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The Effect of Vocational Skill Practice Training given in the Laboratory before the Clinical Practice of Women's Health and Diseases Nursing Course on Students' Anxiety Level

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Abstract

The present study aims to investigate the anxiety levels of students before and after vocational skill laboratory practice of Women's Health And Diseases nursing course. This cross-sectional study was carried out on 3rd grade n = 124 students who took the course of Women's Health and Diseases Nursing at the Faculty of Health Sciences, Faculty of Health Sciences between October 2018-March 2019. The data were collected with information form developed by the researchers based on the available literaure and State Anxiety Inventory. The data were assessed using the descriptive statistics and Paired T-test. The average age of nursing students is 20.8 ± 1.2 and the gender of 81.5% is female. 79.8% of the students do not feel ready for the vocational skills laboratory practice, 48.4% are excited before the vocational skills laboratory practice, and 38.7% are concerned about not being able to apply the theoretical knowledge. He stated that. The mean score of the State Anxiety Scale before the laboratory application was 42.1 ± 8.8 and the average score of the State Anxiety Scale for the students who came to the clinic after the laboratory application was 34.1 ± 12.1. A significant difference was found between the mean scores of the State Anxiety Scale before and after the vocational skills laboratory application of the course ($p < 0.001$). The state anxiety level of the students is middle before the Occupational Health and Disease Nursing course professional skills laboratory application. After the laboratory application, anxiety levels of the students who came to the clinic decreased significantly. Before the clinical practice of the Women's Health and Diseases Nursing course, having the students perform the laboratory practice will decrease the level of anxiety related to the clinic and practices and will make the clinical practice more effective.

Anahtar Kelimeler

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Makale Hakkında

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Introduction

Information technologies, which are changing rapidly today, have changed traditional education. Students provide comprehensive access to information anywhere and anytime (Chang, Lai & Hwang, 2018). Independent Global Education Commission for Healthcare Professionals; In the 21st century, it directs health education institutions to reorganize existing education and curriculum design in order to strengthen theoretical and clinical education by adopting information technology supported learning (Frenk & et al., 2010). Nursing educators also constantly challenge students in innovative teaching and learning methods from the beginning of education to graduation (Butt, Kardong-Edgren & Ellertson, 2018; Irwin & Coutts, 2015). Therefore, supporting the theoretical part of nursing education with laboratory applications is important in preparing students for the clinic (Chang, Lai & Hwang, 2018; Frenk & et al., 2010; Fealy & et al., 2019).

The purpose of nursing education is to provide students with optimal knowledge, skills and attitudes in cognitive, affective and psychomotor fields in order to provide professional clinical competence and to increase the delivery of safe, quality nursing care (Forsberg, Georg, Ziegert & Fors, 2011; Tseng, Chou, Wang, Ko , Jian & Weng, 2011). Nursing education as a practice-oriented profession not only encompasses the theoretical content discussed in classrooms, but also requires sufficient clinical practice to allow skill development and the integration of theoretical content into practice. Nursing students can learn what they have learned in classroom and laboratory practices on cases in the clinic (Salifu, Gross, Salifu & Ninnoni, 2019). The application gap of the theory arises due to the deficiencies that occur during the insufficient transfer of theoretical knowledge into practice (Salifu, Gross, Salifu & Ninnoni, 2019). The disappointments and difficulties in practice, together with the theoretical practice gap, can have a negative effect on the professional professionalization of student nurses and graduate nurses (Salifu, Gross, Salifu & Ninnoni, 2019; Jamshidi, 2012; Monaghan, 2015). The reality shock experienced after a wide theoretical practice gap increases the rates of making mistakes in practice, decision making, inability to evaluate patients in a holistic and physical manner, stress and anxiety among student nurses. The theoretical practice gap experienced in the education system is tried to be overcome by laboratory applications. Laboratory practice is an effective pedagogy for training healthcare professionals and is widely used in undergraduate nursing education (Alexander & et al., 2015). The Council of National Nursing Boards (NCSBN) supports the addition of professional skills laboratory practices and simulations for the quality of clinical practice times in nursing undergraduate programs (Alexander & et al., 2015; National Organization of Nurse Practitioner Faculties, 2013; Nye, Campbell, Hebert, Short & Thomas, 2019).

Clinical training after professional skills laboratory practice enables the student to learn by applying nursing clinical skills in real environments such as hospitals and family health centers. Experiences provided in professional skill laboratory applications increase the psychomotor development of the student and provide professional socialization as well as transferring theoretical knowledge to practice (Şendir & Acaroğlu, 2008). Students who encounter real cases during clinical practice have to deal with many situations that cause anxiety and stress at various stages. Anxiety and stress are among the factors that affect the academic success and professional adaptation of the student during nursing education (Kartal & Yazıcı, 2017; Karaca, Yıldırım, Ankaralı, Açıkgöz & Akkuş, 2015).

Students in clinical practice; the patient experiences anxiety and stress as a result of the care of the patient, insufficient guidance instructor, insufficient support, lack of self-confidence, fear of making mistakes, and relationships with clinical healthcare professionals (Salifu, Gross, Salifu & Ninnoni, 2019; Pryjmachuk & Richards, 2007; Lo, 2002; Levett- Jones, Lathlean, Higgins & McMillan, 2009). It has been determined as a result of national and international studies that nursing students experience long-term and uncontrollable stress during their education poses a negative risk on both their professional identity development and their health (Seyedfatemi, Tafreshi & Hagani, 2007; Özkan & Yılmaz, 2010; Edwards, Burnard, Bennett & Hebden, 2010).

It is thought that the high level of anxiety affects the clinical practice skills and clinical performance of the student (Bayar, Çadır & Bayar, 2009). It is important for nursing students to be able to control their anxiety levels by using clinical practice experiences in the nursing approach to women who have experienced many biological, physiological, sociological and psychological changes in their

life cycle. It is thought that the vocational skills laboratory applications of the Women's Health and Disease Nursing (WHD) course, which is a part of the education process of nursing students, may have a positive effect on students' anxiety levels before they go into clinical practice in the field of gynecology and obstetrics. In this study, it was aimed to examine the effect of vocational skill practices training given in the laboratory prior to the clinical practice of the WHD Nursing Course on students' anxiety level. For this purpose, the following questions were sought in the research:

1. What is the level of anxiety of the students before the vocational skills laboratory applications of the WHD Nursing Course?
2. What is the level of anxiety of the students after the vocational skills laboratory applications of the WHD Nursing Course?
3. Does the vocational skills laboratory practice training given before the clinical practice of the WHD Nursing Course reduce the anxiety level of the students?

Method

This study was conducted between October 2018 and March 2019 on 3rd grade students who are in a cross-sectional type and are studying in the Nursing Department of the Faculty of Health Sciences of a State University.

Research Group

The universe of the research was composed of all (n = 134) 3rd grade students studying in the Nursing Department. Without calculating the number of the study group, n = 124 students who were willing to participate in the study were included in the study, and 92.5% of the population was reached.

Data Collection Tool

"Questionnaire Form" and "State Anxiety Inventory" were used in the study.

Questionnaire Form: It was created by the researchers by scanning the literature, and consists of 6 questions containing the personal characteristics of nursing students and 5 questions about the feelings and thoughts about the professional skills laboratory practice of the WHD Nursing Course (Nye, Campbell, Hebert, Short & Thomas, 2019; Kartal & Yazıcı, 2017).

State Anxiety Inventory: It is an inventory that was developed in 1964 to determine the state anxiety levels of Spielberger et al., And consists of short expressions that allow the person to evaluate himself in terms of anxiety. In 1998, it was adapted to Turkish by Öner and Le Compte. State Anxiety Scale was developed to measure what the person feels at that moment. The scale consists of 20 items and is a four-point Likert type ((1) None, (2) A little, (3) Much and (4) Totally). There are two types of expressions in the scales, both straight and reverse. In the State Anxiety Scale, 10 questions (items 1, 2, 5, 8, 10, 11, 15, 16, 19 and 20) are reversed expressions. The constant value in the State Anxiety Scale is 50. The scores obtained from the scale theoretically vary between 20 and 80. High score indicates high anxiety level, low score indicates low anxiety level. The same is true when interpreting scores according to percentage order. That is, a low percentage rank (1, 5, 10) shows that anxiety is low (Spielberger, Gorsuch & Lushene, 1970; Öner & Le Compte, 1998).

Data Collection and Analysis

Before starting data collection, the participants were informed about the purpose of the study, and it took approximately 10 minutes for the students who agreed to participate in the study to fill out the questionnaire form. In the analysis of the data; descriptive statistics (mean (mean) ± standard deviation (SD) and categorical results were used as number (n) and percentage (%) and Paired T-test. Social Sciences (SPSS Inc .; Chicago, IL, USA) 23.0 was used Significance level was accepted as $p < 0.05$ in statistical evaluation.

Ethical Aspect of the Research

For the ethical compliance of the study, written permission from the Faculty of Health Sciences Department of Nursing of the same university and verbal consent from the students who accepted to participate in the study were obtained from the Scientific Research Ethics Committee of the university (2018/358) where the study will be conducted.

Results

The personal characteristics of nursing students are shown in Table 1. The average age of the nursing students is 20.8 ± 1.2, 81.5% of them are female, 69.4% of them are Anatolian High School graduates, 66.1% of them have income equal to their expenses, 73.4% of their mother's education level is primary education. and six, 55.6% of the fathers were found to have primary education and below.

Table 1. Personal characteristics of nursing students

Variables		Mean±SD	
Age		20.8±1.2	
		Number (n)	Percent (%)
Gender	Woman	101	81,5
	Male	23	18,5
High School Graduated	Normal highschool	15	12,1
	Anatolian High School	86	69,4
	Vocational high School	6	4,8
	Other	17	13,7
Income rate	Less than income	25	20,2
	Income is equal to expenses	82	66,1
	More than income	17	13,7
Mother Education Status	Primary and lower	91	73,4
	High school and above	33	26,6
Father's Education Status	Primary and lower	69	55,6
	High school and above	55	44,4
Total		124	100,0

The feelings and thoughts of the nursing students about the professional skills laboratory practice of the WHD Nursing Course are shown in Table 2. When we question the feelings and thoughts of the nursing students before the laboratory practice; 79.8% of the students did not feel ready for the professional skills laboratory application of the WHD Nursing Course, 91.9% thought that the theoretical knowledge of the WHD Nursing Course was insufficient for the professional skills laboratory application, 72.6% of the WHD Nursing Course professional skills laboratory It was found that there were no skills that they were worried about applying in their practice, 48.4% were excited before the WHD Nursing Lesson vocational skills laboratory practice, and 38.7% stated that the reason for the emotion felt before the WHD Nursing Course vocational skills laboratory practice was the worry of not applying the theoretical knowledge.

Table 2. The feelings and thoughts of nursing students about the professional skills laboratory practice of the WHD Nursing Course

Variables		Number (n)	Percent (%)
Do you feel ready for the WHD Nursing Course professional skills laboratory practice?	Yes	25	20,2
	No	99	79,8
Is your theoretical knowledge sufficient for professional skills laboratory application of WHD Nursing Course?	Yes	10	8,1
	No	114	91,9
Are there any skills you are concerned about applying the WHD Nursing Course in professional skills laboratory practice?	Yes	34	27,4
	No	90	72,6
What do you feel before the WHD Nursing Course professional skills laboratory practice?	Excitement	60	48,4
	Happy	11	8,9
	Stress	34	27,4
	Worry	10	8,1
	Fear	3	2,4
	Other	6	4,8
What do you think is the reason for the emotion felt before the WHD Nursing Lesson vocational skills laboratory practice? *	Fear of hurting the patient	37	29,8
	Attitude of physicians and nurses	48	38,7
	Fear of making mistakes in hospital procedures	17	13,7
	Anxiety about not applying the theoretical knowledge	51	41,1
	Fear of giving false information to the patient	32	25,8
	Lack of trust in the student nurse	28	22,6
	Worry about making mistakes	42	33,9
	Other	4	3,2
Total		124	100,0

* More than one option has been marked.

The comparison of the results of the State Anxiety Scale of nursing students before and after the WHD Nursing Lesson vocational skills laboratory practice is shown in Table 3. The average score of the State Anxiety Scale of the nursing students before the WHD Nursing Course professional skill laboratory practice was found to be 42.1 ± 8.8, and the State Anxiety Scale mean score of the students who came to the clinic after the laboratory application was 34.1 ± 12.1. A significant difference was found between the total mean scores of State Anxiety Scale before and after the professional skill laboratory application of the course ($p < 0.001$).

Table 3. Comparison of the results of the State Anxiety Scale of nursing students before and after the WHD Nursing Course vocational skills laboratory practice

Variables	Before Professional Skills Laboratory Practice After Professional Skills Laboratory Practice Mean±SD	Before Professional Skills Laboratory Practice After Professional Skills Laboratory Practice Mean±SD	p
State Anxiety Scale	42.1±8.8	34.1±12.1	<0.001 t=5.870*

*Paired T-test

Discussion, Conclusion and Suggestions

Before graduating, student nurses are required to apply basic nursing skills that differ from each other as well as to practice similar skills in different clinical areas. According to the nursing education program, the application of the basic nursing skills that students learn in the 2nd or 3rd grade causes great anxiety. Up to this stage, nursing students experience nursing skills and competencies by acting alone in the classroom environment or using teaching techniques such as professional skills laboratory practices (Sun, Long, Tseng, Huang, You & Chiang, 2016; Arabacı, Korhan, Tokem & Torun, 2015) . Professional skills laboratory practices conducted in order to enable students to experience field-specific nursing practices and care before going to the actual clinical field can be effective in reducing anxiety.

In the study, most of the nursing students did not feel ready for the professional skills laboratory application of the WHD Nursing Course, the majority of them thought that their theoretical knowledge was insufficient for laboratory practice, most of them did not have any skills that they were worried about applying in laboratory practice, almost half of them were excited before the laboratory application and the reason for the emotion felt before the laboratory application was theoretical. It was found that he expressed anxiety about not being able to apply the information (Table 2). In the study conducted by Arabacı et al. (2015), it was determined that more than half of the students felt excited before the clinical practice and their emotions were due to their learning new things. It can be said that the nursing students felt excited or anxious before the clinical application.

It was found that nursing students experienced a moderate level of anxiety before the WHD Nursing Course vocational skills laboratory practice, and significantly decreased afterwards. It has been found that professional skills laboratory training given to students before clinical practice is effective in reducing the level of anxiety (Table 3). In the study by Smith et al. (2019) examining the anxiety levels of active and passive role groups in clinical simulation, it was found that the anxiety level of the practice group using the vocational skills laboratory was mild before and after the skill, and the anxiety level experienced after the skill decreased further. In the study by Sun et al. (2016) examining the anxiety experiences experienced by undergraduate nursing students during their first clinical practice, it was stated that the level of anxiety felt by all students after completing the application of basic nursing skills decreased. In the study of Khalaila (2014) evaluating the results of the students in their first clinical practice together with the simulation application, it was found that the anxiety level of the students before and after the first clinical application was mild, and the decrease in the anxiety level experienced after the skill compared to the pre-skill was found to be significant. In the study conducted by Kiraz et al. (2019), it was determined that the anxiety level of the students who were trained on the model before, before and after the first clinical application was mild, and the anxiety level experienced after the skill was significant compared to the pre-skill level. In the study of Çelik and Eşer (2017), it was found that students experienced mild anxiety before and after clinical practice. According to the results of the studies, it is seen that the anxiety level decreases after the skill application compared to before. However, different results have been reached in the literature. In the study conducted by Mert and Terzioğlu (2015), it was found that students using the vocational skills laboratory experienced moderate anxiety, which increased after the pre-skill level before they experienced the management of postpartum hemorrhage. In the study conducted by Karagözlü et al. (2014), it was determined that students experienced mild anxiety before the first clinical application and increasingly moderate anxiety after the first clinical application. In the study conducted by Arabacı et al. (2015), it was found that the students experienced moderate anxiety increasingly after the first clinical application compared to before. It is seen that the level of anxiety decreases in some studies and increases in some studies. It is thought that the students' grade level and the application made may be effective in the change of anxiety level.

Our study results show that; It was found that the nursing students who took the WHD Nursing course experienced anxiety at a moderate level before the professional skill laboratory practice and at a significantly decreasing level afterwards; It has been found that professional skills laboratory training given to students before clinical practice is effective in reducing anxiety levels.

In line with these results; before the clinical application of the WHD Nursing course, it is recommended that the students have the professional skills laboratory practice done, and the opportunity to repeat the practice until the student feels sufficient and the level of anxiety is reduced.

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