DETERMINATION OF THE RELATIONSHIP BETWEEN STRESS LEVELS AND PROBLEM-SOLVING SKILLS OF NURSING STUDENTS ENTERING CLINICAL PRACTICE FOR THE FIRST TIME DURING THE PANDEMIC[1-2]

PANDEMİ SIRASINDA İLK KEZ KLİNİK UYGULAMAYA ÇIKAN HEMŞİRELİK ÖĞRENCİLERİNİN STRES DÜZEYLERİ VE PROBLEM ÇÖZME BECERİLERİ ARASINDAKİ İLİŞKİ

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Abstract: Aim: This study was conducted to examine the relationship between the stress levels, problem solving skills of nursing students who attended the clinic for the first time during the pandemic period. Method: the sample consisted of 168 students who went to clinical practice for the first time during the pandemic. Data were collected using the "Sociodemographic Information Form", "Clinical Stress Questionnaire (CSQ)" and "Problem Solving Inventory (PSI)".

Results: 57% of the students who participated in the study stated that they thought they might experience clinical stress due to reasons such as thinking that their professional knowledge and skills were not sufficient for practice, 61% thought of making mistakes, 79% feared harming the patient, and 58% feared Covid-19 transmission during clinical practice. The mean KSA total score was 26.15±8.46 and the mean PCE total score was 79.65±17.77. There was a statistically significant and moderate negative correlation between the mean KSA scores and the mean PCI scores (p<0.05).

Conclusion: As a result of the study, it was found that the stress levels of nursing students who went into clinical practice for the first time during the pandemic period were low and their problem-solving skills were at a moderate level, and it was observed that as the stress levels of the students decreased, their problem-solving skills increased.

Keywords: Nursing, Student, Clinical Practice, Pandemic, Stress, Problem Solving Skills

Öz: Amaç: Bu araştırma pandemi döneminde ilk kez kliniğe çıkan hemşirelik öğrencilerinin stres düzeyleri ve problem çözme becerileri arasındaki ilişkiyi incelemek amacı ile yapıldı. Yöntem: Araştırma tanımlayıcı ve ilişki arayıcı türde bir araştırmadır. Araştırmanın evrenini, bir üniversitenin hemşirelik bölümü 2020-2021 eğitim-öğretim yılında, ilk kez klinik uygulamaya çıkan, ikinci, üçüncü ve dördüncü sınıf öğrencileri oluşturmuşturken (n=196); örneklemini ise pandemi sırasında ilk kez klinik uygulamaya çıkan, 168 öğrenci oluşturmuştur. Araştırma verileri "Sosyodemografik Bilgi Formu'', ''Klinik Stres Anketi (KSA)'' ve "Problem Çözme Envanteri (PÇE)" ile toplanmıştır.

Bulgular: Çalışmaya katılan öğrencilerin %57'si mesleki bilgi ve becerilerinin uygulama için yeterli olmadığını düşünme, %61 'i hata yapma düşüncesinde olma, %79'u hastaya zarar verme korkusu yaşama, %58'i klinik uygulama sırasında Covid-19 bulaş korkusu gibi sebeplerden dolayı klinik stres yaşayabilme düşüncesinde olduklarını belirtmişlerdir. Öğrencilerin KSA toplam puan ortalaması 26,15±8,46 ve PÇE toplam puan ortalaması 79,65±17,77 olarak saptanmıştır. Öğrencilerin KSA puan ortalamaları ile PÇE puan ortalamaları arasında istatistiksel olarak anlamlı ve orta düzey negatif yönlü bir ilişki bulunmaktadır (p<0.05).

Sonuç: Araştırma sonucunda pandemi döneminde ilk kez klinik uygulamaya çıkan hemşirelik öğrencilerinin stres düzeylerinin düşük ve problem çözme becerilerinin orta düzeyde olduğu saptanmış, öğrencilerin stres düzeyleri azaldıkça problem çözme becerilerinin de arttığı görülmüştür.

Anahtar Kelimeler: Hemşirelik, Öğrenci, Klinik Uygulama, Pandemi, Stres, Problem Çözme Becerisi

INTRODUCTION

Covid-19, which was reported as a global pandemic by the World Health Organization (WHO) on 11 March 2020, has negatively affected the education system, especially the health system. (Çiçek et al., 2020; Kürtüncü and Kurt, 2020). In this process, educational institutions were temporarily closed in more than 150 countries to avoid the spread of the virus. (Toguero, 2020; Kürtüncü and Kurt, 2020; Sahu, 2020; Çevirme and Kurt 2020). As the pandemic became more widespread, students continued to study through distance education (Pokhrel, 2021; Kürtüncü and Kurt, 2020; Taş and Dalcalı, 2021). Nursing education, which consists of theoretical, laboratory and clinical practice components, was also negatively affected by the pandemic process (Savcı et al., 2019; Çevirme and Kurt 2020). In the studies, it has been stated that these negative factors are disruption of clinical practices, inability to perform basic skills in the laboratory environment, and being away from hospitals and patients (Cao et al., 2020; Kürtüncü and Kurt, 2020; Sahu, 2020). In particular, clinical practices enable students to gain competence in the use of values, attitudes, knowledge and skills related to the profession. Although touching the patient, understanding him/her, enabling him/heraltun to come from one stage to another stage, teaching nursing students roles and responsibilities and enabling them to gain professional competence (Çevirme and Kurt 2020; Altundal et al., 2022), clinical practice-based learning is among the situations that cause the most stress and anxiety in nursing students (Moridi et al., 2014). In the studies conducted, it has been stated that nursing students who will begin clinical practice for the first time experience stress due to reasons such as fear of making mistakes and harming the patient, anxiety about not being able to perform the practices expected from them, hesitation to touch the patient, and concerns about not being able to communicate effectively with patients and health professionals (Savcı et al., 2019; Açıksöz et al., 2016; Özşaban and Bayram, 2020; Cantekin et al., 2021; Tosunöz et al., 2021; Taş and Dalcalı, 2021). In addition to these sources of stress experienced by students, it is thought that the Covid 19 pandemic period process further increased clinical stress. Studies have shown that nursing students studying with distance education experience clinical stress owing to reasons such as having difficulty in attending classes during the online education process and experiencing anxiety about not being able to transfer the theoretical knowledge they have learned to clinical practice, feeling isolated from the social environment, encountering the deficiencies of preventive measures in the hospital against pandemic-induced contamination during clinical practice, and carrying Covid-19 infection from the clinic to the family and social environment (Savitsky et al., 2020; Cooke et al., 2020; Deo et al., 2020; Cao et al., 2020; Majrashi et al., 2021).

Stress is a factor that arises due to different sources and can be perceived positively or negatively, affecting the life and harmony of

the individual (Cantekin et al., 2021). In this sense, it is very important for individuals not to experience stress negatively or to know the methods of coping with stress in order to overcome stress and to develop problem solving skills. (Taşdelen and Zaybak, 2013; Cantekin et al., 2021). When the studies are examined, it is stated that nursing students generally have low and moderate problem solving skills level and problem solving skills decrease as the stress level increases (Durmaz et al., 2007; Tezel et al., 2009; Olgun et al., 2010; Üstündağ et al., 2018; Uysal and Manavoğlu, 2019; Barutçu, 2019). In addition, since it is among the basic roles and responsibilities of nurses to understand the challenging processes experienced by patients, to help them cope with their stress and to develop problem solving skills; nursing students who face this challenging process such as pandemic should firstly recognise their own stress levels and develop problem solving skills to cope with this stress (Yıldırım and Bağsürer, 2019; Olgun et al., 2010).

AIM

This study was conducted to determine the relationship between stress levels and problem solving skills of nursing students who went into clinical practice for the first time during the pandemic period when uncertainty and fear were experienced.

Research Questions:

1.What is the stress level of. nursing students who went into. clinical practice for the first time. during the pandemic?

2.What is the level of problem. solving skills of nursing students who. have clinical practice for the first. time during the pandemic?

3. Is there a relationship between the. stress levels and problem solving. skills of nursing students who first. started clinical practice during the pandemic?

MATERIAL AND METHOD

The study was conducted as a descriptive and correlational research. The population of the study consisted of students studying in the nursing department of a university located in the Central Anatolia region of Turkey (n=300). The sample of the study consisted of second-, third- and fourth-year students (n=196) who started clinical practice for the first time in the autumn and spring years of the 2020-2021 academic year. Using the random sampling method, the data collection process was completed with 168 students who volunteered to participate in the study.

Inclusion Criteria:

- Volunteering to participate in the research

- Being in clinical practice for the first time

- Reading and writing Turkish

Nursing students were informed about the study just before the clinical practice in the conference hall of the hospital where the clinical practice would take place. Student nurses who volunteered to participate in the study were informed about the data collection tools and asked to answer the questionnaire and scale questions. The

duration of answering the questions was approximately 15-20 minutes.

Data Collection Form

The data of the study were collected with "Sociodemographic Information Form", "Clinical Stress Questionnaire (CSQ)" and Problem Solving Inventory (PSI).

Sociodemographic Information Form: By utilizing the literature by the researchers (Atay and Yılmaz, 2011; Tosunöz et al., 2021, Açıksöz et al., 2016) The developed form includes a total of 13 questions to determine the sociodemographic and descriptive characteristics of the students such as age, gender, marital status, information about the characteristics related to the choice of nursing profession (willingly choosing the nursing department, reason for choosing the profession, satisfaction with studying in the nursing department, weighted grade point average).

Clinical Stress Questionnaire (CSQ): The Clinical Stress Questionnaire (CSQ) is a Likert-type self-assessment scale developed by Pagana in 1989 to determine the baseline value of stress that threatens or requires student nurses to cope with during their first clinical practice experience. The scale, which consists of a total of 20 items, includes four sub-dimensions. The threat sub-dimension of the scale consists of "6" (questions 1, 7, 9, 12, 15, 19) (upset, worried, overwhelmed, emotional, intimidated, scared), struggle sub-dimension consists of "7" (questions 2, 4, 6, 8, 10, 14, 18) (stimulated, cheered up, hopeful, pleased, enthusiastic, excited, happy), harm sub-dimension consists of "5"

(questions 3. , 5th, 11th, 13th, 17th question) (I felt angry, sad, guilty, disgusted, disgusted, disappointed), benefit sub-dimension consists of "2" items (16th question, 20th question) (I felt relieved, trusted). In the evaluation of the five-point Likert-type scale, each item is scored between "0" and "4" points. Based on the score given for each item, a minimum score of "0" and a maximum score of "80" can be obtained from the questionnaire. A low score indicates a low level of stress, while a high score indicates a high level of stress. The Turkish validity and reliability study of the CSQ was conducted by Şendir and Acaroğlu (2006). The Cronbach's alpha coefficient of the scale was found to be 0.70 (Şendir and Acaroğlu, 2006). In this study, the Cronbach's alpha coefficient of the scale was 0.79.

Problem Solving Inventory (PSI): Problem Solving Inventory (PSI), The scale was developed by Heppner and Petersen (1982) to assess how individuals perceive their own problem-solving behaviors and approaches and consists of 35 Likert-type items with six sub-dimensions. These sub-dimensions consist of "hasty approach" (9 questions), "avoidant approach" (4 questions), "thinking approach" (5 questions), "confident approach" (6 questions), "evaluative approach" (3 questions) and "planned approach" (4 questions). In the evaluation of the scale, each item is scored between "1" and "6" points. Items 9, 22 and 29 are excluded from the scoring of the scale. Some items in the scale (1, 2, 3, 4, 11, 13, 14, 14, 15, 17, 21, 25, 26, 30, 34) are reverse scored. The total score that can be obtained from the

scale varies between 32-192. Higher total scores indicate that the individual perceives himself/herself as inadequate in problem solving skills, while lower scores indicate that he/she perceives himself/herself as adequate. The validity and reliability of the Turkish version of the scale was conducted by Şahin and Heppner (1993) and the Cronbach's alpha coefficient was found to be 0.88. In this study, the Cronbach's alpha coefficient was 0.84.

Data Analysis

IBM SPSS 25 programme was used to evaluate the data. The conformity of the numerical data to normal distribution was evaluated by Shapiro-wilk test. Descriptive statistics such as number, percentage, mean, standard deviation, minimum and maximum were used in the analysis of the data. The relationship between two continuous variables was evaluated by Pearson's correlation coefficient and Spearman's correlation coefficient when parametric test prerequisites were not met. Statistical significance level was accepted as $p < 0.05$.

Ethical Consideration

Ethical permission with decision number 2021/006 was obtained from XXXX University Faculty of Medicine, Drug and Non-Medical Device Research Ethics Committee and permission was obtained from the institution where the research would be conducted. Student nurses were told that they could leave the study at any time they wanted, and the consent of the participants was obtained.

RESULTS

The mean age of the students who participated in the study was 21.04±0.06 years. 83% of the students were women, 70% were from Anatolian high school, 57% were in the second year, and 79% had chosen the department willingly. It was found that 44% of the students chose the department because they were interested in the nursing profession and 34% chose the department because it was a profession with high employment opportunities. The general weighted Grade Point Average (GPA) of 64% of the students was in the range of 3.1-4, and 34% of the students defined patients, 22.9% nurses, 21.2% physicians and 21.7% academic staff as stress factors for themselves (Table 1).

Table 1. Determination of Sociodemographic and Descriptive Characteristics of the Nursing Students Participating in the Study (n=168)

	Ort±SD (Min.-Maks)		
Age	21.04±0.06 (19-23)		
		n	**%**
Gender	Female	139	83
	Male	29	17
Marital status	Married	2	1
	Single	166	99

Graduated high school	Health vocational high school	41	24
	Anatolian high school	117	70
	High school	10	6
Classroom	2. Classroom	63	38
	3. Classroom	57	34
	4. Classroom	48	29
Place of residence	Dormitory	17	10
	Home	58	35
	With family	93	55
Reason for choosing the profession	Job opportunities are high	57	34
	University exam score	15	9
	Being interested in nursing profession	74	44
	Random choice	7	4
	The desire of the family for the Nursing profession	15	9
Coming to the department willingly	Yes	132	79
	No	36	21
GPA	1.1-2	4	2
	2.1-3	57	34
	3.1-4	107	64
*Individuals with stress factors causing stress in the clinic	Nurses	82	23
	Doctors	76	21
	Patients	122	34
	Teaching staff	78	22

Summary statistics are given as Number (Percentage) values. *More than one answer was given.

When the situations that caused stress in students were evaluated, it was determined that students experienced stress mostly because they were afraid of harming the patient (79%), afraid of making mistakes (61%), afraid of Covid-19 transmission (58%), thought that their professional knowledge and skills were not sufficient due to online education during the pandemic process (57%), and feared that they could not transfer the knowledge they learned at school to the workplace due to online education during the pandemic process (49%) (Table 2).

Table 2. Determination of Clinical Stress Causing Conditions of the Nursing Students Participating in the Study (n=168)

		n	**%**
Fear of harming the patient	Yes	133	79
	No	35	21
Thought of making a mistake	Yes	102	61
	No	66	39
Fear of Covid-19 transmission during clinical practice	Yes	97	58
	No	71	42
The idea that professional knowledge and skills are not sufficient for practice due to online education during the Covid-19 pandemic process	Yes	95	57
	No	73	43

Fear of not being able to transfer the knowledge learnt at school to the workplace due to online education during the Covid-19 pandemic process	Yes	83	49
	No	85	51
Fear of being evaluated by lecturers	Yes	63	38
	No	105	63
Fear of failing clinical practice	Yes	51	30
	No	117	70
Thinking that you will have difficulty in communicating with other health professionals	Yes	42	25
	No	126	75
Thinking that you will have difficulty in communicating with the patient	Yes	38	23
	No	130	77
Lack of self-confidence	Yes	36	21
	No	132	79
Difficulty in communicating with lecturers	Yes	24	14
	No	144	86

Summary statistics are given as Number (Percentage) values.

The mean scores of the CSQ and its subscales and the mean scores of the Problem Solving Inventory (PSI) and its subscales are given in Table 3. CSQ The mean total score was 26.15±8.46, with the highest mean score in the struggle sub-dimension (18.33±7.22) and the lowest mean score in the benefit sub-dimension (1.24±1.60). The mean PSI total score was 79.65±17.77, with the highest mean score in the impetuous approach subscale (30.65±7.87) and the lowest mean score in the evaluative approach subscale (6.17±3.01) (Table 3).

Table 3. CSQ and PSI Total Score and Subscales Mean Scores (n=168)

		Ort±SS	Min.-Maks
CSQ	**Total Score**	26.15±8.46	0-50
	Struggle	18.33±7.22	0-32
	Threat	7.82±4.33	0-24
	Harm	1.60±2.22	0-9
	Benefit	1.24±1.60	0-7
PSI	**Total Score**	79.65±17.77	39-124
	Hasty Approach	30.65±7.87	10-50
	Thinking Approach	10.93±3.73	5-26
	Avoidant Approach	8.39±3.94	4-22
	Evaluative Approach	6.17±3.01	3-18
	Confident Approach	14.39±4.86	6-31
	Planned Approach	9.12±3.35	4-23

Summary statistics are given as mean ± standard; minimum and maximum, values.

The relationship between students' clinical stress levels and problem solving skills is given in Table 4. It was seen that there was a moderate negative and statistically

significant relationship between the mean clinical stress scores of the students and their mean problem solving skills scores (r=-0.379, p=0.001). There was a low level negative correlation between the mean CSQ total score and PSI hasty approach (r=-0.232, p=0.002), thinking approach (r=-0.239, p=0.002), avoidant approach (r=-0.298, p=0.001), planned approach (r=-0.230, p=0.003) and a statistically significant relationship was found between the mean scores of the self-confident approach (r=-0.342, p=0.001) sub-dimension at a low level and between the mean scores of the self-confident approach (r=-0.342, p=0.001) sub-dimension at a moderate level (Table 4).

Table 4. Determination of the Relationship Between Students' CSQ and PSI Score Means (n=168)

		CSQ				
		Total Score	**Struggle**	**Threat**	**Harm**	**Benefit**
PSI	**Total Score**	**-0.379 (p=0,001) ****	**-0.454 (p=0,001) ****	0.019 (p=0,812)	0.096 (p=0,215)	0.036 (p=0,643)
	Hasty Approach	**-0.232 (p=0,002) ****	**-0.330 (p=0,001) ****	0.097 (p=0,213)	**0.183 (p=0,017) ***	0.092 (p=0,237)
	Thinking Approach	**-0.239 (p=0,002) ****	**-0.251 (p=0,001) ****	-0.049 (p=0,529)	0.021 (p=0,784)	0.020 (p=0,800)
	Avoidant Approach	**-0.298 (p=0,001) ****	**-0.353 (p=0,001) ****	0.007 (p=0,928)	0.079 (p=0,31)	0.048 (p=0,541)
	Evaluative Approach	-0.132 (p=0,089)	-0.127 (p=0,101)	-0.045 (p=0,56)	-0.020 (p=0,798)	-0.044 (p=0,575)
	Confident Approach	**-0.342 (p=0,001) ****	**-0.385 (p=0,001) ****	-0.026 (p=0,734)	-0.038 (p=0,622)	-0.103 (p=0,184)
	Planned Approach	**-0.230 (p=0,003) ****	**-0.267 (p=0,001) ****	-0.003 (p=0,965)	0.036 (p=0,641)	0.086 (p=0,268)

*p<0.05; **p<0.01; Correlation Coefficient

DISCUSSION

With this study, results were obtained regarding the relationship between the stress levels and problem solving skills of nursing students who went into clinical practice for the first time during the pandemic period.

In this study, when the situations leading to clinical stress were evaluated, it was determined that students experienced stress mostly due to reasons such as harming the patient (79%), making mistakes (61%), fear of Covid-19 transmission (58%), thinking that their professional knowledge and skills were not sufficient due to online education

during the pandemic process (57%) and fear of not being able to transfer the knowledge learned at school to the workplace due to online education during the pandemic process (49%) (Table 2). When the studies conducted before the Covid 19 pandemic were examined, it was determined that students mostly experienced stress due to making an incorrect application (Bahadır Yılmaz, 2016; Açıksöz et al., 2016; Tosunöz et al., 2021), lack of professional knowledge and skills (Chan et al., 2009) and harming the patient (Atay and Yılmaz, 2011; Arabacı et al., 2014; Açıksöz et al., 2016; Savcı et al., 2019). In addition to these sources of stress, when the studies conducted during the Covid-19 pandemic period are examined, it is reported that students also experience stress due to being infected with Covid 19, experiencing a lack of personal protective equipment, facing distance education difficulties during the pandemic period, and lack of preventive measures in clinical education (Savitsky et al., 2020; Cooke et al., 2020; Deo et al., 2020; Cao et al., 2020; Majrashi et al., 2021; İlter and Ovayolu, 2023). The Covid-19 pandemic is one of the biggest challenges that education systems have ever faced. In addition to the characteristics of nursing education, it is thought that major and important changes in the education process due to Covid-19, such as the transition to online education and the difficulties in maintaining online education, create stress on students. Traditionally, nursing education is about utilizing cognitive, sensory and psychomotor learning domains (Nashwan et al., 2020). In addition to theoretical courses, the nursing education curriculum mainly includes professional skills. After students develop their practical skills in the laboratory, they receive clinical practice training. Clinical practice education aims to integrate theoretical knowledge and practice. However, face-to-face training, which is thought to be more effective in increasing clinical practice skills, could not be conducted due to the pandemic. In this context, since theoretical and practical trainings were carried out online during the pandemic process, it is thought that the fear of harming the patient while doing the first clinical applications caused stress in students. In addition, during the application, students' fear of Covid19 transmission may be a source of stress due to the fact that the personal protective equipment available in hospitals to protect themselves from infection is mostly used by healthcare professionals and accordingly, students may think that these protective equipment may be missing or insufficient for themselves, and the fear of transmitting Covid-19 to both themselves and their immediate environment due to this lack of equipment.

In this study, it was found that the mean CSQ total score of student nurses was at a low level. When the studies conducted in the literature to examine the stress levels of nursing students during the first clinical experience before the pandemic were examined, it was found that the stress levels of student nurses were at a low level. (Taşdelen and Zaybak, 2013; Karagözoğlu et al., 2014; Mankan et al., 2016; Savcı et al., 2019) In contrast to the findings of this study, Zheng et al. (2022) found that the

stress levels of student nurses were moderate in their meta-analysis study on the stress levels of student nurses. During the pandemic period, in the study conducted by Deo et al (2020) to determine the factors associated with perceived stress, anxiety, depression, insomnia during the Covid-19 outbreak in nursing students, it was determined that almost all of the students experienced moderate stress. In the study conducted by Temiz (2020) to determine the anxiety levels and coping strategies of nursing students during the Covid-19 pandemic, it was reported that students had moderate anxiety, while Savitsky et al (2020) reported that nursing students had high levels of anxiety. As stated in previous studies, our findings differ from the literature. Due to reasons such as the suitability of the technical infrastructure of the private university to which the students participating in this study were affiliated, the courses could be conducted as Hybrid during the pandemic period. Hence, those students who desired were able to improve their fundamental and clinical skills through in-person laboratory practices while adhering to social distancing and mask regulations. It is thought that the fact that the majority of the students reside in the same province as the university increases the rate of face-to-face participation in the courses. It can be said that the reason why the stress levels of the students participating in this study were found to be low during clinical practice was due to the fact that the majority of the students participated in face-to-face laboratory practices during the pandemic.

In this study, the mean PSI total score of the students was found to be at a moderate level. In studies conducted to determine the problem-solving skills of nursing students before the Covid-19 pandemic, similar to the results of this study, it was reported that student nurses had moderate problem-solving skills. (Durmaz eet al., 2007; Tezel et al.,2009; Olgun et al., 2010; Üstündağ et al., 2018; Uysal and Manavoğlu, 2019; Barutçu, 2019). When the studies conducted during the Covid-19 pandemic period were examined, no study evaluating the total score and sub-dimensions of the PSI was found. However, in another study conducted by Huang et al (2020) to evaluate nursing students' emotional reactions and coping strategies during the Covid-19 pandemic, it was reported that student nurses were more willing to adopt problem-focused coping. When the PSI sub-dimensions of the student nurses were evaluated in this study, it was found that the mean total score of the "hasty approach" sub-dimension, in which the individual acts according to the first thought that comes to mind without thinking about problem solving, was the highest, and the "evaluative approach" sub-dimension, which compares the method applied to solve the problem with the method planned, had the lowest score (Table 3). The results of the study conducted by Uysal and Manavoğlu (2019) to determine the problem solving skills of nursing students support the results of this study. When any problem is encountered in hospital settings, it is very important to make a decision quickly by evaluating the available evidence, although it is positive. In addition, helping and

counseling patients to solve problems is among the roles and responsibilities of the nursing profession. Considering that problem solving skill is an ability and a learned behavior, it is thought that it would be beneficial to empower nursing students in terms of problem solving skills to fulfill their roles and responsibilities.

In this study, it was determined that there was a moderate, negative and statistically significant relationship between the mean clinical stress scores of the students and their mean problem solving skills scores (Table 4). Similar to the results of this study, it has been reported in the literature that there is a negative relationship between students' problem solving skills and stress levels. (Hamaideh et al., 2017; Al Gamal et al., 2018; Onieva Zafra et al., 2020). No study evaluating the relationship between stress and problem solving skills during the pandemic was found. Nurses need to be able to manage their own stress in order to understand the challenging processes experienced by patients and to plan their care. At the same time, it is thought that it is important to develop problem solving skills in order to implement the nursing care plan, which is closely related to the problem solving process. In this direction, it is important for student nurses, who are the nurses of the future, to first recognize their own stress levels and develop problem-solving skills to cope with this stress in this challenging process, which is thought to cause increased stress such as the pandemic.

Limitations of the Study

The fact that the data of the study were obtained from nursing students of an institution during the pandemic period shows that our findings cannot be generalized for all nursing students.

CONCLUSION

As a result of the research, it was found that the stress level of nursing students who went to clinical practice for the first time during the pandemic was low and the problem-solving skills were moderate, and it was seen that the problem-solving skills of the students increased as their stress levels decreased. It is a desirable result that the stress level of the nursing students participating in our research is low. However, it is recommended that academicians carry out improvement studies to increase the problem-solving skills of the students in their education programs in order to make it a way of life for students to cope with stress against the possibility of encountering uncertainty and challenging conditions such as the pandemic in the future. In the training programs, it is thought that it will be useful for students to include scenario-based case discussions before clinical applications and webinars or face-to-face trainings within the faculty about the pandemic period.

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