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HEMŞİRELİK ÖĞRENCİLERİNİN COVID-19 HAKKINDAKİ DÜŞÜNCELERİ İLE KAYGI DÜZEYLERİ ARASINDAKİ İLİŞKİ

Sibel SERÇE

Dr. Öğr. Üyesi, Gaziantep Üniversitesi, Sağlık Bilimleri Fakültesi Hemşirelik Bölümü, s_serce80@hotmail.com, Gaziantep/Türkiye, 0000-0003-3490-5193

Özlem OVAYOLU

Prof. Dr. Gaziantep Üniversitesi, Sağlık Bilimleri Fakültesi Hemşirelik Bölümü, drovayolu@gmail.com, Gaziantep/Türkiye, 0000-0002-7335-4032

Nimet OVAYOLU

Prof. Dr. SANKO Üniversitesi, Sağlık Bilimleri Fakültesi Hemşirelik Bölümü, drnimetovayolu@gmail.com, Gaziantep/Türkiye, 0000-0002-4505-0349

Öz

Bu araştırma, öğrenci hemşirelerin yeni tip koronavirüs (COVID-19) hakkındaki düşünceleri ve kaygı düzeyleri arasındaki ilişkiyi belirlemek amacıyla yapılmıştır. Tanımlayıcı tipte olan çalışma, Nisan-Mayıs 2020 tarihleri arasında bir Sağlık Bilimleri Fakültesinin Hemşirelik Bölümünde öğrenim gören öğrencilerle yapılmıştır. Araştırmanın evrenini tüm öğrenciler oluştururken, örneklemini araştırmaya katılmaya gönüllü olan 346 hemşirelik öğrencisi oluşturdu. Çalışmaya başlamadan önce Sağlık Bakanlığı, Etik kurul ve ilgili kurumdan gerekli izinler alındı. Veriler, anket ve durumluk kaygı envanteri ile çevrimiçi olarak toplanmıştır. Durumluk kaygı envanteri ortalama puanlarının 46,4±9,2 olduğu ve cinsiyet, ailede kronik hastalık, dezenfektan kullanma, yiyecek stoğu bulundurma, evde kal çağrısına uyma, stres yaşama ve inanma durumu ile durumluk kaygı envanteri puan ortalamaları arasında korelasyon olduğu belirlendi. eğitim ve yaşam kalitesinin olumsuz etkilendiği ($p<0.05$) bulundu. Öğrencilerin "orta" düzeyde kaygı yaşadıkları tespit edilmiştir.

Anahtar Kelimeler: COVID-19, öğrenci, anksiyete, hemşirelik.

THE CORRELATION BETWEEN THOUGHTS AND ANXIETY LEVELS OF THE NURSING STUDENTS ABOUT COVID-19

Abstract

This study was conducted to determine the correlation between thoughts and anxiety levels of the student nurses about the new type of coronavirus (COVID-19). The descriptive study was conducted between April and May 2020 with the students studying in the Nursing Department of a Faculty of Health Sciences. While the study population consisted of all students, the sample was composed of 346 nursing students who were voluntary to participate in the study. Before starting the study, necessary permissions were obtained from the Ministry of Health, Ethics Committee, and the relevant Institution. The data were collected online with the Questionnaire and State Anxiety Inventory (SAI). The data were collected online with the Questionnaire and State Anxiety Inventory (SAI). It was determined that SAI mean scores was 46.4±9.2 and there was a correlation between SAI mean scores with the gender, chronic disease in the family, taking disinfectant, keeping food stock, obeying the call to stay at home, having stress, and believing that education and quality of life were negatively affected ($p<0.05$). It was found that the students experienced "moderate" level anxiety.

Keywords: COVID-19, student, anxiety, nursing.

INTRODUCTION

Coronaviruses are enveloped and single-stranded RNA viruses. Although it has a zoonotic nature, it can be found in bat, pig, cat, dog, rodent, and poultry. It is a big virus family causing various health problems from cold to Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV) (1). (hsgm.saglik.gov.tr). The new type coronavirus (COVID-19/2019-nCoV/CoV-19) from this family has been on the agenda of the whole world with the presence of pneumonia cases without known etiology in Wuhan province of China in the last month of 2019. The data obtained about COVID-19 points out wild animals sold in the seafood city market in the Southside of Wuhan province of Hubei state of China (2). (Li, et. al., 2020) While the number of COVID-19 cases increasing rapidly in China slowed down in early March 2020, it was seen in Iran, South Korea, Italy and subsequently all over the world, associated deaths increased rapidly and it has a rapid rate of transmission; therefore, it was declared as pandemic by the World Health Organization (WHO) (1, 3, 4). **In the WHO's report, it was stated that average incubation period of COVID-19 was 5-6 days (2-14 days) but it may prolong up to 14 days in some cases** (5). While this virus causes severe symptoms in some people, some others have mild symptoms and severe cases are treated under intensive care conditions. Acute upper respiratory tract infections such as mild fever, fatigue, muscle pain, cough, and sore throat can be seen in asymptomatic cases, digestive system symptoms such as nausea, vomiting, abdominal pain and diarrhea without fever can be seen in some cases. Although subclinical lung lesions are seen in computed tomography images of moderate cases, gastrointestinal symptoms accompanying frequent fever and cough, pneumonia in patients may lead to pneumonia, severe acute respiratory syndrome, renal failure and even death in severe cases (1, 6). Due to the fact that the agents remains alive on surfaces for days or even weeks and spreads through droplets, issues like individual hygiene rules for the society, closing mouth and nose during coughing-sneezing, avoiding close contact with people showing symptoms of respiratory tract illness and disinfection of frequently used areas are emphasized (1, 3, 7). This is because there is no effective treatment or vaccination yet apart from protection from the virus. However, related studies are ongoing (8). The disease usually causes more severe problems in people aged over 60 years and suffering from chronic diseases (such as heart disease, hypertension, diabetes, chronic respiratory tract illness, and cancer) (1). Although pediatric cases constitute a small percentage of this disease, they constitute a severe risk in the spread of the disease in the society (9). In this process, especially nurses are at the forefront of the epidemic. Therefore, WHO and International Nursing Council (ICN) work together for COVID-19 and emphasize the importance of using personal protective equipment for nurses and ensuring their own safety (10). It is seen that COVID-19 not only threatens the physical health of healthcare professionals but also causes a severe effect on mental health (11). In addition, restrictions imposed due to the disease negatively affect daily life, education, and thus clinical practices of the students. Situations such as witnessing these hard conditions faced by the profession as well as difficulties they may experience if they start the profession and coping methods may cause nursing students, professionals of the future, to have anxiety (12). In this sense, this study was planned to evaluate opinions and anxiety levels of the nursing students about COVID-19.

MATERIAL AND METHOD

Type, Place, Population and Sample of the Study: This descriptive study was conducted with 346 students who were voluntary to participate in the study and were studying in the Nursing Department of a Faculty of Health Sciences between April and May 2020, without using sample selection.

Inclusion Criteria

The students who were studying in the nursing department of the related faculty, were voluntary to participate in the study and had internet access were included in the study.

Data Collection Tools

The data of the study were collected online with State Anxiety Inventory (SAI) and the Questionnaire prepared by the researchers.

Questionnaire: The questionnaire prepared by the researchers in line with the literature is composed of questions questioning the students' socio-demographic characteristics, thoughts about COVID-19 and concerns about their education (13).

State-Trait Anxiety Inventory: Validity and reliability of the scale developed by Spielberger (1979) were conducted by Öner and LeCompte (1998). State-Trait Anxiety Inventory include two separate scales consisting of 40 items in total. The State Anxiety Inventory requires the individual to answer by taking into account his/her feelings about the situation he/she is in. The Trait Anxiety Scale generally requires individual to describe how he/she usually feel. Both scales consist of 20 items. The total score obtained from both scales ranges between 20 and 80. High scores indicate higher anxiety levels (14). For this study, only the state anxiety inventory was used and this scale was used to measure the anxiety level of the students at that moment (14).

Data Collection: Since the students were in the online education process, the Questionnaire and State Anxiety Inventory were sent online to each student's mobile phone as a "questionnaire link". The students, who were voluntary to participate in the study, were asked to fill out the questionnaire completely and send it back to the researcher again via e-mail and the study was completed with 346 students since 433 students make a come-back about the questionnaire.

Data Assessment: Data obtained as a result of the study were evaluated in computer environment with frequency, number, percentage, mean, student t, ANOVA, Kruskal Wallis test, and Mann Whitney U test. The value of $p<0.05$ were accepted as statistically significant.

Limitations of the Study: The most important limitation of this study is that the students' anxiety levels were evaluated only with a scale online since they were not at school due to COVID-19 and the students who had no internet access were not included in the study.

Ethical Aspect of the Study: This study was conducted in accordance with the "Declaration of Helsinki" and Ethics committee approval was obtained on 02/04/2020 with the decision number 2020/122, permission from the institution and consent from students were obtained in order to collect data.

RESULTS

Results about the Comparison of Some Characteristics of the Nursing Students and Their State Anxiety Inventory Mean scores

It was determined that 41.9% of the students were in the age range of 18-20 years, 77.5% were female and 32.7% were in the second year. It was found that 98.6% of these students had knowledge about COVID-19, 87% were following the data of the World Health Organization and 90.2% were following the data of the Ministry of Health. In addition, 96% of the students stated that COVID-19 had no vaccine, 67.6% stated that it had no treatment, 87.3% had some knowledge about diagnosis methods, 85% stated that mostly the elderly individuals were affected and 33.8% stated that the first symptoms suggesting COVID-19 are fever and cough. It was stated that the state anxiety inventory mean score of the nursing students was 46.4±9.2, they experienced "moderate" level of anxiety, and those who were female, believed that COVID-19 affected the whole society and had a great number of family members with chronic diseases had higher state anxiety inventory mean scores ($p<0.05$). In addition, although those, who had knowledge about COVID-19, were following the data of WHO

and the Ministry of Health, said that COVID-19 had no vaccine but treatment, had no knowledge about diagnosis methods, and said that cough is the first symptom of COVID-19, had higher mean score in state anxiety inventory, these results were determined to be statistically insignificant (Table 1).

Table 1. Comparison of Some Characteristics and State Anxiety Inventory Mean Score of the Nursing Students

Characteristics	Number(%)	Mean±SD	p
Age			
18-20	145(41.9)	46.0±9.6	
21-23	172(49.7)	47.3±8.7	0.090
24 and over	29(8.4)	43.4±10.0	
Gender			
Female	268(77.5)	47.2±9.2	0.007
Male	78(22.5)	43.6±9.0	
Year			
First	46(13.3)	46.9±10.3	
Second	113(32.7)	46.6±9.4	0.907
Third	90(26.0)	45.8±8.5	
Fourth	97(28.0)	46.4±9.3	
Knowledge about COVID-19			
Yes	341(98.6)	46.4±9.2	0.837
No	5(1.4)	45.6±8.5	
Following the COVID-19 Data of the World Health Organization			
Yes	301(87.0)	46.9±9.4	0.126
No	45(13.0)	45.2±8.7	
Following the COVID-19 Data of the Ministry of Health			
Yes	312(90.2)	46.6±9.4	0.171
No	34(9.8)	44.3±7.5	
Is there a vaccine for COVID-19?			
Yes	14(4.0)	46.2±9.2	0.235
No	332(96.0)	47.7±10.2	
Is there a treatment for COVID-19?			
Yes	112(32.4)	47.1±8.9	0.527
No	234(67.6)	46.1±9.4	

Do you have knowledge about the COVID-19 diagnosis method?			
Yes	302(87.3)	46.2±9.5	0.126
No	44(12.7)	47.7±7.1	
What are the first symptoms suggesting COVID-19 for you?			
Fever	99(28.6)	44.6±8.1	
Cough	34(9.8)	48.6±9.7	0.055
Fever and Cough	117(33.8)	47.0±9.6	
Fever, Cough, Shortness of breath	6(27.7)	46.8±9.4	
Who do you think COVID-19 affects the most?			
The Elderly	294(85.0)	45.8±9.1	
Healthcare professional	45(13.0)	48.8±9.1	0.002
Whole society	7(2.0)	56.2±7.2	
The presence of chronic illness in the family			
Yes	185(53.5)	47.7±9.1	0.011
No	161(46.5)	45.0±9.2	
Total	**346(100.0)**	**46.4±9.2**	

Results on the Comparison of Some Conditions of Nursing Students About COVID-19 and Their State Anxiety Inventory Mean scores

While 39.6% of the students were contacting with their relatives once a week before COVID-19, 63.9% stated that they did not see their relatives at all after COVID-19, 44.5% met with their friends once a day before COVID-19, 77.7% did not meet with their friends after COVID-19. It was determined that 94.2% of the nursing students had no infection in this process, 99.1% did not go abroad, and 93.6% had no relative who went abroad. It was concluded that those who met with their relatives once a week before COVID-19 and those met with every day after COVID-19, those who met with their friends once a month before COVID-19 and met with them every day after COVID-19, and those who went abroad or their relatives went abroad in this period had higher state anxiety levels but it was concluded not to be statistically significant (Table 2).

Table 2. Comparison of the nursing students' some characteristics related to COVID-19 and State Anxiety Inventory Men Score

Characteristics	Number(%)	Mean±SD	p
How often did you meet with your relatives before COVID-19?			
Once a day	50(14.5)	45.6±8.5	
Once a week	137(39.6)	47.1±9.0	
Once a month	109(31.5)	46.7±9.8	0.491
Once a year	40(11.6)	44.3±9.0	
Never	10(2.9)	46.1±11.2	
How often do you meet with your relatives after COVID-19?			

Once a day	4(1.2)	48.2±8.0	
Once a week	43(12.4)	43.7±8.6	
Once a month	67(19.4)	47.0±8.6	0.136
Once a year	11(3.2)	43.4±9.8	
Never	221(63.9)	46.9±9.5	
How often did you meet with your friends before COVID-19?			
Once a day	154(44.5)	46.5±10.0	
Once a week	101(29.2)	45.7±8.8	
Once a month	47(13.6)	48.2±9.3	0.709
Once a year	4(1.2)	45.7±4.9	
Never	40(11.6)	45.9±7.2	
How often did you meet with your friends after COVID-19?			
Once a day	1(0.3)	71.0± -	
Once a week	33(9.5)	46.0±9.4	
Once a month	40(11.6)	43.0±7.7	0.078
Once a year	3(0.9)	49.3±10.9	
Never	269(77.7)	46.8±9.2	
Did you or a your relative have an infection after COVID-19 outbreak?			
Yes	20(5.8)	45.5±7.7	0.637
No	326(94.2)	46.5±9.3	
Have you been abroad during the COVID-19 period?			
Yes	3(0.9)	55.3±5.6	0.071
No	343(99.1)	46.3±9.2	
Has a relative you are in contact traveled abroad during the COVID-19 period?			
Yes	22(6.4)	48.9±9.0	0.248
No	324(93.6)	46.2±9.2	
If your relative went abroad, did he/she quarantine him/herself for 14 days on his/her return?			
Yes	128(37.0)	46.1±9.7	0.582
No	218(63.0)	46.6±9.0	
Total	**346(100.0)**	**46.4±9.2**	

Results on the Correlation Between the Status of Preventing COVID-19 and State Anxiety Inventory Mean score of the Nursing Students

It was found that all of the students knew the precautions to be taken for COVID-19 and implemented these precautions, 94.5% obeyed 14 rules suggested by the Ministry of Health, 98.8% stayed away from crowded environments, 93.4% paid attention to distance in communication with people, and 98.6% complied with the call to “stay at home”. 66.2% of the students took protective equipment

such as gloves-mask and 89.6% took disinfectant, 90.2% paid attention to their diet, 91.6% paid attention to fluid intake, and 99.4% paid attention to hygiene rules.

It was determined that those who knew 14 rules suggested by the Ministry of Health, did not pay attention for fluid intake, took disinfectants, stocked food, and complied with the stay at home suggestion had higher mean score in state anxiety inventory and this result was statistically significant ($p<0.05$).

It was found that those, who stated that they took measures for preventing COVID-19, paid attention to hygiene, took protective equipment, left no distance in communication with people, and stayed away from crowded environments, had higher mean score in state anxiety inventory and this result was not statistically significant (Table 3).

Table 3. Comparison of the Nursing Students' Status of Preventing COVID-19 and State Anxiety Inventory Mean Score

Characteristics	Number (%)	Mean±SD	p
Knowing the measures to be taken to prevent COVID-19			
Yes	346(100)	46.4±9.2	
No	-	-	
Knowing the 14 rules recommended by the Ministry of Health to prevent COVID-19			
Yes	327(94.5)	46.4±9.3	0.003
No	19(5.5)	41.6±5.1	
Taking measures to prevent COVID-19			
Yes	346(100.0)	46.4±9.3	0.913
Measures taken to prevent COVID-19 (n: 346)			
Personal hygiene	72(20.8)	45.9±8.5	
Social Isolation	160(46.2)	46.8±8.9	
Mask, gloves	39(11.3)	44.6±9.8	0.859
Nutrition, sports	8(2.3)	45.5±14.7	
Hygiene	67(19.4)	47.1±9.8	
Do you pay attention to your diet to prevent COVID-19?			
Yes	312(90.2)	46.4±9.3	0.547
No	34(9.8)	46.5±9.0	
Do you pay attention to your fluid intake to prevent COVID-19?			
Yes	317(91.6)	46.2±9.4	0.035
No	29(8.4)	48.7±7.4	
Do you pay attention to your hygiene to prevent COVID-19?			
Yes	344(99.4)	46.4±9.2	
No	2(0.6)	40.5±7.7	0.338
Have you taken protective equipment such as gloves and mask to prevent COVID-19?			
Yes	229(66.2)	47.0±9.8	0.079
No	117(33.8)	45.3±7.8	
Have you taken disinfectant to prevent COVID-19?			

Yes	310(89.6)	46.7±9.5	0.042
No	36(10.4)	43.4±5.4	
Have you stocked up food in your home for possible curfew due to COVID-19?			
Yes	149(43.1)	47.9±9.8	0.027
No	197(56.9)	45.3±8.6	
Do you keep distance from people to protect yourself from COVID-19?			
Yes	323(93.4)	46.4±9.1	0.607
No	23(6.6)	47.0±11.1	
Do you stay away from crowded environments due to COVID-19?			
Yes	342(98.8)	46.5±9.2	0.078
No	4(1.2)	39.5±3.5	
Do you comply with the suggestion of "stay at home" of the Ministry of Health to prevent COVID-19?			
Yes	341(98.6)	46.6±9.1	0.020
No	5(1.4)	35.2±9.6	
Total	**346(100.0)**	**46.4±9.2**	

Results on the Comparison of Nursing Students' Some Thoughts on COVID-19 and Their State Anxiety Inventory Mean score

It was found that 73.1% of the students experienced stress due to COVID-19, 35.3% did not do anything to cope with stress, and 95.7% concerned about the future. 82.7% of the students stated that their education was affected and 67.9% stated that their quality of life was affected due to COVID-19 and 87.0% stated that they could go to the hospital if they were called to serve as a nurse.

It was found that those who stated that they experienced stress due to COVID-19 and believed that their education and quality of life were affected had high state anxiety inventory mean score and this result was statistically highly significant (Table 4).

Table 4. Comparison of Nursing Students' Some Thoughts about COVID-19 and State Anxiety Inventory Mean Score

Characteristics	Number (%)	Mean±SD	p
Are you stressed due to COVID-19?			
Yes	253(73.1)	48.6±8.9	0.000
No	93(26.9)	40.5±7.2	
What do you do to cope with stress?			
Reading	61(17.6)	49.0±9.6	
Listening to music	23(6.6)	49.6±8.4	
Watching television	37(10.7)	46.0±6.6	0.001
Doing hobbies	26(7.5)	47.5±10.3	
Praying	13(3.8)	51.4±6.9	
Spending time with family	38(11.0)	46.2±8.8	
Nothing	122(35.3)	43.8±9.6	

Using social media	26(7.5)	47.1±8.2	
Are you worried about your future due to COVID-19?			
Yes	331(95.7)	46.5±9.3	0.710
No	15(4.3)	44.9±7.6	
Do you think your education has been affected by COVID-19?			
Yes	286(82.7)	47.5±9.0	0.000
No	60(17.3)	41.1±8.4	
Do you serve as a nurse in the hospital if you are called due to COVID-19?			
Yes	301(87.0)	46.1±9.1	0.148
No	45(13.0)	48.4±10.2	
Has COVID-19 affected your quality of life?			
Yes	235(67.9)	48.6±9.4	0.000
No	9(2.6)	35.6±3.7	
Partially	102(29.5)	42.2±6.7	
Total	**346(100.0)**	**46.4±9.2**	

DISCUSSION

In the past 20 years, the world has been fighting viral outbreaks such as severe acute respiratory syndrome, avian flu, swine flu, middle east respiratory syndrome, WHO and all public health authorities make restrictions in many areas such as social life, job and education in order to control the pandemic. However, the rapid spread of the virus and its slow clinical course make it difficult to fight the pandemic, make the process uncertain and increase the anxiety level of people (1, 15). Although anxiety is experienced in all age groups, while it was seen widely among university students even under normal conditions, it can be experienced more intensely in pandemic periods where education life is negatively affected. The main causes of this situation include factors such as academic performance, desire to be successful and negative effects on postgraduate plans (13). In this regard, this study was conducted to investigate the effect of nursing students' thoughts about COVID-19 on their state anxiety level.

As it is known, contagious diseases increase anxiety levels of individuals from past to present (16). In their study, Lau et al., determined that psychological reactions such as high levels of stress and helplessness were commonly seen in individuals due to SARS-CoV (17). In the study by Goulia et al., nurses experienced higher levels of anxiety compared to the other healthcare professionals in the swine flu pandemic that affected the world in early 2009 (18). In their study, Balkhy et al., similarly, determined that individuals had high anxiety levels (19). In another study, students who received health education during the periods of Middle East Respiratory Syndrome stated that they were worried about taking necessary infection control and isolation measures in the clinics (20). In this study, it was also found that the nursing students experienced "moderate level" of anxiety. This result can be explained with the fact that students need to continue their theoretical education online, the practice trainings which is the most important part of the nursing profession cannot be made in the clinics and the problems may experience after graduation.

In the literature, it has been reported that factors like gender, education level, having knowledge affect the anxiety level (21). In studies investigating the effect of gender on anxiety level, female students were found to have higher anxiety level than male students (13). In addition, in their studies, Balkhy et al., and Frankenberg et al., determined that those with high education level experienced less anxiety in epidemics and natural disasters (18, 22). Especially studies conducted on COVID-19 revealed that the students in the field of health had higher knowledge level and low anxiety level, but the students who did not work in the field of health had low knowledge level and high anxiety level (23, 24). In this study, it was determined that female students and those with knowledge about COVID-19 had higher anxiety levels. In addition, it was found that there was no correlation between the current class and the anxiety level. In their study, Yildirim et al., found that there was no correlation between the current class and stress level of the students (25).

The World Health Organization recommends protective measures such as hygiene, disinfection, early detection, reporting, isolation, use of personal protective equipment and social distance in order to reduce the rapid spread of infection since the medication and vaccine have not been found specific for COVID-19 yet (26). While in the study conducted by Kwok et al., in Hong Kong almost all of the participants stated that they were worried about COVID-19 pandemic and their daily routines were disturbed (27), in a study conducted by Zhang et al., to evaluate the psycho-social status of healthcare professionals, anxiety level of those who had direct contact with the patient was found to be higher than those who had no direct contact (28). In the study of Wang, it was determined that when detailed, up-to-date and correct health information was given to the individuals, the rate of applying the measures such as hand washing, social isolation and wearing mask increased and stress and anxiety levels decreased (29). In the study conducted by Bostan et al., in Turkey, it was concluded that the people had high sensitivity to COVID-19, therefore they showed the maximum importance to hygiene, wearing mask, social distance and isolation rules (30). However, it was determined in some studies that increasing stress level impaired nutritional quality (31), while the increasing risk perception due to COVID-19 increased the tendency to stock up on food and cleaning agents. (32, 33). It was also found in this study that the number of those who paid attention to fluid intake, nutrition, hygiene, the use of protective equipment and social distance was high but those who did not pay attention to fluid intake, took disinfectant, stock-up food and complied with the stay at home had higher anxiety levels. These results show indicated the students complied with the recommended measures for the COVID-19 pandemic, but the anxiety level was also high. Therefore, it is recommended to inform students about epidemic cause and protective measures and support them in terms of anxiety during epidemic periods.

In this pandemic, the risky groups are mostly the elderly people and individuals with chronic diseases. Children and adolescents who have the infection mildly play a major role in spreading the disease to those groups (34, 35). In the literature, it has been shown that chronic diseases frequently lead to deaths related to COVID-19, especially old age is associated with increased mortality (36, 37). In addition, in the studies conducted in China and Canada during SARS-CoV period, it was found that healthcare professionals had high fear of transmitting the virus to their family members (38, 39). In this study, 85% of the students stated that mostly elderly people were affected and it was determined that the anxiety level of the students with chronic disease in the family was higher. This result can be explained with the fact that the students had young ages and they knew the risk of carrying infection agent.

Considering the different clinical prognosis of COVID-19 disease, the age groups it is seen and its spread, it is seen that the issue will not be limited only with the medical dimension, but it also has some negative effects in terms of education and public health (40). From the first days of when the cases were seen in Turkey, the schools were closed and education continued online in order to minimize the transmission risk. However, conducting the education online due to pandemic has adversely affected the mental processes of the students especially in the health field requiring applied

education. (24, 41, 42). In their study, Savitsky et al., concluded that uncertainty experienced during the education process due to COVID-19 increased the anxiety levels of the nursing students (13). In this study, it was determined that the students stating that their education and quality of life were affected due to COVID-19 had higher anxiety mean score. As known, many higher education institutions in Turkey and in the world have decided to continue education online due to pandemic. However, it is believed that the causes such as difficulties experienced in online education, lack of internet access for every student and inability to do the applied educations have increased the anxiety levels of the students.

CONCLUSION AND RECOMMENDATIONS

It was determined that almost all nursing students had knowledge about COVID-19, knew and applied the protective measures, most of them experienced stress, worried about the future and their education and quality of life were negatively affected. It was found that students experienced moderate level of anxiety and those who were female, had someone with chronic disease in the family, had knowledge about COVID-19, stated that they took measures, paid attention for fluid intake, took disinfectant, stocked up foods, stayed away from crowded places, stated to experience stress, and believed that their education and quality of life were affected had higher anxiety level. In accordance with these results, it is recommended to support especially the students having the specified characteristics during online education process, to consider absolutely their anxiety levels while eliminating their lack of knowledge, and to focus more on anxiety and coping methods in the courses.

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CONFLICTS OF INTEREST

All authors of this study declare that they have no conflicts of interest.

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