Hemşirelik Öğrencilerinde COVID-19 Korkusu ile COVID-19 Fobisi Arasındaki İlişkinin İncelenmesi

The Relationship Between Covid-19 Fear and Covid-19 Phobia of Nursing Students

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ÖZ

Amaç: Hemşirelik öğrencilerinde COVID-19 korkusu ile fobisi arasındaki ilişki incelenmiştir.

Yöntem: Tanımlayıcı ve kesitsel niteliktedir. 2020-2021 akademik yılında iki farklı üniversitede öğrenim gören 396 hemşirelik öğrencisi ile yürütülmüştür. Koronavirüs Korku Ölçeği ve Koronavirüs-19 Fobi Ölçeği kullanılmıştır. Veriler internet üzerinden toplanmıştır.

Bulgular: Çalışmaya alınan öğrencilerin yaş ortalaması 21.06±1.94 idi. Bu çalışmada hemşirelik öğrencilerinin Koronavirüs Korku Ölçeği toplam puan ortalamasının 16,47±6,26 (min:7 max:35) ve Koronavirüs 19 Fobi Ölçeği toplam puan ortalamasının 44,92±16,90 (min:20 max:100) olduğu belirlendi. Hemşirelik öğrencilerinin Koronavirüs Korku Ölçeği toplam puanları ile Koronavirüs-19 Fobi Ölçeği toplam puanları arasında pozitif yönde yüksek düzeyde anlamlı bir korelasyon olduğu belirlendi (r:0,773 p:0,0001).

Sonuç: Hemşirelik öğrencilerinin COVID-19 Korku ve COVID-19 Fobi puan ortalamalarının orta düzeyde olduğu ve hemşirelik öğrencilerinin koronavirüs korkusu ile koronavirüs fobisi arasında ilişki olduğu belirlendi. Hemşirelik öğrencilerinin psikolojik ihtiyaçlarının belirlenmesi, bu ihtiyaçlara yönelik danışmanlık verilmesi, başa çıkma becerilerinin arttırılması için desteklenmesi önerilmektedir.

Anahtar Kelimeler: Hemşirelik öğrencileri, COVID-19 korkusu, COVID-19 fobisi.

ABSTRACT

Objective: The relationship between fear and phobia of COVID-19 in nursing students was investigated.

Method: It is descriptive and cross-sectional type. It was conducted with 396 nursing students studying in two different universities in the 2020-2021 academic year. Coronavirus Fear Scale and Coronavirus-19 Phobia Scale were used. The data were collected online.

Results: The mean age of the students included in the study was 21.06±1.94 years. In this study, it was determined that the total average point of the Coronavirus Fear Scale of the nursing students was 16.47±6.26 (min:7 max:35) and the total average point of the Coronavirus 19 Phobia Scale was 44.92±16.90 (min:20 max:100). It was determined that there was a highly significant positive correlation between the total points of the Coronavirus Fear Scale and the Coronavirus-19 Phobia Scale total points of the nursing students (r:0.773 p:0.0001).

Conclusion: It was determined that the mean point of COVID-19 Fear and the mean point of COVID-19 Phobia of the nursing students were moderate, and there was a relationship between the fear of coronavirus and the fear of coronavirus of the nursing students. It is recommended to determine the psychological needs of nursing students, to provide counseling regarding these needs, to be supported to increase their coping skills.
Key words: Nursing students, Fear of COVID-19, Phobia of COVID-19.

1. INTRODUCTION

Coronavirus disease-2019 (COVID-19), a swiftly spreading disease, has predicated a significant threat to human wellness. Nurses are main members of medical teams charge of controlling, preventing the fan of infectious diseases. Due to the swiftly spread of COVID-19, strong contagion factor, fatality in serious cases, lack of a specific treatment and mutation, it has affected the physical health also mental health of medical teams especially nurses who are in front, providing direct care to individuals who has COVID-19 (1). The psychological impact of the COVID-19 pandemic is multifaceted, encompassing both broad COVID fears and specific COVID phobia. Recognizing and addressing these fears and phobias is crucial for maintaining mental well-being. Mental health support, coping strategies, and targeted interventions are essential for managing the emotional toll of the pandemic and mitigating the adverse effects of COVID fears and phobias on individuals' mental health (1).

COVID fears and COVID phobia are two distinct but related psychological responses to the COVID-19 pandemic. COVID fears encompass a broad range of concerns, anxieties, or worries related to various aspects of the pandemic, such as worries about personal health, the health of loved ones, uncertainty about the future, fear of infection, and concerns about the societal and economic impacts of the pandemic (2). On the other hand, COVID phobia is a more specific term that implies an intense, irrational, and often debilitating fear specifically related to COVID-19, which can lead to avoidance behaviors, extreme stress, and difficulty in daily functioning (3). Both terms reflect the psychological impact of the pandemic on individuals, highlighting the emotional toll and the unique challenges posed by the global health crisis. Research has shown that there is a significant positive relationship between fear of COVID-19 and workplace panic anxiety and workplace avoidance behavior among healthcare professionals (2). This indicates that the fear of COVID-19 is associated with specific behavioral and emotional responses, which can impact the functioning of individuals in their professional settings (3). Furthermore, it has been observed that nursing students and healthcare workers experienced high levels of anxiety and fear during the COVID-19 pandemic (4).

This highlights the widespread impact of the pandemic on individuals within the healthcare sector, emphasizing the need for targeted mental health support and interventions for this population. Additionally, the fear of COVID-19 has been found to have a significant impact on mental health outcomes, with studies showing a mediation influence of burnout and work-related stress in the association between COVID-19 phobia and mental health (5). The fear of COVID-19 has been found to be universal among nursing students, indicating that this specific fear transcends geographical boundaries and affects individuals across different regions (6). This universality of fear underscores the global nature of the psychological impact of the pandemic and the need for comprehensive mental health support strategies at an international level. Additionally, the fear of COVID-19 has been associated with various psychological factors such as anxiety, depression, and anxiety sensitivity among different populations, including healthcare workers, university students, and adults (7-9). It is important to note that

the fear of COVID-19 is not limited to specific demographic groups, as studies have shown its impact on various populations, including adolescents, pregnant women, peritoneal dialysis patients, and individuals seeking dental care (10-13). This indicates the pervasive nature of COVID fears and phobias, emphasizing the need for tailored interventions that consider the unique challenges and vulnerabilities of different groups (1).

It is stated that nurses experience problems for instance fear, anger, concern, stress, fatigue, loneliness, and burnout in the process of COVID-19 pandemic (14). It is an expected result that nurse candidate students who witnessed the difficult working conditions of nurses during the pandemic were also affected by this process. Birimoğlu Okuyan et al. determined that 66.6% of nursing students needed psychological support during the pandemic. It was also stated that there was a statistically significant difference between the fear of infection, fear of death, anxiety about the future and the health anxiety (15). Akman et al. stated that the state-trait anxiety levels of nursing students were middling and they had high levels of anxiety about the transmission of COVID-19 to themselves and family members (16).

After conducting an extensive literature review, it is worth noting that no studies exploring the connection between fear and phobia of COVID-19 in nursing students were found. Therefore, it is crucial to investigate and comprehend this relationship, particularly considering the challenging context of the ongoing COVID-19 pandemic and the pivotal role that nursing students play as the future workforce in healthcare. This study aims to address this gap in knowledge by examining the complex nature of fear and phobia of COVID-19 among nursing students, thus offering valuable insights into their experiences during this unprecedented time. This research is expected to make a significant contribution to our comprehension of the psychological effects of the pandemic on nursing students. Furthermore, it will provide crucial details for creating focused interventions to aid their well-being and professional progress.

2. METHOD

Research Design

It is a descriptive, cross-sectional study.

Participants

The population of the study consists of 1467 students studying in the nursing departments of two different universities in the 2020-2021 academic year. The sample size of the study was determined as 305 with a 5% margin of error and a 95% confidence interval using known sample calculation. 396 students participated in the research. Calculation done via http://sampsize.sourceforge.net/iface/.

Data Collection

The data were collected via an electronic questionnaire over the internet because of distance education process. After obtaining the necessary permissions to carry out the study, the data collection tools were published electronically. An invitation letter including the aim and link of the study was forward the nursing students from the WhatsApp class groups through the class representatives. To increase participation in the study, a reminder message was sent

to the nursing students two weeks after the first invitation letter was sent. IP auditing is provided to allow one participant to fill out a single questionnaire. Filling out the data collection forms was arranged to take 5-7 minutes of the participants.

Data Collection Tools

The data collection tools were published via Google forms. The survey includes descriptive data form, "The Fear of COVID-19 Scale" (FCS) and "COVID-19 Phobia Scale" (CP19-S).

Descriptive Data Form: This form is comprised of open-ended and multiple-choice questions (3, 7, 13-16). It consists of 17 questions that include students' sociodemographic characteristics and information about their COVID-19 disease status.

The Fear of COVID-19 Scale: This is a self-report scale improved by Ahorsu et al. in 2020 to determine the fear of COVID-19 (17). It consists of 7 questions and a 5-likert scale (1 strongly disagree – 5 strongly agree). The total score that can be obtained from the scale varies between 7-35. Experiencing fear of coronavirus is directly proportional to the total point obtained from the scale, a high point means experiencing a high level of fear of coronavirus (18). The Cronbach's alpha (α) coefficient of the original scale was specified as 0.82 (17). The α value in the Turkish form of the scale was reported as 0.88 (18). It was calculated as 0.88 in our study.

COVID-19 Phobia Scale: This is a self-assessment scale improved by Arpacı et al. in 2020 to evaluate coronavirus phobia. It consists of 20 items and a 5-likert scale (1 strongly disagree - 5 strongly agree). The total score that can be obtained from the scale varies between 20-100. The scale has four sub-dimensions: somatic, social, economic, and psychological. The high scores obtained from the scale indicate the high levels in both the sub-dimension and general coronavirus phobia. The α value of the original scale was determined as 0.93 (19). It was calculated as 0.95 in our study.

Data Analysis

The collected data obtained are downloaded as excel. Analyzes were made on the computer with Statistical Package for the Social Sciences (SPSS). Data on socio-demographic characteristics were analyzed using descriptive statistics. Kolmogorov Smirnov Test was used to evaluate the normal distribution of the data. Mann Whitney U test, Kruskal-Wallis, Spearman correlation analysis were used for non-parametric data. In the results obtained, p values below 0.05 were considered statistically significant.

Ethical Consideration of the Study

The approval of the non-interventional clinical research ethics committee of a university was obtained (Date: 20.05.2021 Number: 281). Since it is a study on COVID-19, written institutional permission has been obtained from the Ministry of Health and the universities where the research will be conducted. Necessary explanations about the purpose of the research were made and it was carried out with volunteer students. In the study conducted by Bakioğlu et al., it is stated that "The scale can be used without permission with appropriate citation style.".

Therefore, permission was not obtained for the use of the FCS (18). To apply the CP19-S written permission was obtained from the authors via e-mail.

3. RESULTS

The average age of the students participating in the study was 21.06±1.94 (min:18 max: 38) years. The socio-demographic characteristics of the students are given in Table 1.

Table 1. Distribution of Nursing Students According to Their Socio-Demographic Characteristics.

Socio-demographic characteristics	Number	Percent
Gender		
Male	73	18.4
Woman	323	81.6
Marital status		
The married	6	1.5
Single	390	98.5
Grade		
1st	120	30.3
2nd	158	39.9
3rd	63	15.9
4th	55	13.9
Comorbidities		
Yes	33	8.3
No	363	91.7
Working status during the Covid-19		
Yes	55	13.9
No	341	86.1
Family type		
Broken family	17	4.3
Extended family	58	14.6
Nuclear family	321	81.1
Educational status of the student's father		
Elementary and below	137	34.6
Secondary education	101	25.5
High school	100	25.3
Undergraduate/Graduate	58	14.6
Educational status of the student's mother		
Elementary and below	217	54.8
Secondary education	76	19.2
High school	74	18.7
Undergraduate/Graduate	29	7.3
Income status		
Income less than expenses	89	22.5
Income equals expense	261	65.9
Income more than expenses	46	11.6

81.8% (n: 324) of the students stated social media as a source of information about Covid-19. When Covid-19 status were examined, 19.7% (n: 78) stated that they were infected, and 69.7% (n:276) stated that they were infected by their relatives. Table 2 shows the COVID-19 experiences of nursing students.

It was evaluated that the total point average of the FCS of the nursing students was 16.47±6.26 (min:7 max:35) and the total point average of the CP19-S was 44.92±16.90 (min:20 max:100). The mean somatic, social, economic, and psychological points of the CP19-S sub-dimensions were determined to be 8.45±4.16 (min:5 max:20), 11.90±4.02 (min:5 max:25), 7.53±3.60 (min:4 max:20), 17.04±6.43 (min:6 max:30), respectively. In this study, it was found

that the mean total score of the Coronavirus Fear Scale of male student nurses was significantly higher than that of female student nurses (p:0.004), and the mean score of the psychological sub-dimension of the Coronavirus 19 Phobia Scale of female student nurses was higher than that of male student nurses, and this difference was statistically significant (p:0.01). It was determined that the mean score of the economic sub-dimension of the Coronavirus 19 Phobia Scale of the senior year students was significantly lower than the students studying in other grades (p:0.004). It was determined that the mean scores of the somatic (p:0.03) and economic (p:0.005) sub-dimensions of the Coronavirus 19 Phobia Scale of student nurses with extended family structure were higher than other students. It was observed that the mean scores of the somatic sub-dimension of the Coronavirus 19 Phobia Scale of the students who had a relative who had Covid-19 were higher than those who did not have Covid-19 (p:0.04). It was found that the mean total score (p:0.03), somatic (p:0.03) and social (p:0.03) sub-dimensions of the Coronavirus 19 Phobia Scale of the students who lost a relative due to Covid-19 were higher than those who did not (Table 3).

Table 2. Distribution of Nursing Students According to Their Experiences with Covid-19.

Variable	Number	Percent
Source for information about Covid-19*		
Seminar/scientific meeting	104	26.3
Lesson	168	42.4
Ministry official page	218	55.1
Television	276	69.7
Social media	324	81.8
Covid-19 status		
Passing	78	19.7
İmpermeable	318	80.3
Covid-19 status of relatives		
Passing	276	69.7
Impermeable	120	30.3
The closeness of the person who has Covid-19*		
Father	60	15.2
Brother	71	17.9
Mom	81	20.5
Other	183	46.2
The situation of losing a relative due to Covid-19		
Loser	89	22.5
Not Loser	307	77.5
The closeness of the person who died due to Covid-19*		
Mom	1	0.3
Brother	1	0.3
Friend	7	1.8
Relative	61	15.4
Other	29	7.3

* More than one answer has been given.

It has showed that there is a very significant positive correlation between the total points of the statistical analysis demonstrated a highly significant positive correlation between the total points of FCS and CP19-S among nursing students (r:0.773, p:0.0001). Furthermore, a very significant positive correlation was found between FCS total points and the social (r:0.714, p:0.0001) and psychological (r:0.741, p:0.0001) sub-dimensions of CP19-S. A positive, moderately significant relationship was also observed between the total points of FCS and the somatic sub-dimension (r:0.611, p:0.0001) as well as the economic sub-dimension (r:0.560, p:0.0001) of CP19-S (Table 4).

4. DISCUSSION

Studies in the literature showed that fear and phobia of COVID-19 occur in different groups receiving health education. This study provides new information about the rates and relationship between COVID-19 fear and phobia in nursing students in pandemic. In this study the mean point of FCS of the nursing students was moderate. Metwally Elsayed et al. stated that 61% of the Egyptian firs-year nursing students had a moderate fear of COVID-19 (20). Similarly, it was noted in recent studies that both Turkish university and nursing students were moderately afraid of the COVID-19 (21, 22).

Table 3. Distribution of the Mean Scores of the Coronavirus Fear Scale and the Coronavirus 19 Phobia Scale According to the Variables.

Variable	The Fear of COVID-19 Scale	COVID-19 Phobia Scale				
	Total score Mean±SD	Total score Mean±SD	Somatic Mean±SD	Social Mean±SD	Economic Mean±SD	Psychological Mean±SD
Gender						
Male	14.56±6.07	42.00±16.90	8.33±4.17	11.15±4.95	7.27±3.28	15.25±6.30
Woman	6.24±16.90	45.58±16.85	8.48±4.16	12.07±5.02	7.59±3.67	17.45±6.40
	U:9228.00	U:10248.00	U:11385.50	U:10522.00	U:11315.00	U:9503.50
	p:0.004	p:0.08	p:0.64	p:0.15	p:0.59	**p:0.01**
Marital status						
Married	14.00±5.37	44.00±14.72	8.17±3.97	12.50±5.65	7.33±3.83	16.00±4.69
Single	16.51±6.27	44.93±16.94	8.45±4.17	11.89±5.01	7.54±3.60	17.06±6.46
	U:927.50	U:1162.50	U:1138.50	U:1081.00	U:1113.50	U:1083.50
	p:0.38	p:0.98	p:0.91	p:0.75	p:0.84	p:0.76
Grade						
1st	16.54±6.54	46.01±17.27	9.00±4.64	11.92±4.84	7.99±3.64	17.10±6.53
2nd	16.66±6.34	46.10±16.61	8.53±3.95	12.36±5.26	7.69±3.54	17.43±6.35
3rd	16.95±6.53	45.54±18.28	8.37±4.23	12.16±5.22	7.44±4.05	17.57±6.83
4th	15.20±4.96	38.44±13.99	7.13±3.27	10.22±4.17	6.18±2.81	14.91±5.70
	KW^2:2.267	KW^2:10.506	KW^2:9.462	KW^2:7.181	KW^2:13.242	KW^2:6.816
	p:0.52	**p:0.02**	p:0.02	p:0.07	**p:0.004**	p:0.08
Chronic Disease						
Yes	16.36±5.16	45.48±15.70	8.70±4.46	12.24±4.51	7.18±2.72	17.36±6.13
No	16.48±6.36	44.87±17.02	8.43±4.14	11.87±5.07	7.56±3.67	17.01±6.47
	U:5963.50	U:5713.50	U:5851.00	U:5551.00	U:5973.00	U:5737.50
	p:0.97	p:0.66	p:0.82	p:0.49	p:0.98	p:0.69
Family Type						
Broken family	15.88±5.75	43.06±16.89	7.94±4.58	11.65±4.77	7.65±3.57	15.82±6.48
Extended family	17.43±6.13	48.17±15.70	9.45±4.10	12.74±4.80	8.62±3.25	17.36±5.79
Nuclear family	16.33±6.31	44.43±17.09	8.30±4.13	11.76±5.07	7.33±3.63	17.05±6.55
	KW^2:2.361	KW^2:3.828	KW^2:7.009	KW^2:2.680	KW^2:10.738	KW^2:0.472
	p:0.31	p:0.15	**p:0.03**	p:0.26	**p:0.005**	p:0.79
Income status						
Income less than expenses	16.37±7.15	43.65±17.33	8.93±4.47	11.13±4.82	7.64±3.60	15.94±6.49
Income equals expense	16.30±5.57	44.67±15.92	8.08±3.73	12.03±4.91	7.33±3.36	17.22±6.35
Income more than expenses	17.61±7.97	48.48±20.85	9.61±5.45	12.59±5.88	8.46±4.70	18.13±6.66
	KW^2:0.340	KW^2:1.574	KW^2:4.182	KW^2:2.667	KW^2:1.663	KW^2:3.919
	p:0.84	p:0.46	p:0.12	p:0.26	p:0.44	p:0.14
Working status during the covid-19 process						
Worker	16.25±6.40	44.71±16.17	8.58±4.13	11.67±4.53	7.91±3.50	16.55±6.31
Inoperative	16.50±6.25	44.95±17.03	8.43±4.17	11.93±5.10	7.47±3.62	17.12±6.46
	U:9196.00	U:9345.00	U:9089.00	U:9306.00	U:8423.00	U:8863.00
	p:0.82	p:0.97	p:0.71	p:0.93	p:0.22	p:0.51
Covid-19 status						
Had Covid-19	15.64±6.13	43.35±16.18	8.45±3.72	11.45±4.95	7.44±3.11	16.01±6.46
Did not have Covid-19	16.67±6.29	45.31±17.07	8.45±4.26	12.01±5.03	7.56±3.71	17.29±6.41
	U:11310.50 p:0.23	U:11757.00	U:11996.00	U:11617.50	U:12191.00	U:10994.00
		p:0.48	p:0.65	p:0.39	p:0.81	p:0.12

Table 3. Distribution of the Mean Scores of the Coronavirus Fear Scale and the Coronavirus 19 Phobia Scale According to the Variables (continue).

Variable	The Fear of COVID-19 Scale	COVID-19 Phobia Scale				
	Total score Mean±SD	Total score Mean±SD	Somatic Mean±SD	Social Mean±SD	Economic Mean±SD	Psychological Mean±SD
Covid-19 status of relatives						
Had covid-19	16.65±6.50	45.77±16.99	8.66±4.21	12.20±5.04	7.52±3.58	17.39±6.45
Did not have covid-19	16.06±5.69	42.97±16.59	7.96±4.01	11.21±4.92	7.56±3.65	16.24±6.34
	U:15809.00 p:0.47	U:14850.00 p:0.10	U:14500.00 **p:0.04**	U:14577.50 p:0.06	U:14961.00 p:0.94	U:14961.00 p:0.13
The situation of losing a relative due to Covid-19 Bereaved						
Not bereaved	17.28±4.77	48.08±17.11	9.12±4.27	12.93±5.26	7.87±3.44	18.16±6.56
	16.23±6.39	44.00±16.75	8.25±4.11	11.60±4.91	7.44±3.64	16.72±6.37
	U:12039.00 p:0.09	U:11567.00 **p:0.03**	U:11601.50 **p:0.03**	U:11597.50 **p:0.03**	U:12272.00 p:0.14	U:11810.00 p:0.05

SD: Standard Deviation, L: Mann Whitney U Test, X^2: Kruskal Wallis Test

In the study, it was founded that the average CP19-S point of nursing students was at an intermediate level. In Rahman's study of COVID-19 phobia status of medical school students, it is noted that corona phobia level of the students is moderate (23). Our data supported this result. Furthermore, there are studies showing that the average COVID-19 phobia point of students were high. It is also stated that students are adversely affected by being at home due to the pandemic, they feel overwhelmed and stressful, they experience virus contamination and fear of death, and therefore their health concerns increase (15, 24, 25). It is expected that students will experience phobia during the pandemic period. However, it is thought that the students studying in the field of health experience less phobia than other segments of society is due to their greater knowledge about the disease.

Table 4. Correlation between the total points of the FCS and the CP19-S total points of the nursing students

	Coronavirus Fear Scale
Coronavirus-19 Phobia Scale	r:0.773 p:0.0001
Somatic sub-dimension	r:0.611 p:0.0001
Social sub-dimension	r:0.714 p:0.0001
Economic sub-dimension	r:0.560 p:0.0001
Psychological sub-dimension	r:0.741 p:0.0001

r: Spearman's correlation coefficıent

Fears and phobias are the emotions that are affected by the situation of the individual. Therefore, it is an expected result that fears, and phobias differ according to the socio-demographic features of nursing students (25). In the study examining the effect of the COVID-19 pandemic on the perception of fear and control of nurses and midwives, it was determined that the total mean point of the COVID-19 fear scale of female students was statistically significantly higher than that of male students (p<0.01) (26). Similarly Delibaş concluded that the CFS points of female students are higher than those of males (24). It is stated that women are more affected by the COVID-19 news on social media than men, and therefore they have more fear of death (27). It is stated that the responsibilities of staying at home cause women to

be more at risk in terms of mental health problems. The results of studies in the literature show that university students experience moderate levels of anxiety caused by COVID-19 and that female students experience higher levels of anxiety than males (24, 25, 27). In this study it was found that the mean CFS total score of male nursing students was significantly higher than that of females (p:0.001). This is probably due to the fact that men in this sample are more sensitive to health risks associated with COVID-19 than women. Therefore, gender differences in fear of COVID-19 among university students should be investigated further.

It was determined that the total point of the CP19-S and the average point of the economic sub-dimension of the senior students were significantly lower than the students studying in other grades. Turan stated that as the grades of nursing students increases, COVID-19 phobia decreases (25). This can be explained by the fact that senior nursing students have more professional knowledge than other grades.

In the study conducted by Ertuğrul et al. (2022), it has been observed that the average point of students who have COVID-19 relatives and who have lost relatives due to COVID-19 disease is higher. Some studies in the literature using the "Fear of COVID-19 Scale" (FCS) and the "COVID-19 Phobia Scale" (CP19-S) support this finding (21, 28).

In a study conducted by Karaca et al., it was stated that the mean score of somatic subscale of the COVID-19 phobia scale physical education teachers whose relatives or friends were diagnosed with COVID-19 was significantly higher than those who were not diagnosed (29).

Ertuğrul et al., stated that the average C19P-S score of students who lost their relatives due to COVID-19 disease was found to be significantly higher than those who did not die (28). In this study, it was determined that among the factors affecting the COVID-19 phobia of university students was the loss of a relative due to COVID-19. Our findings are similar to the findings of Ertuğrul et al.'s study.

Gökkaya et al. showed a positive relationship between sub-dimensions of phobia and total score of fear scale (30). The present study indicates positive significant correlation between somatic, social, economic, psychological sub-dimensions of CP19-S and CFS. Our results are similar with the results of Gökkaya et al. These results indicate that increased fear of COVID-19 makes the student nurses prone to experience somatic, social, economic, psychological phobias.

In this study it is found that there is a very significant positive correlation between the total point of the CFS and the CP19-S of the nursing students (r:0.773 p:0.0001). As the fear of COVID-19 increases, the phobia of COVID-19 also increases. In a study conducted with nursing students during the COVID-19 pandemic, it was stated that students' COVID-19 anxiety and fear were at high levels and positively related to each other (31). Malik et al. concluded that fear of COVID-19 was significantly united with workplace phobia among Pakistani doctors (2). Similarly, Gökkaya et al. stated that there is a high positive correlation between fear of COVID-19 and corona phobia (30). Nursing students are among the groups that have the most difficulties in the pandemic, as the practical courses are held in the hospital (32). Negative feelings experienced during the pandemic may cause students to move away from the profession and cause undesirable situations in the profession (15). Hence, it is crucial to determine the fear and phobia levels of nursing students in terms of planning preventive and necessary interventions.

In conclusion, the challenges faced by nursing students during the pandemic, particularly those involved in practical courses held in hospitals, underscore the importance of understanding and addressing their fears and phobias. Identifying these levels is crucial for planning preventive and necessary interventions to ensure the well-being of nursing students and mitigate potential negative consequences on their professional journey.

5. CONCLUSION

In conclusion, this study revealed a positive correlation between the fear and phobia of COVID-19 in nursing students. Recognizing that nursing students are the future healthcare providers; it becomes paramount to provide substantial support in fostering healthy living environments for both these students and their communities. The significance of this support is underscored by the understanding that the development of fears and phobias during and after the undergraduate education of nursing students could potentially impede their effective practice in the profession.

Considering these findings, it is strongly recommended to prioritize the identification of the psychological needs of nursing students. Offering counseling services tailored to address these needs can prove invaluable. Additionally, supporting students in enhancing their coping skills and providing guidance, when necessary, becomes an essential aspect of their overall well-being.

Ultimately, the proactive intervention and support for nursing students not only contribute to their personal development but also have the potential to positively impact the quality of healthcare they will provide in their future roles as healthcare professionals. This holistic approach is vital for cultivating resilient and well-prepared individuals who can navigate the challenges of the profession with confidence and efficacy.

Limitations

The study was conducted only at two universities in Izmir.

Ethical Consideration of the Study

The approval of the non-interventional clinical research ethics committee of a university was obtained (Date: 20.05.2021 Number: 281). Since it is a study on COVID-19, written institutional permission has been obtained from the Ministry of Health and the universities where the research will be conducted. Necessary explanations about the purpose of the research were made and it was carried out with volunteer students. In the study conducted by Bakioğlu et al., it is stated that "The scale can be used without permission with appropriate citation style.". Therefore, permission was not obtained for the use of the FCS (18). To apply the CP19-S written permission was obtained from the authors via e-mail

Conflict of Interest Statement

No conflict of interest was declared by the authors.

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