493	0.057	0.699	0.486	0.054	0.666	0.506	-	-	-	-0.085	-1.096	0.275	-	-	-	-0.080	-0.990	0.324
Working in COVID-19 clinics at least once	-	-	-	-	-	-	-0.252	-3.215	**0.002***	-	-	-	-	-	-	-	-	-	-0.185	-2.308	**0.022***
COVID-19 diagnosis of the her/his family	-	-	-	-	--		0.119	1.508	0.134	-	-	-	-0.245	-2.160	**0.033***	-	-	-	-	-	-
Desire to work in the nursing profession	-	-	-	0.184	2.293	**0.023***	-	-	-	0.183	2.304	**0.023***	-	-	-	0.200	2.494	**0.014**	-	-	
Education level	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.142	1.497	0.137

Shaded bold values denotes p values are <0.05; *Multivariate regression analysis was performed separately for six subscales of Compassion Scale and total scale scores.

TABLE 4: The relationship between the Compassion Scale and the C19P-S.

	Compassion Scale						
	Kindness	Indifference	Common humanity	Separation	Mindfulness	Disengagement	Total
C19P-S	r/p	r/p	r/p	r/p	r/p	r/p	r/p
Psychological	0.369/0.000*	-0.045/0.579	0.260/0.001*	-0.058/0.478	0.289/0.000*	-0.120/0.142	0.293/0.000*
Psychosomatic	0.220/0.007*	-0.012/0.882	0.165/0.043	-0.026/0.751	0.057/0.487	-0.028/0.728	0.133/0.101
Social factors	0.320/0.000*	-0.006/0.940	0.259/0.001*	-0.027/0.741	0.251/0.002*	-0.069/0.398	0.246/0.002*
Economic	0.121/1.138	-0.034/0.677	0.136/0.095	-0.048/0.553	0.034/0.677	-0.092/0.258	0.116/0.155
Total scale	0.315/0.000*	-0.029/0.721	0.244/0.002*	-0.047/0.569	0.205/0.011*	-0.092/0.259	0.241/0.003*

*Shaded bold values denotes p values are <0.05; C19P-S: COVID-19 Phobia Scale.

shows that in nurses working in a COVID-19 clinic and working willingly at their profession, compassion levels are high, while coronaphobia levels are high in nurses who are female and in those who are not working willingly in the clinic where they are. Also, another important finding of this study is that there is a significant positive correlation between compassion and coronaphobia.

In this study, the nurses' total C19P-S scale score was found to be 52.40±15.58. The total score on the C19P-S scale is calculated between 20 and 100, and a higher score shows greater coronaphobia.[8] In this way, it can be said that the nurses' COVID-19 phobia was at a medium level. It is thought that this may be affected by nurses' working on the front line during the pandemic, by the concern that they were putting their own or their families' lives at risk, by stress, anxiety and the fear of death, or by the fear of losing a loved one. Asmundson and Taylor stated that lack of information, misinformation and sensational popular media headlines can play an important role among the causes of coronophobia.[9] No studies on coronaphobia were found in the literature with which to compare the results of our study. It has been shown in studies that the pandemic has opened the way to various psychological problems.[8,22-24] Despite signs that health workers are experiencing abnormal levels of anxiety in connection with the coronavirus, and that they are experiencing depression and fear, there is a need for information on the level of coronaphobia.[4,25] Developing a phobic state can cause stress, depression and psychosomatic and psychosocial disorders.[8,26] For this reason, it is seen as necessary that coronaphobia levels in healthcare workers should be measured and monitored, and if the phobia level is high, timely psychological support should be provided in order to prevent more complex psychiatric disorders.

In this study, multivariate regression analysis showed a relationship between COVID-19 phobia and related factors. The coronaphobia total score and the sociophobia subscale mean score of women were found to be higher than those of men. Similar to our study results, Arpaci et al. showed that women experienced higher levels of coronaphobia compared to men.[8] In our study, all sub-scales and total scale mean scores are associated with individuals' unwillingness to work as nurses in their current clinic; 21% of the nurses stated that they did not desire to work as nurses in the clinic where they were working. It is thought that the coronaphobia score was high because most of the nurses who were working unwillingly in their clinics were in the coronavirus clinic. It is thought that the reason for this may be the uncertainty of the pandemic, the limited medical equipment, the potential for nurses to become infected with coronavirus, and stress and anxiety. No studies were found in the literature examining the factors affecting coronaphobia, but it is known that nurses are struggling with a number of difficulties during the pandemic, such as the increasing number of patients, a difficult work environment, long working hours, fear of infection, putting themselves and their families at risk, and infecting others unknowingly.[27,28] Tayyib and Alsolami showed that social media and exposure to trauma prior to the outbreak increased nurses' level of fear.[29] It is recommended that studies be conducted to elucidate coronaphobia and the factors which af-

fect it. It is thought that positive results will be obtained in reducing coronavirus and its affective factors by frequently updating medical information on COVID-19, by giving education to increase the level of knowledge, and by prioritizing mental support for female workers.

In our study, the nurses' total mean compassion score was found to be 94.67±12.34. In studies in which the compassion level of the Compassion Scale developed by Pommier was investigated, it was seen that the compassion level score average of nurses in the period before the pandemic was 98.34±13.75 and 97.02±10.67.[30,31] It can be said that compassion scores obtained in studies conducted before the pandemic are close to those obtained in our study, and even that the pre-pandemic scores were higher. However, the fact that the measurements were not made in the same institution on the same nurses prevents a total comparison from being made. It is thought that mean compassion scores may have been affected by such factors as isolation measures taken because of the risk of COVID-19 infection, physical distancing, and the use of masks, goggles and protective clothing, which prevents therapeutic interaction and touch. Empathy has been defined as one of the four basic components of compassion.[18] Wilkinson et al. stated that there was a negative correlation between empathy and burnout.[32] It is known that burnout levels in nurses have increased during the pandemic.[25,33,34] In this regard, it is thought that burnout can negatively affect the level of empathy, and that this can affect the provision of compassionate nursing care.[3] As far as we know, there are no studies examining the compassion levels of nurses during the pandemic. It is thought that there is a need for more such studies.

Analysis of the relationship between compassion and related factors showed that nurses who had worked in COVID-19 clinics at least once had higher mean scores on the common humanity subscale and on the total scale. Common humanity means being aware that people are not perfect and can make mistakes. By showing compassion to themselves and others, individuals become aware that suffering is a common experience of all humanity. In this way, they perceive individuals who suffer as part of a common life, not independent of themselves.[35] In this regard, it is thought that the high compassion levels of nurses working in the COVID-19 clinic are affected by the perception that individuals who catch coronavirus are not independent from them but part of a shared life, and that they put themselves in the place of the patients and feel empathy. Also, the mean scores on the subscales of indifference, separation and disengagement of nurses who were not working willingly in the nursing profession were higher in this study. Thus it can be said that nurses working at their profession lovingly and willingly had great effects on compassionate care. It is thought that more studies need to be conducted on the factors influencing the compassion levels of nurses during the pandemic.

In this study, results on the relationship between coronaphobia and compassion showed a correlation between them. Compassion is based on three foundations: kindness, common humanity and mindfulness.[35] Among the reasons why compassion and its sub-dimensions show a positive correlation are that nurses think more of the patients' pain than of themselves, that they put themselves in the patient's place, and that they are involved in striving at empathy and closeness in providing uninterrupted care to patients.

As far as we know, there are no studies examining the relation of compassion and coronaphobia. It is thought that studies should be conducted examining compassion and coronaphobia levels and the correlation between them. It is thought that monitoring nurses' coronaphobia levels during the pandemic, increasing the level of knowledge about COVID-19, giving education on this topic and providing support to workers at regular intervals will yield positive results with regard to reducing coronaphobia and increasing compassion levels.

LIMITATIONS

Among the limitations of our study, the first is that participation was voluntary, and the research was carried out at a single center. Second, since participation was voluntary, it is thought that the participants in this study showed a selective interest in this topic and those who did not participate may have had different experiences. Third, when the sample characteristics of the participants were examined, it was found that gender and clinical variables lacked heterogeneity.

The fourth limitation was that some of the data were collected online. Therefore, it is recommended that new studies to be planned and conducted with a larger and homogeneous sample group.

CONCLUSION

This research has shown that factors such as being female, an individual's willingness to work as a nurse in their current clinic and having a chronic disease are associated with coronaphobia. Also, working in COVID-19 clinics, family structure and willingness to work in the nursing profession are factors related to compassion. In addition, a positive relationship was found between compassion and coronaphobia. It is thought that the results of this study may contribute to reducing nurses' levels of coronaphobia in the pandemic, to maintaining their psychosocial health, and to increasing their compassion levels. It is recommended that education should be given at regular intervals to increase the levels of knowledge of COVID-19 of health workers in order to reduce coronaphobia and the variables which affect it, and to increase compassion levels, and that workers be supported psychosocially. There is a need for further research in this field to investigate more comprehensively the factors affecting coronaphobia and compassion levels in the pandemic.

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Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: *Selma Turan Kavradım, Zeynep Canlı Özer;* ***Design:*** *Selma Turan Kavradım, Zeynep Canlı Özer;* ***Control/Supervision:*** *Selma Turan Kavradım, Zeynep Canlı Özer;* ***Data Collection and/or Processing:*** *Gizem Almaz;* ***Analysis and/or Interpretation:*** *Selma Turan Kavradım, Zeynep Canlı Özer, Gizem Almaz;* ***Literature Review:*** *Selma Turan Kavradım, Gizem Almaz;* ***Writing the Article:*** *Selma Turan Kavradım, Zeynep Canlı Özer;* ***Critical Review:*** *Selma Turan Kavradım, Zeynep Canlı Özer.*

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