

Investigation of the Stress Level and Coping Behaviors of Nursing Students, and Their Thoughts on Professional Life in COVID-19 Pandemic

COVID-19 Pandemisinde Hemşirelik Öğrencilerinin Stres Düzeyi ve Başa Çıkma Davranışları ile Mesleki Hayata İlişkin Düşüncelerinin İncelenmesi

 Belkız KIZILTAN¹,  Nurgül KAPLAN²,  Seda UZUNALI³

¹Avrasya Üniversitesi, Sağlık Bilimleri Fakültesi, Hemşirelik Bölümü, Trabzon, belkizckiziltan@avrasya.edu.tr

²Tokat Gaziosmanpaşa Üniversitesi, Erbaa Sağlık Hizmetleri Meslek Yüksekokulu, Tokat nurgul.kaplan@gop.edu.tr

³Gümüşhane Üniversitesi, Lisansüstü Eğitim Enstitüsü, Afet Yönetimi Anabilim Dalı, Gümüşhane, seda.bagbanci@windowslive.com (Sorumlu Yazar)

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ABSTRACT

It is known that nursing students perceive more stress than the students who are studying in other health disciplines. The pandemic period brought additional stress to nursing students and this period may have negatively affected their thoughts about the profession. It is aimed to determine the stress level of nursing students in the COVID-19 pandemic, to investigate the behaviors of students in coping with stress and their thoughts about their future professional life in this process. The study was carried out as a descriptive and cross-sectional study on the 226 undergraduate nursing students. The data were collected via Google Form in June-July 2020 following the first wave of the COVID-19 pandemic in Turkey. The students perceived stress above the average. As the perceived stress level increases, the tendency to adopt the self-confident and optimistic approach decreases, and the tendency to adopt the helpless approach increases. The number of students who did not want to work in the pandemic service in the event of an epidemic such as COVID-19 was high (n=119), as well as the number of students (n=195) who stated that the COVID-19 epidemic process caused them to regret their career choice was. The COVID-19 has increased to the stress level of nursing students. The students did not cope with this stress effectively and their thoughts on future professional life affected in negatively.

Keywords: Nursing Students, COVID-19, Pandemic, Stress, Professional Role, Coping Behavior

ÖZET

Diğer sağlık disiplinlerinde okuyan öğrencilere göre hemşirelik öğrencilerinin daha fazla stres algıladığı bilinmektedir. Pandemi dönemi, hemşirelik öğrencilerine ek stres yükü getirmiş ve bu dönem onların mesleğe yönelik düşüncelerini olumsuz etkilemiş olabilir. COVID-19 pandemisinde hemşirelik öğrencilerinin stres düzeyinin belirlenmesi, öğrencilerin stresle baş etmede davranışlarının ve bu süreçte gelecek mesleki yaşamları ile ilgili düşüncelerinin araştırılması amaçlanmaktadır. Araştırma, 226 hemşirelik lisans öğrencisi ile tanımlayıcı ve kesitsel tipte bir çalışma olarak gerçekleştirildi. Veriler, Türkiye'deki COVID-19 pandemisinin ilk dalgasını takiben Haziran-Temmuz 2020'de Google Formu aracılığıyla toplandı. Öğrenciler bu süreçte stresi ortalamanın üzerinde algılamış ve algıladıkları stres düzeyi arttıkça da kendine güvenen ve iyimser yaklaşımı benimseme eğilimleri azalmış, çaresiz yaklaşımı benimseme eğilimleri ise artmıştır. COVID-19 gibi bir salgın durumunda pandemi servisinde çalışmak istemeyen öğrenci sayısı (n=119) yüksek olduğu gibi, COVID-19 salgın sürecinin meslek seçiminde pişmanlık duymalarına neden olduğunu belirten öğrenci sayısı da (n=195) fazladır. COVID-19, hemşirelik öğrencilerinin stres düzeyini artırmıştır. Öğrenciler bu stresle etkili bir şekilde baş edememiş ve gelecekteki meslek hayatları hakkındaki düşünceleri olumsuz etkilenmiştir.

Anahtar Kelimeler: Başa Çıkma Davranışı, Hemşirelik Öğrencileri, COVID-19, Mesleki Rol, Pandemi, Stres

INTRODUCTION

The “Coronavirus Disease-2019 (COVID-19)” declared as a pandemic by the World Health Organisation (WHO), has rapidly spread and become a global problem, and the first positive case was detected in Turkey on March 11 (World Health Organization, 2020). With the aim of reducing the increasing morbidity and mortality rates due to the highly contagious COVID-19 and preventing the spread of the epidemic, a large number of countries have implemented a large number of strategies by limiting the mobility of the people, including mandatory use of masks, strict physical distancing, strict quarantine for those who are in contact with infected patients, and home isolation of those who do not (Gössling et al., 2020). In addition to this, schools and universities were indefinitely closed and forced to switch to online education. This transition, together with the increasing threats of COVID-19, put additional stress and mental health burdens on many young people (Lee, 2020; Tercan, 2020). As a consequence, apart from the clinical picture, the pandemic affected people socially, professionally, economically, and psychologically.

One of the most important measures taken by the Ministry of National Education and Higher Education Institutions in Turkey was the three-week closure of schools on March 13, 2020. Subsequently, during the course of the pandemic, it was decided to keep the schools closed for the remainder of the spring semester of that year, and the institutions providing education in the field of nursing, including disciplines such as medicine and dentistry, would continue with remote education. This situation has deeply affected nursing education, where challenges such as increasing student numbers, insufficient number of educators, and clinical practice settings have already existed (Barton et al., 2020). It is known that nursing students have higher stress levels than students studying in other health disciplines due to the factors (Bublitz et al., 2016; Labrague et al., 2018; Jenkins et al., 2019) such as excessive course load, career plans, complex interpersonal relationships, and difficulties in the clinical learning environment; furthermore, factors such as the uncertainty of the course of COVID-19 and its duration, concerns about returning to normal life, uncertainty in the education process, difficulties experienced in remote education, and lack of clinical practice were

added to these existing stressors during the pandemic. This set of circumstances not only threaten the physical health of nursing students but also negatively influence their psychological health and social relationships (Lovrić et al., 2020; Mashaal et al., 2020; Savitsky et al., 2020; Aslan & Pekince, 2021).

According to Lazarus and Folkman (1984), even though stress or tension are seen as an inevitable aspect of the human condition, it is coping strategies that make a big difference in the adaptation process. Coping with stress can be defined as learned behaviours to survive in the face of a life-threatening danger. As it will enable students to efficiently benefit from their education and form a positive professional identity, developing coping strategies to deal with stress is important (Reyes et al., 2015). Professional identity has an immediate relationship with students' engagement in nursing programs and their intention to leave the nursing profession (Worthington et al., 2013). Studies have shown that nursing students have ineffective coping strategies than nurses at a much higher level (Huang et al., 2020), and knowing and using effective coping strategies is effective in reducing stress levels (Reyes et al., 2015). There are also studies showing that a variety of coping strategies are beneficial in stress management during epidemics (Pan et al., 2005; Brooks et al., 2018). In order to maintain a healthy workforce and increase the quality of patient care during a possible pandemic that the students may encounter in the future, it is of vital importance to define the stress levels that negatively affect the psychological well-being of nursing students, who are the health professionals of the future, in the face of unexpected difficulties and the effective coping strategies, to offer solutions, and to develop behavioural changes required in the education process.

Since nursing students are the future of the nursing workforce, their stay in the nursing profession has been the subject of worldwide research (Swift et al., 2020; de Los Santos et al., 2022). Positive or negative information about the COVID-19 pandemic affects nursing students' thoughts about their future professional life. For instance, despite the fact that the media portrayal of

nurses as heroic, self-sacrificing, and having a strong moral sense positively affect their continuing career (Swift et al., 2020), fear of COVID-19 has been found to increase psychological tendencies such as aggressiveness, poor sleep quality, and intention to drop out of nursing school (de Los Santos et al., 2022). Meanwhile, no study has been found in the literature on the thoughts of nursing students who will take an active role in the

epidemic process in the future, about coping with stress during COVID-19 and their future professional lives.

This study aimed to a) to determine the stress level of nursing students in the COVID-19 pandemic; b) investigate the relationships between students and effective strategies to cope with stress, and; c) to determine their thoughts about their future professional life in this process.

MATERIAL METHOD

Ethical Considerations

Approval from the Ethics Committee of Eurasia University (22/06/2020, 3248) written consent from the institutions where the research was conducted, research permit from the Directorate General of Health Services of Ministry of Health, and the necessary permissions for the scales were obtained. It was explained to the participants that the data would be used in scientific research, forms would be anonymous, the information would be kept confidential, and participation was voluntary. The informed consent form was obtained from the participants. The study was conducted according to the guidelines of the principles of the Declaration of Helsinki.

Study Design and Participants

This study was a descriptive cross-sectional study and it was carried out online. The universe of the research was determined as 230 undergraduate nursing students who were taking courses in the 2019-2020 academic year at a foundation university in Northern Turkey. In this study, the census method was used and a sample of 226 students was formed (98.3%). Of the 226 participants, 75.6% were women ($n = 171$) and 24.4% were men ($n = 55$), with a mean age of 21.40 years ($SD:2.55$). A total of 32.3% ($n = 73$) first, 24.4% second ($n = 55$), 22.6% third ($n = 51$), and 20.7% fourth year ($n = 47$) in the nursing program. The data were collected via Google Form in June-July 2020 following the first wave of the COVID-19 pandemic in Turkey. The students received the questionnaire forms via WhatsApp groups of each class and university e-mail. The survey remained open for sixty days and reminders were sent every fifteen days for a total of three times. Questionnaires with missing data were sent again,

and those less than 90% complete were excluded from the study (4 questionnaires).

Data Collection Tools

Student Information Form

Within the scope of sociodemographic characteristics, five questions including gender, age, class, socioeconomic status, parental education level, three questions about stress and coping strategies, two questions questioning the effect of the COVID-19 epidemic on the thought of the post-graduation work area, and six expressions examining their thoughts on professional life during the COVID-19 process were added to the questionnaire (Fitzgerald and Konrad, 2021; Sveinsdóttir et al., 2021; de Los Santos et al., 2022).

Perceived Stress Scale (PSS)

Stress was measured using the PSS (Cohen et al., 1983), which aimed to identify personal experiences in the previous month. The scale was a 5-point Likert type consisting of 14 items, which ranges from "Never" (0) to "Very Often" (4), and was graded between 0 and 54 points with higher scores indicating higher perceived stress. In adapting the scale into Turkish (Eskin et al., 2013) Cronbach's alpha coefficient internal consistency was calculated at 0.84, and in this study, it was measured to be 0.83. When factor analysis was performed for the Perceived Stress Scale, it was observed that there was no separation in the two-dimensional scale for the dataset, and the scale was considered one dimension.

Coping Scale (CS)

Coping with stress was measured using the CS (Lazarus and Folkman, 1984) with its Turkish version (Şahin and Durak, 1995). The scale was a

4-point Likert type which ranges from “Not at all Appropriate” (0) to “Very Appropriate” (3). The scale has five sub-dimensions: "self-confident approach", "optimistic approach", "helpless approach", "submissive approach" and "social support seeking approach". In the validity and reliability study, Cronbach’s alpha coefficient was found to be 0.80, 0.68, 0.73, 0.70, 0.47, respectively. In the evaluations, it was discovered that effective coping strategies were applied as the scores obtained from the self-confident, optimistic, and social support-seeking approaches increase, whereas the increase in the scores obtained from the helpless and submissive approaches shows that ineffective coping strategies were applied (Şahin and Durak, 1995). In the factor analysis, it was noticed that the "Self-Confident Approach" and "Optimistic Approach" dimensions did not differ from each other and were included in the analysis as a single dimension. As a result of six iterations, the questions that did not provide a factor loading of 0.50 were removed from the scale. The results from the factor analysis show that the total variance,

which was reported to consist of four dimensions and a total of 18 items, was 62.31%. Following the determination of the sub-dimensions, it was tested whether the Cronbach’s alpha values were above 0.70 in order to ensure the reliability of the scale, and it was seen that this value was reached (Cronbach’s alpha: 0.78). In order to perform parametric analysis, the data were collected on a 5-point Likert scale (1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree).

Data Analysis

SPSS 22 statistical program was used to assess the data. To determine the number and percentage distribution, mean, and standard deviation in data analysis, and whether the research data had normal distribution, Kolmogorov-Smirnov test, Independent sample t-test, and Pearson correlation coefficient were used. The distributions of categorical variables were compared with chi-square test methods. The significance level was reported as $p < 0.05$.

RESULTS

Table 1 shows the students' PSS and CS mean scores. According to this, the mean perceived stress level was 2.96, the mean value was 3.73 for the self-confident and optimistic approach, 4.23 for

the social support seeking approach, 2.70 for the submissive approach, and 2.17 for the helpless approach.

Table 1. Distribution of Average Points of Student in PSS and CS.

Scales	Min.	Max.	M	SD
CS				
Self-Confident and Optimistic Approach	1.44	5.00	3.7384	.72349
Submissive Approach	1.00	5.00	2.7065	1.02939
Social Support Seeking Approach	2.00	5.00	4.2375	.66455
Helpless Approach	1.00	5.00	2.1711	.94815
PSS	1.57	4.57	2.9690	.53149

CS: Coping scale; PSS: Perceived stress scale; SD: Standard deviation; Min: Minimum; Max: Maximum; M: mean.

While a positive and statistically significant relationship was found between displaying a helpless approach and perceived stress level ($p < 0.05$, $r = 0.251$), a negative and statistically significant relationship was observed between self-confident and optimistic approach and perceived stress ($p < 0.05$, $r = -0.361$). As the perceived stress

level increases, the tendency to adopt the self-confident and optimistic approach decreases, and the tendency to adopt the helpless approach increases. No statistically significant relationship was found between the submissive approach and social support seeking approach of the students and the perceived stress ($p > 0.05$) (Table 2).

Table 2. The Relation Between Points of PSS and CS.

	PSS		CS			
	Self-Confident and Optimistic Approach	Submissive Approach	Social Support Seeking Approach	Helpless Approach		
r	1	-.361	.115	-.031	.251	
p	.00*	.000*	.085	.644	.000*	

CS: Coping scale; PSS: Perceived stress scale. * p<0.05.

Students who were not with their families during the pandemic period had significantly higher mean PSS scores and adopted the submissive approach and helpless approach more as coping strategies, while the students who were with their families adopted the self-confident and optimistic approach more as a coping strategy (p<0.05). It was determined that the students without a chronic disease had significantly higher mean PSS scores than those with a chronic disease, and the students

with a chronic disease adopted the self-confident and optimistic approach more as a coping strategy (p<0.05). Mean self-confident and optimistic approach and, social support seeking approach scores of the students who voluntarily chose a career in nursing were significantly higher than the students who chose it unwillingly (p<0.05). It was observed that other characteristics did not have a statistically significant effect on the mean PSS scores and coping strategies (P>0.05) (Table 3).

Table 3. Comparing the Points of PSS and CS Based on Specific Characteristics of Students.

Variables	n (%)	PSS M±SD.	CS				
			Self-Confident and Optimistic Approach M±SD.	Submissive Approach M±SD.	Social Support Seeking Approach M±SD.	Helpless Approach M±SD.	
Lived place in pandemic	With family	27 (12.0)	2.71±63	4.14±76	2.28±84	4.22±74	1.66±87
	Other	199 (88.0)	3.00±50	3.68±70	2.76±1.04	4.23±65	2.23±93
	t; p		-2.691; 0.008*	3.199; 0.002*	-2.294; 0.023*	-0.127; 0.899	-2.998; 0.003*
Chronic illness	No	191 (84.5)	3.18±54	3.40±80	2.57±96	4.21±72	2.15±1.00
	Yes	35 (15.5)	2.93±51	3.79±69	2.72±1.03	4.23±66	2.17±94
	t; p		2.440; 0.015*	-2.758; 0.006*	-0.724; 0.470	-0.213; 0.832	-0.110; 0.912
Choice of nursing	Willing	194 (85.5)	2.94±52	3.80±70	2.70±1.00	4.29±64	2.11±99
	Not willing	32 (14.2)	3.11±47	3.41±67	2.74±1.15	3.90±68	2.47±1.12
	t; p		-1.650; 0.100	2.748; 0.006*	-1.217; 0.828	2.931; 0.004*	-1.874; 0.062

CS: Coping scale; PSS: Perceived stress scale; SD: Standard deviation; Min: Minimum; Max: Maximum; M: mean. * p<0.05.

There is a significant relationship between COVID-19 and the field in which student nurses want to work after graduation. (X²:1.079; p:0.000). The number of students who wanted to work as a nurse in a hospital after graduation (n=164, 72.6%) seems to have decreased (n=152, 67.3%) after COVID-19 (Table 4).

In Table 5, students' thoughts on professional life in the first wave of COVID-19 are included. A remarkable majority of the students stated that they understood the value of their profession in this process (n=207), their perspective

on their profession was affected positively (n=119), and they would have felt like a hero if they had been working as a nurse (n=185). The number of students (n=166) who thought that they could cope psychologically with an epidemic such as COVID-19 when working as a nurse was also higher. The number of students who did not want to work in the pandemic service in the event of an epidemic such as COVID-19 was high (n=119), as well as the number of students (n=195) who stated that the COVID-19 epidemic process caused them to regret their career choice was.



Table 4. Distribution of Thoughts of Students on the Field Which They Want to Work on When They Graduate During the COVID-19 Process.

Areas	The area which they want to work on after the graduation when before the beginning of COVID-19		The area which they want to work on after the graduation when after the beginning of COVID-19	
	n	%	n	%
Nurse in Hospital	164	72.6	152	67.3
Other (Lecturer, Different profession related with Health, a profession not related with Health)	62	27.4	74	32.7
Sum	226	100	226	100
X ² ; p	1.079; 0.000*			

* p<0.05.

Table 5. Distribution of Thoughts of Students About the Professional Life During the COVID-19

Statement	Not Agree		Hesitant		Agree	
	Agree					
	n	%	n	%	n	%
I realized the value of my profession during the COVID-19 pandemic.	11	4.9	8	3.5	207	91.6
The process of COVID-19 has positively affected my perspective on the nursing profession.	16	7.1	46	20.4	164	72.6
I wouldn't want to work in the pandemic service in case of an epidemic like COVID-19.	48	21.2	59	26.1	119	52.7
I think I can psychologically cope with an epidemic like COVID-19 when I work as a nurse.	22	9.7	38	16.8	166	73.5
If I was working as a nurse during the COVID-19 pandemic, I would feel like a hero.	19	8.4	22	9.7	185	81.9
The COVID-19 pandemic made me regret for my choice of profession.	9	4.0	22	9.7	195	86.3

DISCUSSION

Determining the stress conditions and coping strategies of nursing students, who are health workers of the future, and professional repercussions of these is important in terms of shedding light on education policymakers, program developers, lecturers, and researchers working in the field of health in order to provide healthy academic life, workforce, and health care quality in case of a possible epidemic that students may encounter in the future. In this context, the research was conducted to examine the perceived stress and effective coping strategies of nursing students during the COVID-19 pandemic and their thoughts on future professional life.

In addition to the responsibility of being a student, nursing students are faced with many stressors such as fear and anxiety in the face of an epidemic that they have not experienced before during the pandemic period, and as a consequence,

they experience stress. In similar studies conducted with nursing students before the pandemic, it was found that students perceived stress at a moderate level (King et al., 2014; Bublitz et al., 2016). Furthermore, it is known that nursing students have higher levels of stress compared to different departments (Labrague et al., 2018). In our study, it was determined that the stress perceived by the students was slightly more than moderate. It is emphasized in the studies that there is an increase in the anxiety and stress levels of university students during the COVID-19 pandemic, and similar to our study, it is seen that the stress levels are above the average (Savitsky et al., 2020; Aslan and Pekince, 2021). In addition to this, the stress associated with the sudden transition to distance education and online learning was also seen to have contributed to mental and psychological problems in student nurses (Mashaal et al., 2020; Wallace et al., 2021).

Therefore, perceived stress of the students being higher-than-moderate can be explained by the stress burden caused by the pandemic in addition to the existing difficulties of nursing education. Negative effects of pandemic conditions in students' educational and social lives, the conditions of working nurses, and the possibility that some of the participants may graduate in a short time and work in the pandemic service are also thought to have contributed to the higher stress levels.

It was found that the students who participated in the study mostly adopted the social support seeking approach of effective coping strategies, and the submissive approach of ineffective coping strategies. In the submissive approach, “the individual accepts to experience stress-related negativities by displaying a fatalistic attitude”, while in the social support seeking approach, it was stated that “help should be sought from others in order to reveal the cause of a stressful situation and to cope with it” (Şahin and Durak, 1995). When the studies investigating the coping with stress strategies of nursing students before the pandemic period were examined, it was seen that the findings differed, and in these studies, it was seen that the students mostly adopted the self-confident approach of the effective coping methods and the helpless approach of the ineffective coping methods (Özdemir and Kaya, 2013; Şahin and Buzlu, 2017). It is thought that this situation arises from the difference of stress sources and perceived stress levels, environmental and social factors, and dissimilarities in learned coping strategies. International studies in the literature have shown that student nurses suffer from psychological problems such as emotional and social loneliness, post-traumatic stress disorder, emotional exhaustion, depression, and fatigue during the pandemic (Labrague et al., 2018; Savitsky et al., 2020). These studies support our research results and have shown that in spite of the fact that the students participating in our study accepted a fatalistic approach towards stress factors during the COVID-19 pandemic, they mostly resorted to social support to cope with these factors. Considering their stress level, it is suggested in the study that attempts should be made by the students to use coping strategies more effectively because the knowledge and use of positive coping strategies have been shown by the studies to be associated with lower stress levels in nursing students (Reyes et al., 2015; Jenkins et al., 2019). For example, in a

study conducted on this subject during the pandemic period, it was found that nursing students who defined the support of their instructors and peers as good or excellent were able to cope with stress more effectively (Fitzgerald and Konrad, 2021). In this context, assessment of the stress level of the students, frequent information-gathering activities, communication between the instructors and the students about their anxiety and support needs, and communication-building activities among the students are recommended in case of a national or international crisis.

It is known that when effective coping strategies are used in the face of stress, which is associated with poor mental health, they reduce the mental health problems during a crisis (Savitsky et al., 2020). In our study, it was found that as the perceived stress level of the students increases, their tendency to adopt self-confident and optimistic approaches decreases, and their tendency to adopt the helpless approach increases. The literature has revealed that increased stress over COVID-19 among university students causes anxiety and depression (Lovrić et al., 2020; Sun et al., 2020), and it has been supported by the studies that students are highly vulnerable to mental health problems during the pandemic, and as a consequence, the mental health problems increase (Lee, 2020; Savitsky et al., 2020; Hamaideh et al., 2022). On the other hand, in a study carried out in Iceland, it was found out that most of the students described their mental and physical health as good and did not experience a significant level of stress during the pandemic period. This dissimilarity is explained by the fact that Icelandic students were able to participate in the clinical part of their studies despite the pandemic and therefore continue to their programs mostly uninterrupted (Sveinsdóttir et al., 2021). Our study has revealed that since the students have a tendency to adopt a helpless approach as a coping strategy in the face of increasing stress, there is a situation that needs to be paid attention to and improved. In this context, considering that coping with stress is learned behaviour, it is thought that it is necessary to include a “coping strategies” course in the education curriculum, to establish mental health services units on campuses, and most importantly, to be prepared in advance for education to continue without interruption.

With the addition of vital stressors to academic stressors, nursing students are likely to

perceive the stress they experience in different intensities in comparison to their past experiences and current coping skills. Protective factors that protect the individual in the stress response to perceived stress and that are based on the individual, are the factors that are personal, familial, and environmental factors that aim to eliminate or reduce the negative impacts of risks and challenging conditions (Öz and Bahadır Yılmaz, 2009). In a nationwide qualitative study conducted during the pandemic period, nursing students stated that they were able to cope with the difficulties with family and peer support (Kaya and Akın Işık, 2021). Similarly, in our study, those who were staying with their families during the pandemic period were able to cope with stress by adopting the self-confident and optimistic approach, whereas those who were not with their families perceived stress more and adopted ineffective coping strategies. As a consequence, it is observed that family support plays an important role for students to be able to cope with stress during the epidemic period.

The literature show that students with chronic diseases take more responsibility to protect and improve their health (Pender et al., 1992). On the other hand, the presence of chronic diseases not only increases the risk of being infected with SARS-CoV-2, but also significantly affects the course of the disease in infected patients, causing an increase in the need for intensive care hospitalisations, and increasing mortality (Eastin and Eastin, 2020). For this reason, a large number of countries have introduced protective restrictions in their emergency plans for those with chronic diseases (World Health Organization, 2020). In our study, it was found out that students with chronic diseases perceived less stress and were able to cope with stress more successfully. A wide range of studies conducted during the height of the COVID-19 pandemic have shown that when an individual is equipped with adequate resilience, they are less likely to suffer from stress, anxiety, loneliness, depression, and post-traumatic stress (Savitsky et al., 2020; Labrague et al., 2021). In the light of this information, it is thought that the experience of receiving a diagnosis and treatment of the students with chronic diseases, and their coping strategies, and COVID-19 measures support our study results.

In the literature, it is stated that the increase in the importance given to the nursing profession during the pandemic period and the fact

that it has reached the wider masses through the media also increases the motivation of nursing students (Swift et al., 2020; Nie et al., 2021). In our study, it was seen that students who willingly chose a career in nursing adopted a more effective strategy of coping with stress. In 2020, which has been designated as the year of the nurse and the midwife (ICN, 2020), the contribution of nurses to health care worldwide has unfortunately never been more evident. Nurses have assumed many roles and responsibilities to combat this epidemic and provide quality care. It is thought that this situation influences nursing students positively.

In our study, it was observed that there was a decrease in the nursing students' willingness to work as a nurse in hospitals after the start of the COVID-19 epidemic. There are study findings that have revealed that students who are enrolled in health sciences programs which are more fearful of the COVID-19 virus when compared to the students in other undergraduate programs (Martínez-Lorca et al., 2020), and the nursing student's fear is correlated to their feelings of unpreparedness and doubt whether to care for patients inflicted with COVID-19 (de Los Santos et al., 2022). For this reason, this finding of our study suggests, in the light of the literature, that students are not ready to care for patients diagnosed with COVID-19.

Studies on the COVID-19 epidemic and its impacts on university students are emerging rapidly. In a study conducted with 725 university students, it was found that nearly half of the participants agreed with the statement "I am so worried about COVID-19 that I cannot pay attention to anything else" (Cohen et al., 2020). In the literature, studies have been found that determined that nursing students were afraid of COVID-19 and experienced psychological problems during the pandemic (Lovrić et al., 2020; de Los Santos et al., 2022). In the study by Sun et al. (2020), it was determined that anxiety negatively affects the professional identity of nursing student. It is obvious that COVID-19 affects students' thoughts about the nursing profession either positively or negatively. In our study, the majority of the students stated that "they have understood the value of their profession during the COVID-19 epidemic process", "the COVID-19 epidemic process has positively affected the attitude towards the nursing profession", "they think that they are able to psychologically cope with an epidemic like COVID-19 when they start working as a nurse",

and "they would have felt like a hero if they had been working as a nurse during the COVID-19 pandemic process". In spite of the positive thoughts of the students about the nursing profession, it was observed that the majority of the students have stated that they "do not want to work in the pandemic service in the event of an epidemic such as COVID-19", and that "the COVID-19 epidemic process caused them to regret their choice of profession". In similar studies, it was determined that nursing students have considered dropping out of school, do not want to work as a nurse after graduation due to COVID-19 (Nie et al., 2021; de Los Santos et al., 2022) or do not want to work in a clinical environment in case of an epidemic (de Los Santos et al., 2022). In addition to this, it was also observed that the COVID-19 stress levels of students who were acquainted with people with a positive COVID-19 test were found to be higher, and students' anxiety about the transmission of the

virus influences their perceived stress (Aslan and Pekince, 2021). It can be said that the nurses' continuous fight with the disease at the forefront despite the challenging conditions of COVID-19 has positively influenced the attitudes towards the nursing career of the nursing students who have clearly seen their effectiveness and importance in the pandemic management, but their emotions and anxieties affect their professional identities negatively when they encounter life-threatening events.

The findings which were obtained from the research cover only the sample group in which the research was conducted. Future researchers may be encouraged to collect a larger sample size to obtain more generalised findings. A qualitative assessment of students' reflections of COVID-19 on their professional thinking may be advantageous to better describe their experiences.

CONCLUSIONS AND RECOMMENDATIONS

The pandemic has brought an additional stress to the nursing students which has already have stress for being a student. The students accepted this stress due to approach based on destiny and they applied to social support to handle it. In this period, it is seen that as their stress level increased, they also become hopeless in same time. Students who were with their families, had a chronic illness and chose nursing voluntarily were able to cope with stress more effectively. The most stunning result of the research is that COVID-19 affects positively to nursing students on their perspectives for nursing profession but on the other hand it affects negatively to nursing students on

their professional identities. The recommendations for in crisis situations such as pandemic; to determine the stress situations of students frequently, to use techniques which will increase effective communication between student-student and student-instructor, to add coping techniques of stress to the curriculum, to be prepared in advance so that education can continue uninterrupted, and to be guide for students to right sources where they can obtain correct information. Thus, it can be ensured that nursing students reduce their stress, fear and anxiety and use effective coping methods. Therefore, they can have hopeful and positive thoughts about their future professional life.

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