

The Effect of Ethics Course in Nursing on Students' Inclination to Ethical Values and Ethical Decision Making: A Quasi-Experimental Study

Hemşirelikte Etik Dersinin Öğrencilerin Etik Değerlere Yatkınılığına ve Etik Karar Verme Durumlarına Etkisi: Yarı Deneysel Bir Çalışma

 Zeynep ÖLÇER^a

^aDepartment of Nursing, Ankara Medipol University Faculty of Health Science, Ankara, Türkiye

ABSTRACT Educational programmes should be designed to improve nurses' awareness due to ethical problems associated with their professional practice. This study aimed to determine the effect of ethics in nursing course on students' inclination to ethical values and their ethical decision-making. The study was conducted based on quasi-experimental design with one-group pre-test and post-test. The study was conducted with 42 nursing students between September 2022-January 2023. The data were collected using a questionnaire prepared by the researcher based on the literature, the "Nursing Dilemma Test" and the "Inclination to Ethical Values Scale". Descriptive data were expressed as a number, percentage, mean, standard deviation, minimum, and maximum values, and the Shapiro-Wilk test was used to test the compatibility of the data to the normal distribution. The Wilcoxon signed rank test, Mann-Whitney U test, dependent samples t-test were used to analysing the difference between dependent and independent variables. A statistically significant positive difference was found on the practical consideration (PC) at the end of the training. The mean scores of female students in the principled thinking and the mean scores of students who loved their department on the cooperation were higher. Ethics course in nursing has a positive effect on students' PC. Loving the profession has positive effects on professional values. Since it is considered that it would positively contribute to the students' ability to distinguish ethical problems, it is recommended to train students on ethical issues before the courses of clinical practice begin.

Keywords: Ethic education; course; values; decision-making; nursing

ÖZET Hemşirelerin mesleki uygulamalarında ortaya çıkan etik sorunlar nedeniyle farkındalıklarını geliştirmek için eğitim programları tasarlanmalıdır. Bu araştırmanın amacı, hemşirelikte etik dersinin öğrencilerin etik değerlere yatkınılığına ve etik karar verme durumlarına etkisini belirlemektir. Araştırma tek grupta ön-test ve son-test kontrol grupsuz yarı deneysel desenli olarak yapılmıştır. Araştırma Eylül 2022-Ocak 2023 tarihleri arasında 42 hemşirelik öğrencisiyle gerçekleştirilmiştir. Verilerin toplanmasında literatür doğrultusunda araştırmacı tarafından hazırlanan soru formu, "Hemşirelik Etik İkişlem Testi" ve "Etik Değerlere Yatkınılık Ölçeği" kullanılmıştır. Araştırma verileri tanımlayıcı veriler sayı, yüzde, ortalama, standart sapma, minimum ve maksimum değerler ile gösterilmiş, verilerin normal dağılıma uygunluğu Shapiro-Wilk testi ile test edilmiştir. Bağımlı ve bağımsız değişkenlerin arasındaki fark Wilcoxon işaretli sıra testi, Mann-Whitney U testi ve bağımlı gruplarda t-testi kullanılarak analiz edilmiştir. Eğitim sonunda hemşirelikte etik ikişlem ölçeğinin pratik düşünme alt boyutunda istatistiksel olarak pozitif yönlü anlamlı bir fark olduğu belirlenmiştir. Kız öğrencilerin ilkeli düşünme puan ortalamaları ve bölümünü seven öğrencilerin iş birliği puan ortalamaları daha yüksektir. Hemşirelikte etik dersi, öğrencilerin pratik düşümlerini olumlu yönde etkilemektedir. Mesleği sevmenin mesleki değerler üzerinde olumlu etkileri vardır. Öğrencilerin, etik sorunları ayırt edilmesine olumlu katkıları olacağı düşünüldüğünden klinik uygulama dersleri başlamadan önce etik konularda eğitim verilmesi önerilmektedir.

Anahtar Kelimeler: Etik eğitimi; ders; değerler; karar verme; hemşirelik

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Correspondence: Zeynep ÖLÇER

Department of Nursing, Ankara Medipol University Faculty of Health Science, Ankara, Türkiye
E-mail: zeynep.olcer@ankaramedipol.edu.tr

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Ethics helps determine what should be done at the social, community, or individual level. The International Council of Nurses (ICN) recommends the introduction of ethics into areas such as nursing practice, education, research, etc.¹ Values in nursing refer to goals, objectives, and attitudes towards the individual's professional career and pursuit of nursing, which resolve conflicts both in the profession and in the nurse-patient relationship, enhance the quality of care, and guide decisions on ethical issues.¹⁻⁴ The professional values of nurses are based on the ethical principles.^{5,6} Nurses are expected to make ethical decisions based on ethical principles while caring.⁷ The ethical duties and values of nurses pertain to all nursing roles, such as educators, students, clinicians, researchers.¹

Ethical decision-making in nursing refers to the ability to make the best decisions on ethical issues based on moral judgment, professional values, and ethical nursing principles.^{4,8} It has been reported that clinical nurses who are able to make ethical decisions at high level can provide high-quality care, establish better nurse-patient relationships, and avoid ethical conflicts.^{4,9,10} Despite the uncertainty about ethical decision-making in nursing, professional values have been emphasized to set a scientific baseline when faced with dilemmas.¹¹ Professional values is a factor affecting ethical decision-making.^{4,12} For nursing students, ethical decision-making presents a complex issue since they still continue their education, they have difficulties communicating with patients and their knowledge, and skills have not fully developed.¹¹ Some studies have shown that nursing students with positive professional values tend to demonstrate better clinical performance, and adopt positive coping strategies to resolve ethical dilemma.^{3,4,13} It has been stated that the factors that affect ethical decision-making in nursing students should be discussed more, and nursing students' skills and should be improved.^{4,14,15}

Ethics education in nursing are necessary to prepare nursing students for the ethical challenges they are likely to face.¹⁶ Education programs can be prepared to improve their decision-making skills in conflict cases, and raise nurses' ethical sensitivity, and ethical responsiveness, awareness, and the ability to critically analyse ethical challenges can be improved

through ethics education. It is reported that it is important to provide ethics train to nursing students to prepare them before introducing them to clinical practice where ethical conflicts are frequently observed, especially for newly graduated nurses.¹⁵

Although the significance of nursing ethics education has been acknowledged, it has been reported that the courses related to ethics in the curriculum of nursing education are inadequate. There is also a lack of knowledge about effective teaching methodologies to develop ethical decision-making skills for nursing students.¹⁵ Educational programs should be devised to raise nurses' awareness due to ethical issues associated with their professional practice.⁷ The ICN, in its publication on ethical codes, recommended that curricula should be prepared to incorporate current refereed and published approaches to nursing ethics that includes topics, such as human rights, equality, justice, research methodology and ethics, workplace ethical issues, ethical implications on the use of various technologies, reporting and recording systems, organ donation, innovative equipment, robotics, and genetics technologies.¹ The studies to improve the ethical setting of nurses would directly affect the quality of patient- and family-centred care.¹⁶ This study would determine the effect of the ethics course in nursing on students' inclination to ethical values and ethical decision-making. It is considered that the results of the study would contribute to nursing curricula and making the appropriate decisions about ethical problems faced in clinical practice.

HYPOTHESIS OF THE STUDY

H₁: There is a difference between the scores of the students, who took ethics course in nursing, on ethical decision-making and inclination to ethical values before the education and their scores on inclination to ethical values after the education

MATERIAL AND METHODS

The study was conducted based on quasi-experimental design with one-group pre-test and post-test with nursing students between September 2022-January 2023. The population consisted of second-year nursing students of the university. No sampling method was used to determine the sample size, but the whole

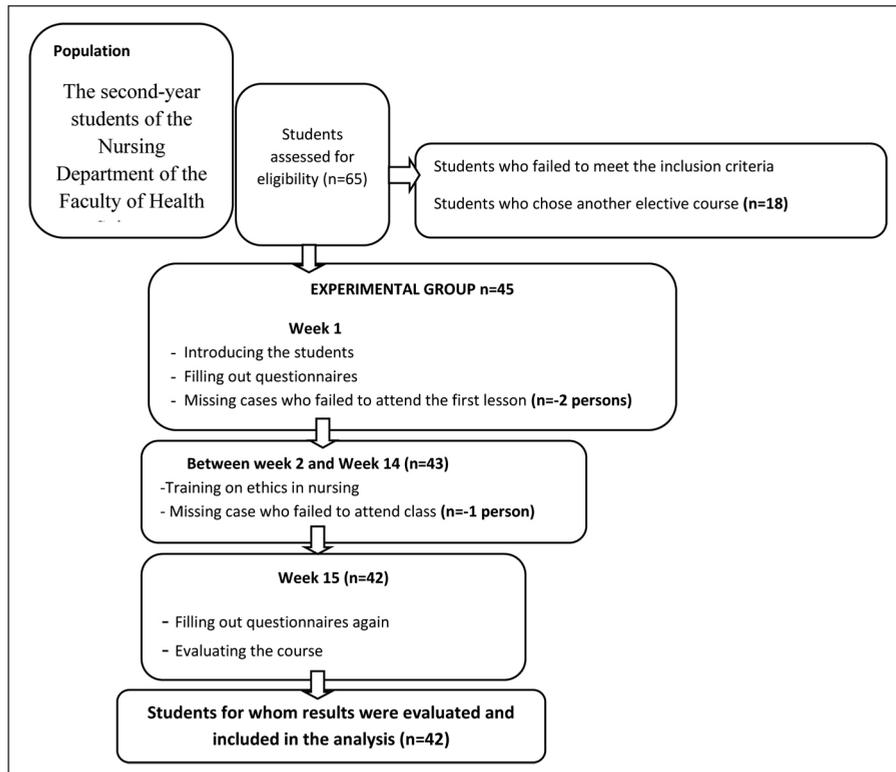


FIGURE 1: Sampling chart of the study.

population was intended to be reached. There were 63 students in the second year of nursing. Ethics and deontology in nursing is an elective course in a 2-hour weekly, and 45 students took this course. Since the pre-tests could not be applied due to the absence of 2 students on the first day of the course and one student withdrew from the course, they were dropped out of the study, and the study was completed with 42 students. The post-power analysis done in the G*Power 3.1.9.7 (Heinrich Heine University Düsseldorf, Germany) program showed a power ratio of 88% with an effect level of 0.5, a significance level (alpha) of 0.05, and a sample size of 42.¹⁷ Figure 1 shows the sampling chart of the study.

DATA COLLECTION FORMS

The data were collected using a questionnaire form, the “Nursing Dilemma Test” and the “Inclination to Ethical Values Scale”.

■ Questionnaire form: Prepared by the researcher based on the literature, this questionnaire consisted of a total of 19 questions, including 10 in-

quiries about the descriptive characteristics of the participants and information about the department, and 9 inquiries about ethics.^{18,19}

■ Nursing Dilemma Test: Crisham developed the ethical dilemma test, where each of the 6 dilemmas consists of three parts.²⁰ The first part questions how the nurse should act about the dilemmas in the scenario given to them. The second part includes 6 statements that the nurses can consider in their approaches to the scenario by thinking about it. The nurse is expected to choose the most important one among these statements and enumerate them by order of importance. According to the responses to this part of the test, it was aimed to determine the level of practical consideration (PC) and principled thinking (PT) of the nurses. The third section requires nurses to state whether or not they have ever experienced a similar dilemma in the past. Based on the responses to the question in this part, the 5-point Likert-type scale is used to assess the familiarity of the nurses with a similar dilemma, and their Familiarity (F) score is determined.^{18,20,21} Cerit adapted the Nursing

Dilemma Test into Turkish and conducted its validity and reliability. It was determined to be a valid and reliable scale.¹⁸

■ **Inclination to Ethical Values Scale:** Kaya developed a 5-point Likert-type scale consisting of sixteen items.¹⁹ The scale consists of three subscales. The first subscale is love and respect, the second subscale is justice and honesty, and the third subscale is cooperation. Total scores of the scale range between 16 and 80. The higher scores on the overall scale and its subscales indicate that individuals are more disposed to ethical values.^{19,22} The Cronbach's alpha value of the scale, whose validity and reliability was conducted by Kaya, was found to be 0.90.¹⁹

DATA COLLECTION PROCESS

When the students attended the first lesson, they were informed about the objective of the study and the questionnaire form and scales were shared with the students. After the forms were filled out, the students were informed about the topics to be taught in the course during the semester. Ethics codes published by the ICN in 2021 made recommendations on which topics related to ethics should be included into the nursing curriculum.¹ Table 1 shows the content of the training prepared based on the literature under this course.^{1,23-25}

The students were assigned to read and analyse research papers on those topics. In some courses, related videos, photographs, and case studies were shared and discussed with the students. Presentations on the course and additional materials that the students could make use of were uploaded to the computer system related to the course, thereby allowing students to access the information and files on the topics whenever they required it. The courses lasted for a total of 14 weeks, with an average of 2 class hours, and since there were exams across the university during the mid-term week, it was not possible to hold a course during the mid-term week. At the end of the semester, the forms were applied again one week after the end of the training.

DATA ANALYSIS

The data were analysed using SPSS 25.0 (IBM Corporation, Armonk, NY, USA). Descriptive data were

expressed as a number, percentage, minimum, and maximum values, mean, standard deviation, and the Shapiro-Wilk test was used to test the compatibility of the data to the normal distribution.²⁶ The Mann-Whitney U test, Wilcoxon signed rank test and, dependent samples t-test were used to analyse the difference between dependent and independent variables. To evaluate the results, a confidence interval of 95% and significance level of $p < 0.05$ were taken into account.

ETHICAL CONSIDERATIONS

Approval (date: September 20, 2022; No: E-81477236-604.01.01-3158) from the Non-Invasive Clinical Trials Ethics Committee and institutional permission were obtained to conduct the study. The informed consents of participants were obtained. Permission of the researchers, who assessed the Turkish validity and reliability study of the scale, to use it in the study was obtained. All steps of the study adhere to the principles of the Declaration of Helsinki.

RESULTS

Table 2 shows the descriptive characteristics of the students. The mean age of the students in the sample group was 20.21 ± 1.27 years, and 76.2% of them were female. However, only 9.5% of the students graduated from health vocational high school.

Also, 81% of the students in the sample group stated that they loved their department. None of the students had taken a course on ethics before, and only 23.8% of them had faced an ethical problem, and the majority of them told their friends about that problem. The top 3 topics for which information was mostly sought were determined to be legal obligations, acting in accordance with professional ethics, and the patient and nurse rights. The 3 most adopted ethical principles were fairness and equality, providing the beneficence, and nonmaleficence, respectively. A great majority of the students stated that there is a need for an ethics course in nursing (Table 3).

When the scores of the scales before and after the training were compared, a statistically significant positive difference was found in the PC subscale of the Nursing Dilemma Test ($t=3.658$, degree of freedom=41, $p < 0.001$) (Table 4).

TABLE 1: Topics taught in ethics and deontology course in nursing on a weekly basis.

Weeks	Topics Discussed/Taught in the Courses
Week 1	Introduction, disclosure of the objective and method of the study, obtaining verbal and written consent, application of questionnaires, the introduction of the course, concepts of ethics, deontology, and morality, the historical development of deontology, and ethics.
Week 2	Concepts related to ethics and morality, types of ethics, ethical theories, and social ethical rules.
Week 3	Nursing and ethics, ethical codes and ethical principles, causes of ethical conflicts in nursing, and the ethical decision-making process in nursing.
Week 4	Patient rights, the progress of patient rights at the national and international level (declarations on patient rights, treaties, etc.), patient privacy, types of patient privacy and ethics, nurse rights.
Week 5	Ethical issues in surgical nursing include preoperative ethical issues (informed consent, surgical safety, etc.), intraoperative ethical issues (confidentiality, privacy, infectious diseases, compliance with aseptic techniques, fair sharing of resources (personnel, materials, etc.), wrong side surgery, forgotten foreign bodies, burns, position-related health problems, radiation safety, surgical smoke, laser applications, etc.), and postoperative ethical issues (patient transfer, draping, pain control, information secrecy, etc.).
Week 6	Ethical issues in women's health nursing (Women's right to childbirth, abortion, effective contraceptive researches, gender identification in the womb, the necessity of infertility treatments, the moral dimension of assisted reproductive techniques, embryo transfer, gamete and embryonic cryopreservation, sperm and egg banks, surrogate motherhood, preimplantation genetic diagnosis and sex identification, reduction of multiple pregnancies, ethics in tubulisation (sterilisation), caesarean section for non-medical purposes and ethics, ethics in hymen examination, hymenoplasty, gynaecological examination and ethics, uterine transplantation, cloning, gender-based violence treatments, stem cell procedures and ethics, germ-gene therapies and the associated laws).
Week 7	Ethical issues in paediatric and neonatal nursing (beneficence / nonmaleficence for the child, autonomy, respect for autonomy, respect for the truth, respect for patient confidentiality, informed consent, justice, moral problems in paediatric nursing, professional ethical codes adapted by the American Nurses Association to paediatric nurses, ethical problems in paediatric intensive care and the way to be followed in solving ethical problems, neonatal and ethics, autonomy, justice, biomedical ethics and neonatal intensive care units, the principle of beneficence / nonmaleficence, supporting the family, neonatal and palliative care, advocacy, resuscitation, ethical decision-making process in paediatric nursing).
Week 8	Midterm week.
Week 9	Ethical issues in intensive care nursing (ethical problems that stand out in intensive care units (admission-selection of the patient to the intensive care unit, equitable sharing of resources, informing patients and their relatives, maintaining confidentiality and privacy, telling the truth, futile therapeutic practises, restriction or termination of the treatment programme, decision to resuscitate or not, euthanasia and its associated concepts, brain death and organ transplantation, clinical research practises, infections, etc.), Ethical issues in oncology nursing (telling the truth, relieving pain and suffering, termination of treatment, ethical duties of oncology nurses, etc.).
Week 10	Ethical issues in psychiatric nursing (World Federation of Mental Health recommendations for ethical principles, ethics in psychiatric practice, ethics in diagnosis and treatment, ethics in research, ethics and psychotherapy, ethical dilemma issues in mental health, ethics in restrictions (types of restrictions, their reasons, issues to be considered during restrictions, isolation, harms of restrictions, alternative methods to restrictions, the ethical dimension of restrictions, etc.).
Week 11	Ethical issues in public health nursing (ethical problems in the care of disabled individuals, ethical problems in the care of elderly individuals, home care and ethical issues, infectious diseases and ethics, quarantine, isolation, mandatory vaccination, screening tests, ethical problems in health care for immigrant individuals, etc.).
Week 12	Clinical research and ethics in nursing (ethical principles that nurse researchers must comply with, permissions to be obtained during research projects, ethical rules when animals and humans are used as test subjects in health researches, unethical behaviours committed by researchers in scientific research and publications, ethical rules in scientific publications, violations of publication ethics, sanctions and legal consequences, etc.).
Week 13	Medical malpractice and ethics in nursing (medical malpractice and basic concepts, causes of medical malpractice and legal dimension, types of medical malpractice, approaches to prevent medical malpractice, Swedish cheese model, medical malpractice reports, medical malpractice and ethics in nursing, etc.).
Week 14	Professional ethics (principles of professional ethics, unethical behaviours, etc.) Health technologies and ethics (health informatics and ethical dimension, electronic patient registry system, telemedicine, medical imaging methods, humanoid robots, three-dimensional bio-printers and ethical dimension, etc.).
Week 15	Violence and ethics in health (types of violence in the workplace, causes of violence in healthcare institutions, mobbing and its effects, violence and abuse against patients, violence and abuse against patients who need protection (children, elderly, disabled), domestic violence and its ethical dimension, ethical principles related to violence, etc.).
Week 16	Evaluation of the course and application of the questionnaire forms again.

TABLE 2: Descriptive characteristics (n=42).

		$\bar{X}\pm SD$	Median	Minimum-maximum
Age		20.21±1.27	20	18-25
Gender	Female	n	%	
	Male	32	76.2	
Graduated high school	Health vocational high school	10	23.8	
	Other	4	9.5	
Income status	Income less than their expenditures	38	90.5	
	Income equal to their expenditures	3	7.1	
	Income more than their expenditures	29	69.0	
Place of residence	With family	10	23.8	
	At dormitory	26	61.9	
	At home with friends or alone	13	31.0	
		3	7.1	

SD: Standard deviation.

TABLE 3: Nursing department and characteristics related to ethics (n=42).

		n	%
Status of loving the department	Yes	34	81.0
	No	8	19.0
Choice of the department*	Availability of many job opportunities	26	61.9
	Loving the profession	15	35.7
	Qualifying score	2	4.8
	Preference of the family	1	2.4
Facing an ethical problem previously	Undecided	19	45.2
	Yes	10	23.8
	No	13	31.0
How he acted about the ethical problem**	I talked with a friend I trusted about it	4	9.5
	I reported it to the nurse in charge or the person in charge	3	7.1
	I shared it with no one	2	4.8
	I asked the doctor or people in charge	1	2.4
Requirement for counselling on ethics	Yes	25	59.5
	No	17	40.5
Ethical issues on which you need information*	Legal obligations	21	50.0
	Appropriate behaviour to professional ethics	19	45.2
	Patient-nurse rights	18	42.9
	Ethical decision making	9	21.4
	Reporting of unethical practices	6	14.3
	Functions of ethics committees	4	9.5
	I do not need information	1	2.4
The most adopted ethical principle	Fairness and equality	13	31.0
	Beneficence	9	21.4
	Nonmaleficence	8	19.0
	Honesty	5	11.9
	Respect for autonomy	1	2.4
	Respect for life	3	7.1
	Respect for privacy and confidentiality	3	7.1
Requirement for ethics course in nursing	Yes	40	95.2
	No	2	4.8

*More than one response is marked; **The distribution of the students who only responded yes is presented.

TABLE 4: Comparison of the scales and its subscales before and after the training (n=42).

Scales and its subscales	Before the training			After the training			Test	p value
	X±SD	Median	Minimum-maximum	X±SD	Median	Minimum-maximum		
Inclination to Ethical Values Scale								
Love, respect	34.95±2.95	35.00	29-40	35.93±3.62	36.00	28-40	1.621 ^a	0.105
Justice, honesty	21.73±3.38	22.00	13-25	22.21±3.05	23.00	14-25	0.386 ^a	0.700
Cooperation	11.62±2.11	12.00	8-15	11.86±2.96	13.00	4-15	0.625 ^a	0.532
Total score	68.31±5.97	68.00	55-80	70.00±8.22	69.50	52-80	1.051 ^a	0.293
Nursing Dilemma Test								
Principled thinking	52.86±5.24	52.50	41-65	51.30±5.79	51.00	37-62	1.888 ^b	0.066
Practical consideration	13.86±3.19	14.00	8-19	16.08±2.79	16.00	10-22	3.658^b	0.001*
Familiarity	18.45±1.96	18.00	14-25	17.51±2.08	18.00	6-20	1.878 ^a	0.060

^aWilcoxon signed rank test; ^bDependent samples t-test; *p<0.05; SD: Standard deviation.

When demographic characteristics and knowledge about ethics courses were considered, no statistically significant difference was found in the Inclination to Ethical Values Scale before and after the training in terms of gender, whereas a significant difference was found in the PT subscale of the Nursing Dilemma Test after the training (U=74.00, p=0.011). Accordingly, the scores of the PT subscale were significantly higher in female students after the training. When the scores of the Inclination to Ethical Values Scale were compared with the student's status of loving the department, a statistically significant difference was found in the cooperation subscale after the training (U=70.50, p=0.033), while no statistically significant difference was found between the other subscales and total scores and the subscales of the Nursing Dilemma Test. Accordingly, students who loved their department had higher mean scores in the subscale of cooperation. Students who had previously faced an ethical problem had statistically significant differences in the familiarity subscale before the training (H=6.917, p=0.031) and the familiarity subscale after the training (H=6.232, p=0.044) in the Nursing Dilemma Test. Accordingly, while the familiarity scores of the students who responded that they did not face an ethical problem were higher before the training, the familiarity scores of the students who responded that they were undecided were higher after the training.

DISCUSSION

Ethical problems pertain to values such as right and wrong and good and bad. In the study by Lee et al., most of the students stated that they faced various ethical dilemmas and had moral problems during their clinical practice, leading them to be confused about values. The students also reported that ethical awareness should be raised to become a professional nurse and mentioned the significance of gaining ethical knowledge before beginning their clinical practice.¹⁵ In this study, 19% of the students reported that they faced an ethical problem in the clinic, and 40.5% reported being undecided. This suggested that students might not be able to distinguish whether the problems they faced were ethical or not, as they had not taken a course on ethics before. Similar to the literature, it is considered that providing students with training on ethical issues before they begin to take courses on clinical practice would contribute to distinguish ethical problems.

The ethical values and responsibilities of nursing apply to all nursing roles, such as educators, students, clinicians, researchers, etc., and nurses are expected to make decisions and behave ethically.^{1,7} The study by Feeg et al. reported that students observed that nurses behaved unethically in some cases in the clinic.¹⁶ Ion et al., found that students reported unethical behaviours in clinical settings, but students who did not report unethical behaviours despite having observed them avoided reporting this issue due to their fear of personal and professional con-

sequences.²⁷ In this study, when students who faced an ethical problem were asked how they acted upon this issue, 81% of them stated that they shared it with no one. The fact that very few of the students report the situation to the health personnel in the clinic may be due to the fact that the students do not know what to do when they encounter these problems. In the literature it is reported that guidelines should be prepared to manage ethical violations when faced.^{16,27} From this perspective, it is considered that it would be beneficial to train students on where to consult when faced with ethical problems and dilemmas and to draw up guidelines or directives in the training given to students related to the ethics course.

To prepare nursing students for the ethical challenges they will face, to improve ethics training in nursing are necessary.¹⁶ In the literature it is reported that ethics training elevates students' level of knowledge about ethics, and taking an ethics course would bring advantages such as improving students' problem-solving skills, knowing ethical principles, and contributing positively to decision-making.^{28,29} The study by Feeg et al. reported that 79% of the students stated that nursing and medical ethics should be integrated into the curriculum as part of courses in clinical practice.¹⁶ In the study by Lee et al., students reported that nursing ethics training was neglected compared to other topics in the curriculum, ethics courses in nursing were given for credit, students had no idea how to adapt the ethical principles and theories learned in the classroom to clinical practice.¹⁵ Similarly, when compared with the literature, the nursing students took the ethics course in nursing as an elective course, and this course was not taught compulsorily in the nursing curriculum. The fact that the majority of the students in this study reported the need for an ethics course in nursing and 59.5% of them stated that they needed counselling on ethics showed the need for an ethics course in the curriculum of nursing education. It is thought that it would be useful to consider ethics as a compulsory course in the curriculum.

Studies on the ethical decision-making have indicated that nurses have not reached the desired level.¹⁴ When nurses are faced with an ethical dilemma, there are two ways to make decisions. One

of them is PC and the other is PT. PC shows the importance nurses attach to environmental factors in their decisions regarding ethical dilemmas.^{7,11} In the study by Cerit it was found that the PC mean score of nurses was 17.54 ± 4.13 , while Bektas et al. found that PC mean score of nurses was 17.44 ± 4.09 in their study, and Sari et al. determined that PC mean score of nurses was 17.87 ± 4.13 in their study, a value close to the median.^{11,14,18} This study revealed that the PC mean score before the training was 13.86 ± 3.19 , a value slightly lower than the average. When the pre- and post-training scale scores of the students were compared, a statistically significant difference was found in their scores in the PC subscale of the Nursing Dilemma Test. Accordingly, the PC scores of the students improved at the end of the training and were close to the average with a score of 16.08 ± 2.79 . It can be asserted that the ethics course in nursing positively affected the PC of the students.

Another way for nurses to make ethical decisions is PT. PT is how much significance is given to ethical principles when making an ethical decision in nursing.^{7,11} In the study by Cerit it was found that the PT mean scores of nurses were 52.72 ± 6.57 , Bektas et al., found it to be above the average with 50.23 ± 7.08 , and Sari et al., determined in this study that it was slightly above the average with 48.38 ± 7.97 .^{11,14,18} In this study, it was observed that they got a score above the average in the PT subscale with 52.86 ± 5.24 before the training and 51.30 ± 5.79 after the training. Compared with the literature, it was seen that the PT subscale scores were similar.

Familiarity refers to whether or not nurses have experienced a similar ethical dilemma in the past.^{11,14} The studies by Cerit, Sari et al., and Bektas et al., reported that nurses were familiar with similar dilemmas and the familiarity scores of the participants were 14.72 ± 3.70 , 17.77 ± 1.55 and 17.75 ± 2.77 , respectively.^{11,14,18} In this study, the familiarity scores of the students were 18.45 ± 1.96 before the training and 17.51 ± 2.08 after the training. Additionally, it was found that while the familiarity scores of the students who responded that they did not face an ethical problem were higher before the training, the familiarity scores of the students who responded that they were undecided were higher after the training. A high fa-

miliarity score indicates that the individuals are not familiar with that situation.^{18,20,21} When compared with previous studies, the unfamiliarity of the students with the ethical dilemmas on the scale suggests that the students might not have faced an ethical problem since they have not yet been involved in the clinical practice of all courses as second-year nursing students, and even if they have faced an ethical problem, they might not know whether there is an ethical problem or not, since they have not taken a course on ethics before. Therefore, their familiarity scores may appear to be high. Courses related to ethics should be included into the nursing curriculum, and this process should involve skills of the ethical thinking and decision-making. This would help nurses identify an ethical problem when they face it, make decisions in cases where ethical principles conflict, and find solutions.¹⁴

Knowing the factors and ethical values affecting the ethical decision-making in nursing students can help them improve their ability to cope with ethical problems and make ethical decisions.²⁻⁴ Bijani et al., found in their study that the inclination of female students towards ethical codes was significantly higher.³⁰ Sari et al., determined in their study that the PT scores of female students and the PC scores of male students were higher.¹⁴ In their study, Uzum and Sivrikaya also found that women got higher scores than men in the Inclination to Ethical Values Scale.²⁸ When demographic characteristics and knowledge about ethics courses were considered in this study, the scores of the PT subscale were found to be significantly higher in female students. This suggests that gender may be effective in making ethical decisions and attributing significance to ethical principles.

Nursing professional values resolve dilemmas, can guide decisions about ethical issues and enhance the quality of care.²⁻⁴ In their studies, Kirca et al., found that the total scores and all subscale scores of the Inclination to Ethical Values Scale according to the student's status of loving the nursing department were higher than those of who did not love the department.²² This study revealed a statistically significant difference in the cooperation subscale after the training when the student's status of loving the nursing department and their scores of the Inclination to

Ethical Values Scale were compared. It is expected that individuals who chose their profession willingly also do their jobs willingly. The difference found in the cooperation subscale after the training was interpreted as the fact that loving the profession may affect the enjoyment of working in cooperation while working in the field.

LIMITATIONS

This study is limited to students who attended a foundation university. The students took the ethics and deontology course in the second year and did not do some clinical practices yet, which may have been effective in the responses to the questions in the scales.

CONCLUSION

It can be asserted that the ethics course in nursing positively affected the PC of the students. Professional values may be effective in making decisions on ethical problems faced by nurses in the clinic. It was observed that loving the profession may have positive effects on professional values, an important ethical issue. Therefore, making programmes introducing the department and the profession to the students who will attend the university may contribute to the development of professional values since it would make it possible for individuals to love and willingly choose their department. Since it is considered that it would positively contribute to the student's ability to distinguish ethical problems, it is recommended to train students on ethical issues before the courses of clinical practice begin. The training on ethics should also include information about where to consult when faced with ethical problems and dilemmas. It is recommended to conduct further studies with all clinical practice students to identify factors such as gender that may be effective in making ethical decisions and attributing significance to ethical principles.

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Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or mem-

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Authorship Contributions

This study is entirely author's own work and no other author contribution.

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