

Effects of Ethics Education on Ethical Values in Nursing Students

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Abstract: This study was performed to identify the effects of ethics education on moral sensitivity and moral motivation in nursing students. This study used a one group pretest-posttest design. Freshman nursing students who took a nursing ethics course in two nursing schools were encouraged to participate. A 2-h lesson of ethics education was provided weekly for 12 weeks to the students. The lesson was composed of lecturing, watching a video clip, discussing as a team and performing case studies. Data were collected before the first lesson and 6 months after the last lesson from 200 students and 163 questionnaires were analyzed using SPSS WIN 18.0. Paired t-test was used to identify the effects of the ethics education. Moral sensitivity was increased significantly after the ethics education from 4.95 ± 0.45 (Mean \pm SD) to 5.13 ± 0.48 (Mean \pm SD) ($t = 3.356$, $p < 0.001$). Moral motivation was decreased significantly after the education from 3.51 ± 0.23 (Mean \pm SD) to 2.71 ± 0.35 (Mean \pm SD) ($t = -22.447$, $p < 0.001$). The results of sub-analysis of the moral motivation showed that nurse-client relationship domain and nurse-nursing task relationship domain tend to be utilitarianism after the education. The findings of the study showed that ethics education was effective on moral sensitivity. A variety of materials should be provided for nursing students, so that, they can experience ethical situations indirectly and can increase their moral sensitivity. It is also necessary to encourage students to participate actively in class by applying various teaching and learning methods. Nursing ethics education that emphasizes the obligatory position needs to be provided to nursing students.

Key words: Ethics education, ethical values, moral motivation, moral sensitivity, nursing students, obligatory

INTRODUCTION

Recently, the rapid development of science and medical technology has prolonged human life but new ethical problems such as embryo reproduction, stem cell and gene therapy which have not occurred before are occurring in the field of health care. In addition, patient's autonomy and self-determination are emphasized, so, nurses who act as advocate of the patient face various ethical problems in the changing medical field (Shin *et al.*, 2015). Ethical issues related to new knowledge and skills are difficult to solve with traditional morality. As a result, nurses in Korea experience considerable ethical dilemmas (Lee and Yoo, 2011). Therefore, nursing students as preliminary nurses, should not only acquire scientific nursing knowledge and skills but also have the ability to establish ethical values and make the right decisions in various clinical ethical situations. Therefore, the (KABNE., 2012) has included the ability to recognize legal and ethical responsibility for the development of nursing profession as nursing competencies and nursing schools require students to take nursing ethics courses. Ethics education helps nursing students respond to changing needs and values

in a changing age (Grady *et al.*, 2008). In addition, it stimulates nursing students to develop moral sensitivity to properly recognize the ethical problems that students may experience in clinical practice and to internalize the moral motivation to follow ethical values among other conflicting values, so that, they can ultimately perform ethical nursing in the future. However, technology-oriented vocational education neglects ethical values and cramming-based teaching hinders student's moral judgment ability (Kim, 2007). In addition, nursing students with no clinical experience have difficulties in understanding ethics theory in classes and in applying ethical values to nursing practice (Kim, 2013). Thus, nursing educators have made great efforts in nursing ethics classes for nursing students to experience indirect ethical dilemmas using situational drama or role play (Kim, 2013; Um *et al.*, 2012), team discussion (Kim, 2013; Yoo and Shon, 2011), debate (Jung *et al.*, 2012), problem-based learning (Yoo and Shon, 2011) or blended learning (Kim, 2014).

Moral sensitivity is essential for ethical decision-making and moral conduct. Moral sensitivity is the ability to perceive certain situations as moral problems to select appropriate behaviors in that situation and to

understand how those behaviors affect people around them (Rest, 1986). Moral sensitivity is related to integrating nurse intuition, practical experience and knowledge of context (Lutzen and Nordin, 1993). It is necessary to have a psychological ability such as empathy as well as a cognitive ability to comprehend the situation (Thompkins, 2009). Nurses with higher education and nurses with ethics education showed a higher level of moral sensitivity and also experienced more ethical dilemmas while taking care of patients (Shin *et al.*, 2015). This shows that nurses with ethical education and with higher education are more sensitive in an ethical situation. Likewise, it is important for nursing students to establish a professional value and improve moral sensitivity to have the ability to solve various ethical problems in a clinical situation (Yoo and Shon, 2012).

Moral motivation provides a reason for preferring ethical values over conflicting socioeconomic and religious values (Rest, 1986). In other words, moral motivation is a desire to act in a manner consistent with one's own moral values (Robichaux, 2012). Moral motivation plays a role in connecting moral judgment in ethical nursing situations and actions, so that nursing students can do what they think is right (Robichaux, 2012). A lack of moral sensitivity and a lack of knowledge of professional obligation prevent moral motivation from moral conduct (Scott, 2000).

Similar to clinical skills, ethical skills can be learned experientially and progressively through appropriate role models (Benner, 2004). Ethics education in nursing school and continuous ethical education in clinical practice can improve and maintain ethical skills (Clark and Taxis, 2003). Therefore, it is important to provide ethics education to nursing students, so that ethical values can be selected first in clinical situations. The purpose of this study was to investigate the effects of nursing ethics education applying various learning methods such as situational drama, discussion class, lecture, etc., On moral sensitivity and moral motivation in nursing students.

MATERIALS AND METHODS

Samples and data collection procedures: The subject of the study was freshman nursing students who were taking a nursing ethics class. Using the G* power win 3.1.9.2 program (Faul *et al.*, 2007) when power of .95, effect size of 0.25, significance level (α) of 0.05, paired t test were set, 175 students were necessary. The data were collected from 200 freshmen nursing students in two nursing schools in Korea using questionnaires from August 24-31 in 2015. Then, 2 h ethics education was provided for 15 weeks in the fall semester of 2015. The

second round survey was conducted from June-10 in 2016, 6 months after the end of the class, so that, the ethics education would be internalized in student's values and attitudes. A total of 163 among 200 copies were analyzed, excluding unfaithful data. Post-hoc analysis using the G* power program (Faul *et al.*, 2007), showed that the effect size was 0.39 and the power of moral sensitivity was 0.99 with samples of 163. Therefore, samples of 163 were considered to be sufficient for the study.

Instruments: Moral sensitivity was measured using a Korean version (Han *et al.*, 2010) of moral sensitivity questionnaire (Lutzen *et al.*, 1997). The instrument was a 7-point scale with a total of 27 items and each question was composed of a scale from "Absolutely disagree" corresponding to 1 point to "totally agree" corresponding to 7 points. A higher score indicated a higher degree of moral sensitivity. The questionnaire contained five items in patient-centered nursing, 5 items in professional responsibility, 5 items in conflict, 6 items in moral meaning and 4 items in benevolence. The internal reliability was 0.76 at the time of development and 0.71 in this study.

Moral motivation was measured using the tool developed by Lee (1990) and modified by Lee *et al.* (2007). There are four sub-domains: 8 items of human life, 7 items of nurse-client relationship, 6 items of nurse-nursing tasks relationship and 4 items of nurse-colleague relationship. The tool is a 5-point Likert type scale; the point of absolute utilitarianism is 1 point and absolute obligatory position is 5 points. The higher the score, the more firm and positive the respondent's ethical value is based on a deontological view. Utilitarianism views that the act that brings the maximum benefit when ethical problems occur in a clinical situation is morally right. In contrast, deontology thinks there is an absolute value that must be kept in every circumstance (Lee, 1990). The reliability was 0.71 (Lee *et al.*, 2007) and 0.68 in this study.

Nursing ethics education: Nursing ethics education in this study consisted of a 2-h, 12 weeks course, excluding 3 weeks of orientation and mid-term and final exams. Ethics education was composed of lectures, QandA (question and answer) sessions, topic-related videos, case analysis of an ethical dilemma, presentations and an individual report on the ethical dilemma situation. Students watched videos related to the ethical dilemma situations that were provided from the hospital nurse's association and presented the results of team discussion on each dilemma. Peer evaluation was done to encourage active participation of all students.

Data analysis: The collected data were analyzed using (SPSS., 2009) Statistics 18.0 and the significance level was set to 0.05. The frequency and percentage were calculated for the general characteristics of the subjects and descriptive statistics such as mean and standard deviation were used for continuous variables. Paired t-test was used to compare the level of moral sensitivity and moral motivation before and after ethics education.

Ethical consideration: This study was approved by the Institutional Review Board of Baekseok University (BUIRB-201510-HR-019). The researchers explained the purpose and the procedure of the study to the participants and emphasized that participation in the research would not affect the grades of the nursing ethics course. After that, a written consent was distributed and those who wanted to participate in the study were asked to sign it. Then, questionnaires were distributed only to those who signed on the consent. It took about 15 min to fill out the questionnaires.

RESULTS AND DISCUSSION

General characteristics: The general characteristics of the study subjects are as follows (Table 1). About 78% of the students were under 20 years old. Less than half of the students (44.8%) reported they had a religion. About 78% of the students were satisfied or very satisfied with nursing as a major.

The effects of ethics education on moral sensitivity and moral motivation: Moral sensitivity increased from 4.95-5.13 after education and there was a significant difference ($p < 0.001$). The score of the patient-centered nursing domain, among the sub-domains of moral sensitivity, decreased significantly from 5.84-5.67 ($p = 0.017$). Professional responsibility and moral meaning domain scores increased significantly after education ($p < 0.001$, $p = 0.044$, respectively). The scores of the conflict domain and benevolence domain increased after education, however, there was no significant difference ($p = 0.711$, $p = 0.118$) (Table 2).

Moral motivation decreased from 3.51-2.71 (on the 5-point scale) and there was a statistically significant difference ($p < 0.001$). In sub-domain analysis, the scores of human life, nurse-client relationship, nurse-nursing tasks relationship and nurse-colleague relationship decreased significantly ($p < 0.001$) (Table 3).

Nurses dealing with human life should have the ability to make the right ethical decisions in the context of an ethical dilemma as well as scientific knowledge and nursing skills. This study was conducted to provide

Table 1: General characteristics of the participants

General characteristics/Category	Frequency	Percentage
Age (years)		
≤20	127	77.9
≥21	36	22.1
Religion		
Yes	73	44.8
No	90	55.2
Birth order		
First	72	44.2
Second	79	48.5
Third and more	12	7.3
Place of growth		
Big city	73	44.8
Small to medium city	77	47.2
Rural area	13	8.0
Decision maker when choosing a major		
Self	148	90.8
Others	15	9.2
Satisfaction with major		
Very satisfied	29	17.3
Satisfied	99	60.7
Neutral	29	17.8
Not satisfied	6	3.7

Table 2: The comparison of moral sensitivity in participants

Variables	Mean±SD		t-values	p-values
	Pre-test	Post-test		
Moral sensitivity	4.95±0.45	5.13±0.48	3.356	0.001
Patient-oriented care	5.84±0.71	5.67±0.62	-2.405	0.017
Professional responsibility	4.92±0.52	5.45±0.58	8.469	0.000
Conflict	4.91±0.75	4.94±0.63	0.371	0.711
Moral meaning	4.53±0.89	4.76±1.06	2.205	0.044
Benevolence	4.57±0.63	4.68±0.63	1.571	0.118

Table 3: The comparison of moral motivation in participants

Variables	Mean±SD		t-values	p-values
	Pre-test	Post-test		
Moral motivation	3.51±0.23	2.71±0.35	-22.447	<0.001
Human-life area	3.60±0.45	2.92±0.64	-11.162	<0.001
Nurse-client relationship area	3.45±0.30	2.27±0.57	-21.616	<0.001
Nurse-nursing task relationship area	3.09±0.48	2.27±0.57	-13.665	<0.001
Nurse-colleague relationship area	3.94±0.52	2.80±0.46	-19.613	<0.001

SD: Standard Deviation

nursing ethics education for nursing students to practice ethical nursing in clinical practice and to examine the effect of provided ethics education on moral sensitivity and moral motivation. The results showed that there were significant differences in moral sensitivity and moral motivation after 12 weeks of nursing ethics education in nursing students.

Moral sensitivity increased significantly from 4.95 before the education (3.54 on the 5 point scale) to 5.13 after the education (3.66 on the 5 point scale). In the study of Yoo and Shon (2012) which measured the moral sensitivities of nursing students using the same tools as this study, the level was 3.54 before education and 3.66

after education. In Yoo and Shon's study, participants were junior nursing students who experienced clinical practice. They shared ethical issues that they observed or experienced during the clinical practicum at the beginning of the ethics class with their peers and professor. This activity seemed to contribute to the improvement of moral sensitivity. In this study, students were freshman nursing students who had no clinical practice yet, so, videos related to the ethical dilemma situation provided by the hospital nurse's association were utilized for students to experience the ethical situation, albeit indirectly. In this way, the levels of moral sensitivity of freshman nursing students increased by the same level as the junior nursing students. Kim (2013) conducted a study by applying lectures and ethical situation drama to one group and lectures and debate to another group of sophomore nursing students and measured moral sensitivities before and after the intervention. The moral sensitivity was 5.12 before education which is higher than our preliminary result and 5.11 after the education which is similar to our result after education. By Kim (2013), the education utilized 4 times while in our study, 12 times of various teaching methods were utilized and the moral sensitivity increased significantly 6 months after the end of education. This result means that the contents of the ethics education are internalized in the student's set of values and that the students maintain high levels of moral sensitivity. The results of the study were consistent with Jeong's study (2016) which showed that the moral sensitivities increased significantly from 4.96-5.11 after providing 12 weeks of biomedical ethics education to first year nursing students. Kim (2014a, b), the moral sensitivity of the experimental group increased significantly from 4.91-5.12 after 8 weeks of nursing ethics education but there was no significant difference when compared with that of the control group. Kim's result was partially in agreement with the result of this study because moral sensitivity in the experimental group increased significantly. In the study by Kim (2015), the moral sensitivity of the nursing students in the second, third and fourth grades was 3.64 which was higher than the preliminary moral sensitivity in our research. This is because the clinical practice experience has an important influence on the biomedical ethics consciousness (Moon and Jaung, 2012).

Moral sensitivity is the most fundamental element in ethical conduct (Robichaux, 2012) and it can be promoted by enhancing moral imagination using literature, films, role-plays and empathic listening (Kim *et al.*, 2014). Therefore, in ethical education, it is necessary to make use of these various methods actively to allow students to

experience ethical situations indirectly and stimulate moral imagination to raise moral sensitivity. So far ethics education has mainly addressed traditional ethical issues such as euthanasia, surrogacy or abortion. However, according to the study of Shin *et al.* (2015), ethical issues most frequently experienced by clinical nurses were patient care conditions that may threaten the health of nurses, personnel allocation that limits the provision of nursing care and conflicts between nurses and doctors or nurses with other experts. In the study of Lee and Yoo (2011), the highest ethical dilemma in nurses was caused by inappropriate nursing staff and conflicts arising from mutual non-cooperation with medical staffs. Therefore, in developing the curriculum of ethics education for nursing students, it is necessary to include the ethical problems that nurses experience frequently in clinical practice. Also, it is necessary to include coping strategies in ethical conflicts. The most ethical issues are encountered in the Intensive Care Unit (ICU) and Emergency Departments (Shin *et al.*, 2015). Thus, ethical issues should be addressed in courses which deal with ICU and emergency care.

The levels of moral motivation of freshman nursing students were significantly lowered from 3.51 before ethics education to 2.71 after education. This means that the obligatory position before ethics education has shifted to the position of utilitarianism after ethics education. This phenomenon has occurred in the human life domain, the nurse-client relationship domain, the nurse-nursing tasks relationship domain and the nurse-colleague relationship domain. The results of this study are not consistent with Kim (2014) which showed that moral motivation was significantly increased from 3.55-3.77 after 8 weeks of ethics education in second-year nursing students. In addition, the results of this study were not in agreement with Kim (2014) which showed that the moral motivation of the nursing students increased significantly from 3.4-3.6 after 15 weeks of ethics education that applied the blended learning method. Jung *et al.* (2012) provided 5 weeks of lectures and 4 weeks of debate about ethical dilemmas to second year nursing students and the scores of moral motivation in the experimental group increased significantly from 3.14-3.27 compared with that of the control group. In the above studies, the obligation tendency is strengthened through education. In the study of Kim (2014) and Jung (2012), students took a lead in class rather than cramming the ethical knowledge. If a student has conducted student-led lessons such as researching about topics, preparing for the discussion, producing videos and presenting them, then it seems that the obligatory tendency is strengthened. While discussing various

cases, students suggested their own viewpoint and logic in the process of refuting others' opinions; the student's own moral values were confirmed, making the obligatory stance firm (Kim, 2014). Therefore, students should be encouraged actively to participate in ethics class.

The results of this study showed that the average scores of the human life domain and nurse-colleague relationship domain were higher than 2.5 while the average of the nurse-client relationship domain and the nurse-nursing tasks relationship domain were <2.5 which indicates a position of utilitarianism. In the study of Lee *et al.* (2007), the moral motivation of 1028 students in the 1st-3rd grade was 3.52 and the human life domain was closest to the position of utilitarianism. Thus, the results of the study are not in agreement with Lee's study (2007). In the study of Kim (2014), the scores of the human life domain among the sub-domains of moral motivation in 340 second, third and fourth year nursing students were the lowest. In the study of Koo (2016), the scores of human life domain showed the tendency of utilitarianism, showing a difference from this study. However, in the study of Kim (2014), the lowest scores were found in the human life domain and the nurse-client domain. The questions in the nurse-client relationship domain were 'The nurse should keep the secret when a patient informs his/her suicidal plan and asks not to tell it to anyone' and 'If giving the right information to the patient when he/she asks about medication causes confusion, I think it is right not to tell him/her correct information' to name a few. The questions in the nurse-nursing tasks relationship domain resemble, 'Even if the doctor's order sounds like a mistake, it is absolutely right to follow' or 'I think it is right to give the patient placebo if he or she had the analgesic 2 h ago and requested additional one, so, a nurse tried other pain reliever to no avail'. Taking a utilitarian standpoint to these questions is a violation of autonomy as a profession and also affects the therapeutic nurse-patient relationship negatively. As a component of the profession, moral values are increasingly emphasized as well as abilities; nurses should be able to make moral judgments from the obligatory position in order to earn the trust and respect from the public, both as a profession and to fulfill social responsibility (Kim, 2014; Lee, 2008). Um (2012) criticized that the reality is urgent for following standards and guidelines in the hospital and insisted that nursing ethics are beyond the limit of passive ethics to avoid discipline and punishment and ethical ideals should be realized through self-awareness and self-reflection, the pursuit of the common good, the integration of individual values and professional values.

This study has several limitations. First, the effects of education might be affected from exogenous variables such as maturity and other courses or religious activities

because the design of the study was a one group pretest-posttest design, without a control group. Therefore, it is necessary to repeat the research with a time series design or with a control group. In addition, convenience sampling method was used in this study, so, there is limited generalizability in expanding the results of the study to all nursing students nationwide.

CONCLUSION

The significance of this study is that moral sensitivity was high at 6 months after the end of the education. This may be the result of internalization of ethical values into the students. In order for nurses to become trusted and respected professions, individual nurses need to have the right professional ethics and make the right ethical decisions in an ethical dilemma situation. The dignity of human life, the autonomy of nursing professions and the truthfulness of a nurse should be emphasized when caring for a patient. Nursing ethics education based on the obligatory stance, emphasizing the values that must be maintained in any circumstance is necessary to be reinforced.

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