Öğrenci Hemşirelerin Klinik Stres Yaşama ve Çocuk Sevme Durumlarının Belirlenmesi

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Özet

Giriş: Klinik uygulamalarda çocuk hastalarla çalışmak, öğrencilerin önemli düzeyde stres yaşamasına neden olmaktadır. Yaşanılan stres öğrencilerin çocuk sevme davranışlarını etkileyebilmektedir.

Amaç: Bu araştırma, öğrencilerin klinik stres yaşama durumlarının çocuk sevme davranışlarına etkisini belirlemek amacıyla tanımlayıcı olarak yapılmıştır.

Yöntem: Çalışma pediatri hemşireliği dersine kayıtlı 81 öğrenciyle yürütülmüştür. Veriler, klinik uygulamanın başında ve sonunda, demografik veri formu, Barnett Çocuk Sevme Ölçeği ve Klinik Stres Anketiyle toplanmıştır.

Bulgular: Çocuk sevme ölçeğinin puan ortalaması dönem başı 87.11, dönem sonu 87.59'dir. Dönem sonunda öğrencilerin, klinik stres puanlarında önemli bir artış olduğu ve bu artışın, mücadele ve yarar alt grubundaki artıştan kaynaklandığı bulunmuştur. Dönem sonunda mücadele ve yarar puanlarındaki artışın çocuk sevme puanının arttırdığı belirlenmiştir.

Sonuç: Öğrencilerin stres düzeylerinin ve bunun çocuk sevme davranışlarına olan etkisinin incelenmesi ile öğrenimde olumlu deneyimler kazandırılabilir.

Anahtar Sözcükler: öğrenci hemşire, klinik stress, çocuk sevme

Determining Pediatric Nursing Students' Clinical Stress and Liking of Children Scores

Abstract

Background: Taking care of children during pediatric practice causes significant stress in nursing students. Stress could affect students' liking of children.

Objectives: This descriptive study was aimed at determining the effects of pediatric nursing students' clinical stress on their liking of children.

Methods: The study was conducted with 81 pediatric nursing students. The data were collected before and after clinical practice using a socio-demographic form, a Clinical Stress Questionnaire and the Barnett Liking of Children Scale.

Results: The mean scores on the Liking of Children Scale before and after the pediatric clinical practice were, respectively, 87.11 and 87.59. It was found that the Clinical Stress Questionnaire scores rose significantly and that this rise came from higher subscale average scores for the challenge and benefit questions, which measured positive feelings, after the pediatric course. Also, it was determined that the Liking of Children Scale scores significantly increased the challenge and benefit subscale scores of the students.

Conclusion: Evaluating the impacts of clinical stress levels on students' liking of children could lead to more positive experiences for nursing students.

Key words: pediatric nursing students, clinical stress, liking children

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The aim of nursing training is to teach students basic nursing skills, concepts, and professional values for various environments. The training program consists of two main elements: theory and practice. The theoretical aspect focuses on the concepts and theories for clinical application, while the clinical aspect enables the developed skills to be cemented, new skills to be obtained and improved, and critical thinking skills to be developed (Gaberson and Oermann, 1999). During clinical training, students are expected to become proficient in using the values, attitudes, information and skills of the nursing occupation (Chan, 2002).

Studies have shown that clinical training is a serious source of stress for students (Clarke and Ruffin, 1992; Thyer and Bazeley, 1993; Rhead, 1995; Admi, 1997; Timmins and Kaliszer, 2002; Şirin, Kavak, and Ertem, 2003). A lack of knowledge and skills (Chan, So, and Fong, 2009), providing patient care in an unfamiliar environment, and interaction with healthcare staff lead to stress in the student during clinical practice. Stress can cause a lack of success in students by disturbing their mental ability in reasoning and abstract thinking (Çam, Khorshid, and Özsoy, 1998). On the other hand, the higher potential of children to be harmed by an incorrect procedure, the need to take the family into account, and the changing care needs according to the developmental period can lead to increased stress during the pediatric nursing program (Oermann and Lukomski, 2001; Acaroğlu, Şendir, and Kıvanç, 2003; Elçigil and Sarı, 2011).

Students working in a pediatric clinic can have positive feelings such as hope, love, safety and happiness together with negative feelings such as anger, fear, stress and helplessness (Chen, 2010). The experience of positive feelings during clinical training increases the motivation and learning ability of the students (Elçigil and Sarı, 2011). If students working in pediatric clinics feel love towards the children, this may lead to positive emotions in the students. In contrast, a high stress level may influence the student's ability to love the children. This in turn can prevent the creation of a motivating environment for training and the achievement of the results expected from the training in pediatric clinics. We could not find any studies in the literature on the effect of clinical stress levels during clinical practice on the child-loving attitudes of students during pediatric nursing. Our aim in the study was to evaluate the clinical stress levels of students and the effect of this stress on their child-loving behavior, and thus to contribute to the literature.

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Aim

This descriptive study was aimed at determining the effects of clinical stress on the liking of children by pediatric nursing students who were taking a pediatric nursing course in a bachelor degree program.

Questions

1) Is there any difference in the liking of children scale scores of the student nurses before and after taking the pediatric nursing course?
2) Is there any difference in the clinical stress questionnaire scores of the student nurses before and after taking the pediatric nursing course?
3) Is there any relationship between the liking of children scale scores and the clinical stress questionnaire scores after students have taken the pediatric nursing course?

Methods

Participants

Eighty-seven students were approached for this study; they were on the pediatric nursing course of a bachelor nursing degree in the University of Health Sciences Faculty Nursing Department in the center of Anatolia, Ankara, Turkey. In Ankara District, there are three public, three foundation and one military university which have nursing bachelor degree programs. Because more student nurses were enrolled here, this faculty was selected from the others in the district. In this four year nursing bachelor degree program, approximately 350 students were enrolled. The pediatric nursing course was given in the third year of the program, in the spring term. The course was given in one class by two lecturers who had PhDs in the field. The term lasted 15 weeks. After the completion of a theoretical part of the course, which lasted 7 weeks, the students did nursing practice in the pediatric inpatient wards of two hospitals in the same district. The lecturers were present, separately, in two of the inpatient wards of the hospitals with the students during their practice. Clinical nurses assisted student nurses in inpatient wards where there was no lecturer. In the spring term of 2011, 87 nursing students in the bachelor degree program enrolled on the pediatric nursing course and formed the pool for the study. No sample selection was made, and all students who wished to participate in the study were included in the study sample.

During the study period, one student left the program, and five students did not want to participate in the study. For this reason, data from 81 students were collected (the participation rate was 92.0 %).

Instruments

The data were collected using three forms. The first form was aimed at determining the socio-demographic characteristics of the students (student age, gender, academic degree, marital status, working situation), and whether they had taken care of a child or had had training about children or childcare before the pediatric nursing course. This form contained seven questions. The form was created by the researchers in accordance with the literature (Oermann and Lukomski, 2001; Duyan and Gelbal, 2008; Erdem and Duyan, 2011).

The second form was the Clinical Stress Questionnaire (CSQ). The CSQ was developed by Pagana in 1989 to determine the initial stress value of nursing students in their first clinical experience, and is a self-reporting Likert-type instrument with 20 items. These items are divided into four categories: threat, challenge, harm, and benefit. When these categories are broken down, the threat subscale includes six emotional states (worried, anxious, overwhelmed, apprehensive, intimidatednd fearful), the challenge subscale includes seven emotional states (stimulated, exhilarated, hopeful, pleased, eager, excited and happy), the harm scale has five emotional states (angry, sad, guilty, disgusted and disappointed), and the benefit scale has two emotional states (relieved and confident). The responses are assessed on a five-point Likert scale with scores of 0 (not at all), 1 (a little), 2 (moderately), 3 (quite a bit), and 4 (a great deal). Every item has to be scored, so the total score can be as low as 0 or as high as 80. A low score shows a low level of stress, and a high score show a high level of stress. The internal consistency for the challenge and threat scales was found to be $\alpha = .85$ and $\alpha = .84$ respectively (Pagana, 1989). The validity and reliability of the Turkish version of the CSQ was performed by Sendir and Acaroglu in 2008 (Sendir and Acaroglu, 2008). The internal consistency of the total questionnaire in the Turkish version gave Cronbach's $\alpha = .70$.

The third form was the Barnett Liking of Children Scale (BLOCS). This scale was developed to assess an individual's attitudes towards children, using 14 items. The responses are assessed on a seven-point Likert scale that ranges from "strongly disagree" to "strongly agree." In terms of the content of the test items, four of the items that aim to determine the liking of children have negative meanings (items 1, 3, 6, and13,) and the rest of them have positive meanings. When scoring the positive items, 7 points are given to "strongly agree" and 1 point is given to "strongly disagree." While scoring the negative items, 7 points are given to "strongly disagree" and 1 point is given to "strongly agree". Every item is scored, so the total score can be as low as 14 or as high as 98. A high score shows a high level of liking of children and a low score shows a low level of liking of children. For reliability, the BLOCS has an internal consistency of .93 and a test-retest reliability coefficient of .91 (Barnett and Sinisi, 1990). A reliability and validity study of the scale for the Turkish version was performed by Duyan and Gelbal in 2008 (Duyan and Gelbal, 2008). The internal consistency of the total scale was .92 and the test-retest reliability coefficient was .85 in the Turkish version.

Forms were given to the students before and after the practice part of the pediatric nursing course. Students were asked to complete the forms at their school or home and return the completed forms to researchers in an envelope one or two days after completion. Additional days were given to students who forgot to bring the forms.

Written informed consent was obtained from the students. Students who did not want to participate in the research were excluded from the study. The study was approved by the review board of the Health Sciences Faculty of the University. Data collection was performed in the spring term of 2011.

Statistical Analysis

Frequency and percentage distributions related to the data were obtained. Dependent variables of the study were Barnett Liking of Children Scale Scores and Clinical Stress Questionnaire Scores, independent variables were socio-demographic characteristics of the students. The variables were investigated using an analytical method (the

Kolmogorov-Simirnov test) to determine whether or not they were normally distributed. The Paired Student t-test was used for quantitative variables distributed normally, and the Wilcoxon Z test was used for quantitative variables which were not distributed normally. A p value of <0.05 was considered statistically significant. While investigating the associations between non-normally distributed variables, the correlation coefficients and their significance were calculated using the Spearman test. A 5% type-I error level was used to infer statistical significance.

Results

The descriptive characteristics of the students in the study were as below: The average age of the students was 21.64 ± 1.29 years, the average academic degree was 2.86 ± 0.46/4.0 over four and the majority of the students were female (82.7 %). Most of the students (96.3 %) were unmarried, and 85.2% of them were not working. More than half of the students (61.7 %) had done some childcare, but more of them (76.5 %) had not taken childcare training before the pediatric nursing bachelor degree course.

Table 1 shows a comparison between the all students' BLOCS average scores before and after the pediatric nursing course of the bachelor degree program. The average scale scores were high in the students after the completion of the pediatric course but the difference of the scores was not found to be statistically significant (Z = -.244; p = .807).

Table 2 shows a compressed version of the CSQ average scores of all students' before and after the pediatric nursing course. It was found that the total score in the CSQ rose significantly after the pediatric course (from 32.90 ± 11.13 to 42.64 ± 9.80) ($p < .05$). When the subscale average scores were examined, it was found that the challenge and benefit scores, which were the positive feelings, were increased significantly after the course ($p < .05$). Threat and harm scores, the negative feelings, were not increased after the course (p > .05).

Table 3 shows a compressed version of the CSQ average scores and the BLOCS average scores after the pediatric nursing course. It was found that the BLOCS score significantly affected the total and subscale scores of the CSQ ($p < .05$). When the effects were examined, it could be concluded that the BLOCS score increased the challenge and benefit subscale scores of the students (p < .01).

TABLE 1. Comparison of Barnett Liking of Children Scale Average Scores Before and After Pediatric Nursing Course (n=81)

Scale Applications	Barnett Liking of Children Scale Average Scores			Wilcoxon Z Test*	p
	$\overline{X}$ ± SD	Median	Min.-Max. Scores		
First application	87,11±10,92	91,0	37-98	-.244	.807
Last application	87,59±9,25	90,0	64-98		

*Wilcoxon Z Test was used because variables were not distributed normally.

TABLE 2. Compression of Clinical Stress Questionnaire Average Scores Before and After Pediatric Nursing Course (n=81)

Total and Subgroups of Scale	First Application			Second Application				
	$\overline{X}$ ±SD	Median	Min.-Max. Scores	$\overline{X}$ ±SD	Median	Min.-Max. Scores	Test	p
Total Score	32,90±11,13	34,0	5-56	42,64±9,80	45,0	16-64	-7,480*	.001 σ
Threat	10,46±3,85	10,0	1-20	11,09±3,85	11,0	4-21	-1,331*	.187
Challenge	14,0±6,49	14,0	0-28	19,77±4,70	20,0	8-28	-7,715*	.001 σ
Harm	5,04±3,19	5,00	0-13	5,35±2,78	5,0	1-14	-1,307*	.195
Benefit	3,17±2,33	3,0	0-8	5,25±1,90	6,0	0-8	-6,579**	.001 σ

* Paired t test was used because variables were distributed normally.
**Wilcoxon Z test was used because score was not distributed normally, σ Significant at p < ,05

TABLE 3. Compression of Clinical Stress Questionnaire Scores and Barnett Liking of Children Scale Scores After Pediatric Nursing Course (n=81)

Clinical Stress Questionnaire Score	Barnett Liking of Children Scale Score			
	r*	p	Wilcoxon Z Test	p
Total Score	0,213	0,56	-7,819	.001 σ
Threat	0,028	0,802	-7,821	.001 σ
Challenge	0,355	0,001**	-7,821	.001 σ
Harm	-0,044	0,698	-7,820	.001 σ
Benefit	0,374	0,001**	-7,822	.001 σ

*Spearman correlation test was used because variables were not distributed normally.
** Correlation is significant at the ,01 level, σ Significant at p < ,05

Discussion

Students are expected to learn the necessary skills to meet the care needs of the child and his or her family by the end of the pediatric clinical practice period. Experiencing positive emotions increases a student's motivation and learning level during clinical training (Elçigil and Sarı, 2011). One of the factors that influences whether a student experiences positive emotions is liking children.

We found that the mean child-liking scores of the students were high before the pediatric clinic practice and had increased by the end of the period (Table 1). We did not come across any studies on the child-liking attitude of students. However, other studies on nurses working in pediatric clinics (Erdem and Duyan, 2011) and on primary school teachers in Turkey have found similar results (Gelbal and Duyan, 2010). Liking a child is one of the most common forms of unrequited love (Mete, 2005). Turkish society is known to like children (Onur, 2007). The high child-liking scores of the students are probably due to the structure of Turkish society. The increase in child-liking scores by the end of the period, although it is small, can be interpreted as a positive effect of clinical practice on the child-loving attitude of the students.

We saw an important increase in the clinical stress scores of the students by the end of the period (Table 2). The students suffered quite high stress before starting their pediatric clinical practice, but this stress continued afterwards as well. Other studies have found high levels of stress in students working in pediatric clinics (Oermann and Lukomski, 2001; Lassche, Al-Qaaydeh, Macintosh, and Black, 2012). Blumberg et al. (2014) found that nearly half of the students (43%) out of one hundred and eighty-four experienced high level of stress during-clinical practice. Also, high patient-ratio and high student number had an effect on the experience of stress in students (Blomberg, Bisholt, Kullén Engström, Ohlsson, Sundler Johansson, and Gustafsson, 2014).

The increase in clinical stress scores was influenced by increases in the mean challenge (stimulated, exhilarated, hopeful, pleased, eager, excited and happy) and benefit (relieved and confident) subscores by the end of the period. However, there was no important increase in the mean threat (worried, anxious, overwhelmed, apprehensive and fearful) subscores, while the mean harm (angry, sad, guilty, disgusted and disappointed) subscores were the same at the end of the period. These results indicate that the students benefited from the pediatric clinic practice and experienced positive emotions such as exhilaration, hope, pleasure, eagerness, excitement and happiness. Experiencing positive emotions increases the motivation and learning of students (Elçigil and Sarı, 2011). Studies have shown that students experience feelings of challenge during pediatric practice (Oermann and Lukomski, 2001; Oermann and Garvin, 2002). Moridi et al. (2013) found that the most stressfull area was related to the unpleasant emotions area, clinical experiences, unpleasant feelings, educational environment and interpersonal relationships, respectively. Through-out clinical training processes, students of different medical fields face a great deal of stress.

The increase in the students' clinical stress scores by the end of the period was found to increase the child-liking score. We also found that the increased challenge and benefit scores in the stress survey increased the child-liking behavior. This result indicates that the positive emotional states of the students in the challenge (stimulated, exhilarated, hopeful, pleased, eager, excited and happy) and benefit (relieved and confident) subgroups may contribute to increasing their liking for children.

Conclusion

In conclusion, the study determined that if students had positive feelings then this increased their liking of children. The educational environment in which nursing students can have positive experiences has to be provided in the pediatric clinics. On the other hand, students' liking of children should be evaluated before the practice, and the educational curriculum should be examined to increase this liking.

Suggestions and strengths of study

We suggest that similar studies are done with bigger samples and different cultures. However, this is the first study in Turkey about the impact of clinical stress levels on the liking of children of pediatric nursing students.

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