ARAŞTIRMA RESEARCH

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The Effect of Ethics Education on the Ethical Sensitivity of Nursing Students

Etik Eğitiminin Hemşirelik Öğrencilerinin Etik Duyarlılıklarına Etkisi

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ABSTRACT Ethics education provided to nursing students is important in terms of the development of nurses' ethical awareness and sensitivity in professional life. This study was carried out to determine the effect of the case analysis method on nursing students' ethical sensitivity when used in ethics education. This study was planned using a cross-sectional, descriptive, correlational design, and was conducted between September and December 2019. The study population comprises 138 third-year nursing students. All participants were enrolled in the nursing history deontology and ethics of care course in the nursing department of the healthcare sciences faculty of a rooted university in the Black Sea region of Turkey during the fall semester of the 2019-2020 academic year. The study sample comprises 131 nursing students. The study data were collected using the personal information form, the Modified Moral Sensitivity Questionnaire for Student Nurses (MMSQSN), and the Nursing Effectiveness of Ethics Education Scale (NEEES). Data were analyzed with the SPSS 18.0 software program using frequency, mean, standard deviation, and paired samples ttest. It was found that 46.6% of participating students encountered ethical issues in clinical practices, and that of these students, 27.5% encountered ethical issues regarding drug administration, care practices, and patient information. The mean MMSQSN score of the students before the education was 4.48±0.50, but was found to be 5.05±0.68 after the education; this was found to be a statistically significant difference (p<0.001). The mean NEEES score was 56.37±11.09. It was found that students encounter various ethical issues during clinical practice, that their ethical sensitivity was of a moderate level before the ethics education, that their ethical sensitivity increased after the education, and that students evaluated the ethics education as effective.

Keywords: Nursing student; ethical sensitivity; moral sensitivity; ethics education

ÖZET Hemşirelik öğrencilerine verilen etik eğitimi, meslek yaşamında etik bilincin ve duyarlılığın gelişmesinde önemlidir. Bu araştırma, hemşirelik öğrencilerinde etik eğitiminde kullanılan vaka analizi yönteminin etik duyarlılıklarına etkisini belirlemek amacıyla yapıldı. Araştırma kesitsel, tanımlayıcı ve ilişki arayıcı tipte olup Eylül-Aralık 2019 tarihleri arasında gerçeklestirildi. Arastırmanın evrenini 138 üçüncü sınıf hemşirelik öğrencisinden oluşmaktadır. Tüm katılımcılar 2019-2020 eğitim öğretim yılı güz döneminde Türkiyenin Karadeniz bölgesinde yer alan köklü bir üniversitenin sağlık bilimleri fakültesi hemsirelik bölümünde hemşirlik tarihi deontolojisi ve bakım etiği dersine kayıt olmustur. Calısmanın örneklemi 131 hemsirelik öğrencisinden olusmaktadır. Verilerin toplanmasında kişisel bilgi formu, Hemşirelik Öğrencileri İçin Uyarlanmış Etik Duyarlılık Ölçeği (HÖUEDÖ) ve Hemşirelikte Etik Eğitiminin Etkinliğini Değerlendirme Ölçeği kullanıldı. Verilerin değerlendirilmesi, SPSS 18 programında frekans, ortalama, standart sapma, eşleştirilmiş gruplarda t-testi ile gerçekleştirildi. Öğrencilerin %46,6'sının klinik uygulamalarda etik sorunlarla karşılastığı, etik sorun ile karsılasan öğrencilerin %27,5'inin ilaç uygulamaları, bakım uygulamaları ve hasta bilgilendirme konusunda etik sorunlarla karşılaştığı saptandı. Öğrencilerin eğitim öncesi HÖUEDÖ toplam puan ortalaması 4,48±0,50 iken; eğitim sonrasında 5,05±0,68 puan olduğu saptanmış olup, bu fark istatistiksel olarak anlamlı bulunmuştur (p<0,001). Hemşirelikte Etik Eğitiminin Etkinliğini Değerlendirme Ölçeği toplam puan ortalamasının 56,37±11,09 şeklinde ortalamanın üzerinde olduğu belirlendi. Öğrencilerin, klinik uygulamalarda çeşitli etik sorunlar ile karşılaştıkları, etik eğitimi öncesi etik duyarlılık seviyeleri orta düzeyde iken, eğitim sonrası arttığı ve etik eğitimini etkin olarak değerlendirdikleri saptandı.

Anahtar Kelimeler: Hemşirelik öğrencisi; etik duyarlılık; ahlaki duyarlılık; etik eğitimi

Ethical issues are very often encountered in the healthcare services field. Consequently, providing serious ethics education to healthcare professionals as part of their educational process is an important requirement. Ethics education is an important part of nursing education, as it enables the determination of

those kinds of issues that lead to ethical difficulties in nursing practice. Moreover, providing ethics education to nursing students helps them to develop those skills they need to cope with ethical issues they may encounter in the future, provides them with self-confidence regarding the ethical decision-making pro-

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cesses, and helps them take measures against ethical issues through self-confidence and knowledge they have gained.¹⁻³

Additionally, this education will guide them when they need to reach available resources to solve prospective ethical issues. Ethics education in nursing a fundamental element quality care, and it encourages nurses to display moral behaviors.3-5 Nurses' ethical decision making is only possible through the acknowledgement of the nurses' own moral values before they graduate from their respective nursing education programs; however, the application of such ethics education to nursing practice is another important matter.^{3,5-11} The content, duration, style, and teaching methods of nurses' ethics education-as well as the ethical knowledge and attitudes of their educators-are extremely important for developing ethical awareness and sensitivity in regard to nursing practice. 4,10-12 Nurses' ethics education should be provided using contents and methods that aim to provide nurses with clinical decision-making, critical-thinking, and problem-solving skills.^{3,10,11}

In line with theoretical knowledge, written or verbal case analysis, group studies, or group discussions can be used in the classroom or the clinic to achieve these goals. 6,10,13 The case analysis method enables students to develop critical thinking, problem-solving, and decision-making skills through solving real-life problems. 13 This method was observed as being effective in achieving the goals of an ethics course, understanding ethical values, and learning the ethical decision-making process. 14 In analyzing the literature, it was found that studies investigating the effect of ethics education on students are limited. This study was carried out to determine the effect of the use of the case analysis method for ethics education on nursing students.

MATERIAL AND METHODS

DESIGN, PARTICIPANTS AND SETTING

This research uses a cross-sectional, descriptive, and correlational design. The study population comprised 138 third-year nursing students who were enrolled in a nursing history deontology and ethics of care course during the fall semester of the 2019-2020 academic

year in the Nursing Department of the Healthcare Sciences Faculty of Ondokuz Mayıs University in the Black Sea region of Turkey. No sampling method was used. The study was completed with 131 students because seven students from the study population either failed to completely fill out the necessary forms or else did not continue studying the course. Of the study population, 95% was contacted.

The ethics course is provided during the second year of study in the school where the research was conducted. The students were divided into two classes for this course which was conducted by the same instructor. The course lasts for 14 weeks and during the ninth week after the midterms patient and human rights are discussed. In the tenth week the course continued with ethics-related subjects. They included the historical development of ethics, ethics itself, ethical values and theories, vocational ethical codes, ethical problems frequently encountered by nurses (intensive care, palliative care, care ethics, etc.), malpractice, ethical dilemmas, and the ethical decision-making process.

Instruments

Data were collected using the personal information form, which was developed by the researchers in line with the literature, as well as the Modified Moral Sensitivity Questionnaire for Student Nurses (MMSQSN), and the Nursing Effectiveness of Ethics Education Scale (NEEES).

Personal Information Form: This form comprises 12 questions that assess students' sociode-mographic characteristics and their ethical-knowledge level.

Modified Moral Sensitivity Questionnaire for Student Nurses (MMSQSN): The scale was adapted by Comrie from the Moral Sensitivity Questionnaire, itself developed by Lützén, to measure the ethical sensitivity of student nurses. 15,16 The Turkish validity and reliability study of the scale was carried out by Yilmaz Sahin et al. 17 Responses to the 30 items of the scale are given according to a seven-point Likert scale, and range from one point (strongly disagree) to seven points (strongly agree). Higher scores on this scale indicate higher levels of ethical sensitivity, while lower

scores indicate lower levels of ethical sensitivity. Mean overall scale scores of 7-7-6 points are evaluated as being highly significant, scores of 5.9-5 points are evaluated as being significant, scores of 4.9-3.1 points are evaluated as being neutral (at moderate level), and scores below 3.1 points are evaluated as not being statistically significant. The scale comprises six subscales: interpersonal orientation (finding ways to build relationships with patients based on trust and help patients fulfill their determined needs), modified autonomy (concerning situations in which patients or others need to be physically or psychologically protected, restricting the autonomy of patients while realizing the patient's right to make their own decision), beneficence (doing good things and acting in line with patient benefits), creating ethical meaning (an interpretive process that reflects measures and the decisions that restrict even the patients' own decisions), experiencing ethical dilemmas (initially realizing an ethical dilemma; subsequently defining feelings and instincts; cognitively perceiving the ethical issue concerned; and realizing what should be done about this issue), getting expert opinion (consulting an expert to solve the healthcare problems). In the study conducted by Yilmaz Sahin et al., the Cronbach's reliability coefficient was found to be 0.73; however, in this study, the Cronbach's reliability coefficient of the scale was found to be 0.75 before the education and 0.87 after the education. 17

Effectiveness of Ethics Education Scale in Nursing (EEES): This scale was developed by Vynckier et al. to thoroughly assess the effectiveness of ethics education in nursing, as well as to determine the effectiveness of ethics education in developing nurses' ethical sensitivity. The Turkish validity and reliability test of the scale was carried out by Üstün et al. This four-point Likert-type scale comprises three subscales, 'the development of personal morality' subscale, 'the development of ethical reasoning skill' subscale, and the 'development of ethical behavior' subscale. Together these subscales comprise 21 items. The lowest and highest scores possible on this scale are 21 and 84 points, respectively. A higher score indicates that

ethical awareness and sensitivity were developed with ethics education. The Cronbach's alpha reliability coefficient of this scale was found to be 0.95, and the Cronbach's alpha reliability coefficient of this scale was found to be 0.96 for this study.¹⁹

DATA COLLECTION

Students were informed about the study before they discussed ethical concepts in the 10th week of the nursing history deontology and ethics of care course in the fall semester of the 2019-2020 academic year. The study's data collection tools were then delivered to the students, who were asked to fill out the forms using a pseudonym. In the 10th and 11th weeks of the course program, the concept of ethics, ethical values, ethical theories, ethical codes in nursing, the concept of ethical dilemma, common ethical dilemmas, and ethical decision-making processes were explained to participating students. The ethical dilemma examples were explained to the students at the same time as the case-analysis method and the stages of the ethical decision-making process during the course program's 12th week. During week 13, the students were divided into groups of 10-15 students in each class (62 students in Class A, 69 students in Class B). The students were provided with three different case studies. The first case was regarding an infant with a congenital anomaly (performing resuscitation on a neonate with multiple anomalies in the delivery room), the second case was about a medication administration error (a nurse administers the wrong medication to an elderly female patient and reports the error), and the third case was regarding palliative care (a young terminal patient using mechanical ventilation in intensive care). For these three cases, five questions were designed based on a specified goal (identifying the problem, determining the necessary data for the problem, determining the appropriate solutions for the problem, displaying ethical decision-making skills, being able to attribute the decisions to ethical principles) to allow the students to evaluate the case analyses. The students were given 30 minutes to work on the cases and were then asked to prepare case analysis reports within the last 15 minutes. During the second hour, a representative of the group presented

their case analysis verbally within the context of the questions specified for the first case. Afterwards, the same process was performed for the second and third cases. After the students' case analysis presentations, the instructor of the course provided feedback by summarizing the process of identifying each ethical problem, determining the appropriate solution for the problem and decision-making process, The instructor then answered the students' questions. At the end of the 14th week, students were asked to fill out the data collection tools they had been given using the same pseudonym as before.

Data Analysis

Data were analyzed using SPSS 18.0 (Statistical Package for the Social Sciences for Windows) program. The results were assessed within a confidence interval of 95% and at a significance level of p<0.05. Paired samples t-test, frequency, and mean and standard deviation tests were used to analyze the study data.

ETHICAL CONSIDERATIONS

This study was approved by the local ethics commission (Ondokuz Mayıs University Social and Humanities Research and Publication Ethics Committeenumbered: 2020/122, date: 28.02.2020). All participants received oral and written information about the study and its research aims and their right to withdraw at any time without explanation and without any disadvantage and gave their written informed consent regarding their participation in this study. All participants voluntarily agreed to participate in the study, which was carried out in accordance with the Helsinki Declaration principles.

TABLE 1: Students' descriptive characteristics (n=131).						
Characteristics		Number (n)	Percent (%)			
Gender	Female	107	81.7			
	Male	24	18.3			
Choosing the department willing	ngly Yes	84	64.1			
	No	47	35.9			
Experiencing ethical issues in	Yes	61	46.6			
clinical practice	No	70	53.4			
Ethical issues experienced	Drug administra	tion 8	6.1			
	Care practice	s 7	5.3			
	Patient informat	ion 10	7.6			
	All	36	27.5			



SAMPLES AND CHARACTERISTICS OF **PARTICIPANTS**

It was found that 81.7% of the participating students were female, and that the mean age of these female students was 21.01±1.66 years (minimum: 19, maximum: 30). Students' mean academic point [using the 4-point Grade Point Average (GPA) Scale] was 3.66±3.68 (minimum: 2.0, maximum: 3.7). A total of 54.1% of the students reported that they had chosen to study the nursing department willingly. Furthermore, it was found that 46.6% of students encountered ethical issues in clinical practices; of these students, 27.5% encountered ethical issues regarding drug administration, care practices, and patient information (Table 1).

MAIN OUTCOMES

The mean MMSQSN score of the students was 4.48±0.50 before the education and 5.05±0.68 after

	Before education	After education		
Variables	Mean±SD (Minimum-Maximum)	Mean±SD (Minimum-Maximum)	*Test statistics	p value
MMSQSN (Total)	4.48±0.50 (3-6)	5.05±0.68 (3-7)	-8.293	0.000
Interpersonal orientation	3.36±1.00 (1-6)	5.62±0.83 (2-7)	-19.713	0.000
Experiencing ethical dilemma	3.36±1.00 (1-6)	5.05±0.68 (3-7)	-3.490	0.001
Beneficence	4.61±0.76 (3-6)	4.74±0.97 (3-7)	-1.339	0.183
Creating ethical meaning	3.82±0.67 (2-6)	5.32±0.57 (4-7)	-21.311	0.000
Modified autonomy	4.51±0.78 (2-7)	4.54±0.98 (2-7)	-0.241	0.810
Getting expert opinion	4.45±0.82 (2-7)	5.88±0.73 (4-7)	-15.290	0.000

MMSQSN: Modified Moral Sensitivity Questionnaire for Student Nurses; SD: Standard deviation; *Paired samples t-test.

TABLE 3: Students' mean Nursing Effectiveness of Ethics Education Scale Scores (NEEES) and subscale scores.

Variables	Mean±SD (Minimum-Maximum)
Total score of NEEES (Total)	56.37±11.09 (25-78)
Ethical reasoning subscale	29.54±6.08 (13-44)
Development of ethical behavior subscale	e 10.60±2.39 (4-16)
Personal morality subscale	16.24±3.32 (8-24)

NEEES: Nursing Effectiveness of Ethics Education Scale; SD: Standard deviation.

the education; this was found to be a highly statistically significant difference (p<0.001). It was found that, before the education, the mean MMSQSN subscale scores for interpersonal orientation, experiencing ethical dilemmas, creating ethical meaning, and getting expert opinion were 3.36 ± 1.00 , 3.36 ± 1.00 , 3.82 ± 0.67 , and 4.45 ± 0.82 , respectively. After the students had received the education, these scores changed to 5.05 ± 0.68 , 5.05 ± 0.68 , 5.32 ± 0.57 , 5.88±0.73, respectively; this was found to be a statistically significant difference of all four subscale score changes (p<0.05). Students' mean beneficence subscale score was 4.61±0.7 before the education and 4.74±0.97 after the education; the students' mean modified autonomy subscale score was found to be 4.51±0.78 before the education and 4.54±0.98 after the education. Neither of these differences were found to be statistically significant (p>0.05) (Table 2).

No statistically significant relationship was found between the students' gender, their choosing the department willingly, and the students' mean MMSQSN scores (p>0.05).

On analysis, the students' total mean score for the NEEES was found to be 56.37±11.09. Students' mean scores for the NEEES subscales were found to be 29.54±6.08 for ethical reasoning skills, 10.60±2.39 for the development of ethical behavior, and 16.24±3.32 for personal morality (Table 3).

The study determined that there was no statistically significant relationship between students' gender characteristics, their choosing the department willingly and their MMSQSN and NEEES mean scores (p<0.05). Additionally, it was found that there was no statistically significant relationship between students' experiences about ethical problems and their MMSQSN and NEEES mean scores (p>0.05) (Table 4).

DISCUSSION

In Turkey, ethical education generally starts in the first semester of nursing programs, and was the case in the university in which this study was carried out; such ethics education is especially true regarding vocational courses in Turkey. In one study that was conducted across ten universities providing postgraduate

TABLE 4: Comparison of students' characteristics with the Modified Moral Sensitivity Questionnaire for Student Nurses and the Nursing Effectiveness of Ethics Education Scale.

	MMS	MMSQSN (Total)		NEEES (Total)		
			* Test statistics		*Test statistics	
Characteristics	n (%)	Mean±SD	p value	Mean±SD	p value	
Gender						
Female	107 (81.7)	5.08±0.68	0.086	56.42±10.98	0.589	
			0.769		0.444	
Male	24 (18.3)	4.93±0.70		56.17±11.82		
Choosing the department willingly						
Yes	84 (64.1)	5.06±0.73	1.341	56.98±11.03	0.013	
			0.249		0.909	
No	47 (35.9)	5.05±0.59		55.30±11.22		
Experiencing ethical issues in clinical practice						
Yes	61 (46.6)	5.00±0.68	0.005	58.21±0.54	3.668	
			0.941		0.058	

SD: Standard deviation; MMSQSN: Modified Moral Sensitivity Questionnaire for Student Nurses; NEEES: Nursing Effectiveness of Ethics Education Scale; *Paired samples t-test.

nursing education, the authors found that nearly all the study participants had received ethics education through an ethics course. ¹⁰ In a further study, conducted in 39 nursing schools that represent 51% of all nursing schools in Turkey, it was found that the ethical education provided focused on deontological theory, the ethical principles, ethical issues in healthcare, patient rights, and ethical codes for. ⁶

Approximately half of the students in this study reported that they encounter different ethical issues in clinical practices. Studies have shown that nursing students experience cases of ethical conflicts in clinical practice. Students, clinical educators, nurses, and doctors can experience various ethical issues that concern patients, the relatives of patients, or themselves.^{3,9,12,20} Moreover, the literature reports that there was an incompliance between the ethics education of students and the ethical approach they experience in a clinical setting, and that they experience conflicts regarding the right approach to use regarding ethical issues. 11,21 The reasons why students and healthcare professional experience various ethical issues include the facts that humans are the focus of healthcare, people's awareness and expectations related to healthcare fields and services have increased, improvements have been made in science and healthcare technology, and ethical decision-making processes are handled in different ways by healthcare services across Turkey.

Students reported that the most common ethical issues they experience in the clinic are patient information, drug administration, and healthcare practices. Studies conducted in Turkey state that nursing students experience certain ethical issues, for example, they experience patients being treated badly, both physically and psychologically, by doctors and nurses, as well as experiencing patients not being respected, not being provided with the necessary information, being discriminated according to their socioeconomic status, and patient confidentiality being ignored.^{9,12} Similarly, international literature states that students experience ethical issues in clinical practices concerning matters such as patient confidentiality, respect, and fair behavior. 22,23 In terms of their own future professionalism, it is important for nursing candidates to provide care in line with ethical

principles, such as helpfulness, not causing any harm, autonomy, fairness, and honesty. Universal ethical codes that are used to resolve ethical dilemmas remain the focus of healthcare professionals' service. Accordingly, healthcare professionals can experience ethical issues concerning those fundamental values and attitudes about individuals are sensitive.

This study found that the ethical sensitivity levels of students were neutral (moderate level) before they receive the education. Studies conducted with nursing students show students' ethical sensitivity levels to be of moderate levels or low levels. 24,25 Those studies that have been conducted using nurses report ethical sensitivity levels of nurses to be high. 26,27 Potentially this is because after graduation nurses make their decisions in line with their autonomous opinions as their professional experience increases, and as they experience more ethical issues that increase their ethical sensitivity levels.

This study also found that students' mean ethical sensitivity scores increased after the education (Table 2); this made a positive contribution to the students (Table 3). Studies have shown that students who received ethics education have higher ethical decision-making and ethical sensitivity levels. 1,26,28,29 Studies have further shown that ethics education provided with active learning methods (group discussion, reflection, problem-based learning, simulation, case analysis, etc.) increases students' ethical-issue evaluation skills, the existence of ethical dilemmas, the ethical sensitivity, and their ethical decision-making skills. 7,8,11,13,30-32

Several studies state that nurses are unable to apply ethics education, and are unable to adhere to ethical attitudes that are right for them in their professional lives due to various factors they experience in a clinical setting. A.5.8 To this end, nurses suggest that ethical issues should be spread throughout a four-year nursing curriculum in order to be permanent, that ethics education should be clinic-oriented, and that such education should be provided by using active learning methods, which should be supported with in-service trainings after graduation. A.6.8.9.11.33 The results of the current study show that discussing the education provided using the case-analysis method and those ethical

dilemmas experienced by the students were effective in increasing students' ethical sensitivity.

The study found that students' gender characteristics and their choosing the department willingly did not affect their ethical sensitivity and the effectiveness of ethics education. Previous studies also found similar results. ^{25,32,34,35} It was found that the students' experiences with ethical problems did not affect their ethical sensitivity and the effectiveness of ethics education. Paslı Gürdoğan et al. have found that students' experiences with ethical dilemmas in the clinical area did not affect their ethical sensitivity levels; however, Karaca has found that students who experienced ethical dilemmas had higher ethical sensitivity levels. ^{34,35} These different results may be associated with the socio-cultural environment of students.

LIMITATIONS

This study has several limitations: the study sample only included nursing students from a single university; different nursing education curriculums are used throughout Turkey; the finding that students' sensitivity increased was made according to self-reported information from students; and students could not be observed when they applied their ethical sensitivity attitudes to clinical practice.

CONCLUSION

It was found that students experience ethical issues in clinical practice, that their ethical sensitivity was at a moderate level before the ethics education, that this level increased after the education, and that the education was evaluated as being effective by the student participants.

Ethics education plays an important role in nursing education by helping nursing students, who are future healthcare professionals, to gain good ethical attitudes and behaviors, display a humanistic approach, and provide individual care to patients. The ethics education of nurses should prepare nursing students to handle ethical dilemmas experienced in clin-

ical nursing environment by increasing their ethical sensitivity. Moreover, this ethical education is important for students as it helps them to identify ethical issues and think critically when they encounter ethical dilemmas in their professional lives. Using the case analysis method, which provides students with clinical decision-making, critical thinking, and problem-solving skills, as part of the ethics education is important for organization providing nursing education. Preparing sample cases by involving ethical dilemmas in compliance with commonly experienced ethical issues in clinical environments and analyzing these cases by integrating them to clinical environment will be helpful for improving students. Educators have important responsibilities in helping students to better understand their own values and teaching them to respect human dignity.

IMPLICATIONS FOR NURSING EDUCATION

In conclusion, it can be recommended that ethics education in the professional education of students, should be conducted both theoretically and practically, that students should be provided with opportunities in which they can discuss their feelings about their experiences where they encounter ethical issues, and that all courses of nursing education should include the subject of ethics.

Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

All authors contributed equally while this study preparing.

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