

The Effect of Education in Nurse's Moral Sensitivity

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Abstract:

Nursing is a moral effort and moral sensitivity is essential as the first step in moral decision-making process. Teaching moral sensitivity is considered as one of the most important methods to reinforce moral decision making of nurses, thus the aim of this research was to examine the effect of education in nurses moral sensitivity. The current study is a controlled clinical trial study which was done in an interventional way. All of the working nurses of Persian Gulf Martyrdom Hospital in Bushehr city in 1396 were the sampling population of this study. 68 nurses were participated in this research as the samples. They were selected by available sampling method and then were assigned in control and experiment groups randomly. The Lutzen nurses' moral sensitivity questionnaire (MSQ) was used in this study tool. The validity and reliability of this questionnaire is confirmed. Both experiment and control groups did the pre-test. An eight hour training session was held for the experiment group. Both groups did the post-test. The data were coded and analyzed by SPSS software edition 19. Descriptive indicators, T-test, chi-square, and paired sample T-test was used to analyze the data. The mean score of nurses' moral sensitivity, before intervention, was not significant statistically for both groups ($P=0.570$) and both groups were similar. The comparison of moral sensitivity score mean after intervention with independent T-test showed that the score mean of nurses' moral sensitivity is significantly different in experiment and control groups after intervention ($P<.001$). The results of this study showed that transferring knowledge and education improves the nurses' moral sensitivity and therefore the inclusion of this material in nursing curriculums as an educational tool can be a step toward facilitating moral sensitivity training to nurses.

Keywords: Moral sensitivity, Nursing education, Nursing ethics.

INTRODUCTION:

Nursing is an ethical effort. Nurses are the biggest group of service providers in health systems and have a profound impact on health care's [1-3]. The art of nursing is not solely limited to technical skill and knowledge. Ethical values, beliefs, and orientations of nurses have a key role in judging and deciding in clinical environment [4, 5]. It is increasingly important for nursing students and nurses to have moral decision making capacity and the ability to concentrate on the ethical dimensions of patient care [6, 7]. Nurses have to be sensitive to moral issues related to their career so that they can respect their client rights in decision making and manage ethical debates in their profession. Moral sensitivity has an important role in perceiving ethical consequences of decision making and proper performance [8, 9]. Moral sensitivity as the first step in the process of moral decision making is necessary before an individual can have an ethical judgment [10] and in the other words, moral sensitivity is the precondition of ethical behavior and judgment [11]. Moral sensitivity is defined as the awareness and attention to the existing moral values in a contradictory situation and individual self-awareness to the role and duty on that specific situation, in some of the studies moral sensitivity has the same meaning as "conscience"[12]. According to the great emphasis placed on the necessity of paying attention to morality in all phenomena, what is obvious is the dilemma considering nurses professional competence for decision making which has been criticized by health system and other systems times and again [13, 14]. The Filipva research (2009) in the United States showed that nurses did not have enough sensitivity in moral decision making [15]. Also, the

measure of moral sensitivity in nursing students was medium, according to Yeom et al (2016)[16]. Some studies in Iran stated that nurses were weak in utilizing morals during decision making and did not have enough sensitivity [17, 18]. Public worries related to ethical problems in health area are increasing and this growth makes the study of morality irrefutable [19]. According to the existing information, about 11 percent of the nurses face ethical problems and challenges every day and about 36 percent of nurses face these challenges every few days [20]. Most of the studies have shown that nurses face moral problems and suffer from stressful situations [1, 21 and 22]. In a research done by Basak et al (2010), 46.7 percent of the working nurses in ICU stated in their interviews that they have ethical problems and 35.7 percent of them cited that they cannot solve their ethical problems [23]. The inability to face ethical problems causes 20 percent of the professional nurses to quit their job or to change their working environment [24]. Ethical debates are the sources of psychological stress and job burnout of the nurses [25, 26]. Undesirable moral sensitivity can face the nurses with moral conflicts and damage the process of patient care [27, 28]. Enhances patients' trust and satisfaction toward nursing activities and boosts the relationship between nurses and patients [29]. As low levels of moral sensitivity in nurses lead to inappropriate decision making it is necessary for us to do more researches on this issue and provide appropriate curriculum to enhance moral sensitivity in both groups of nurses and students [30]. Currently, ethics education has not been sufficient and nurses do not feel to have enough ability regarding their competences in ethics issues [31]. Considering the importance of nursing ethics

topic, the role of indirect education in behavioral sciences, the necessity of doing research based on modern educational methods, and roles in the field of medical sciences can conclude to valuable results, and the lack of experimental studies which examine the effectiveness of this method.

MATERIALS AND METHODS:

The type of research

This study is a clinical trial study with control group which is done before and after in an interventional way. The aim of this research was to determine the effect of education in nurse's moral sensitivity.

Study Design and Sampling

The participants of this study were all the working nurses of Persian Gulf Martyrdom Teaching Hospital in Bushehr City. 68 nurses participated in this study as samples. The participants were selected with available sampling method and then they were placed into experimental and control group with random selection. The criteria to choose the participants were as follow: 1. having a nursing B.A degree, at least. 2. Having one-year work experience at least. 3. The satisfaction of nurses to participate in this study and their acceptance to exit criteria including: participation background in workshops or similar education courses.

Data Gathering Tool

Nurse's moral sensitivity questionnaire (MSQ) was used in this study. This questionnaire includes two parts. The first part of this questionnaire includes demographic information (age, sex, marital status, work background, education). In the second part, moral sensitivity was measured. This questionnaire was designed by Lutzen et al in Sweden [32], and is popular in many countries including Iran. This questionnaire contains 25 questions and measure moral sensitivity status of nurses during giving clinical services. The score of each question was measured according to Likert Method as absolutely agree (4), fairly agree (3), fairly disagree (2), absolutely disagree (1), and no comment (0). The most score is 100 and the least is zero. Accordingly, the 0-50 score of each participant shows low moral sensitivity of the sample, 50-75 score indicate medium moral sensitivity, and 75-100 score of the sample is considered as high moral sensitivity. The questionnaire has 6 dimensions of moral sensitivity including: 1. the amount of respect to the client independence, 2. the awareness level of the way nurses communicate with patients, 3. the level of career knowledge, 4. The experience of moral problems and tensions, 5. using ethical concepts in moral decision making, 6. honesty and benevolence [33].

Validity and reliability of the tool

According to Hasanpour et al (2011), the validity of this questionnaire has been examined in several steps and its reliability has been confirmed. Also, the reliability of this questionnaire was confirmed by Hasan et al (2011) through an experimental study done on 20 nurses. After gathering and analyzing the internal consistency of the questionnaire, it was calculated by Cronbach Alpha coefficient and the score 0.81 was obtained which shows the reliability of the

questionnaire [33]. Also, the reliability of the questionnaire was investigated in a study done by Izadi et al (1392). After collecting the data from 20 nurses, the internal consistency was measured by Cronbach Alpha and the result was 0.80 [22]. The reliability of the questionnaire in the United States 0.76 [10], and Korea were and 0.78, respectively [34].

Data Gathering and Procedure

After obtaining the legal and moral license from Bushehr Medical Science University and delivering the letter of introduction from ethics committee to the Persian Gulf Martyrdom Hospital of Bushehr City, the experimental group was invited to a meeting and the aims of the study were explained to them. They were assured that their information will remain secret and it will be analyzed generally. They were told that they were able to leave the study whenever they want. At the end of the meeting the informed consent form was signed by them. In another meeting the control group was invited, the aims of the study were explained to them, and the informed consent form was signed by them. Both groups did the pre-test. The experimental group was divided into 4 sub-groups and an 8 hours education session was held for each group and each person in the experimental group was trained for 8 hours. The post-test was taken immediately after finishing the 8-hour reminiscence meeting. For the control group the training session was not held and the post-test was taken one month after the pre-test from the control group.

Ethical Considerations

This project was approved in the ethics committee of Bushehr Medical Science University with the following code, IR.BPUMS.REC.1395.167 and it was registered in Iran clinical trial registration system with the following code, IRCT2016021612830N18. After receiving the permission from research deputy of Bushehr Medical Science University and delivering the letter of introduction to the research center (Persian Gulf Hospital) and also introducing ourselves to the research centers and clarifying the advantages of study to the participants, the research centers were given the permission to whether participate in the research project or leave it. The informed consent form was filled by the samples of the study. The participants were assured that their information will remain secret. The information were coded and registered anonymously in the computer. The participants were able to see the results of the research if they will.

Data Analysis Method

The gathered data from the questionnaire were coded and analyzed by SPSS software edition 19 [35, 36]. Descriptive indices and T-test were used to analyze the data. They were used to compare two groups regarding quantitative demographic variables like age and work experience. Chi-square was used to compare two groups in terms of qualitative demographic variables such as sex. T-test was used to compare the mean scores between two groups and paired T-test was used to compare the mean scores before and after intervention.

Table 1. Assessing and comparing the demographic data in both experimental and control group.

Demographic factors		Experimental group	Control Group	P-value
Age	Mean ± SD	33.0882±5.41249	33.0000±5.14634	P=0.945
Sex	Male	20.6% (n=7)	14.7% (n=5)	P=0.752
	Female	79.4% (n=27)	85.3% (n=29)	-
Marital status	Single	38.2% (n=13)	26.5% (n=9)	P=0.437
	Married	61.8% (n=21)	73.5% (n=25)	-
Education	B.A	100.0% (n=34)	97.1% (n=33)	P=1.000
	M.A	.0% (n=0)	2.9% (n=1)	-
Work Experience	Mean ± SD	9.6029±4.68198	9.4118±5.16907	P=.873

Table 2. Assessing and comparing the scores mean of nurses' moral sensitivity after intervention in experimental group and one month after intervention in control group

Group	Experimental group Mean ± SD	Control group Mean ± SD	P-value
Before intervention	71.0000±9.92090	69.7647±7.80077	P=0.570
After intervention	84.2941±8.63232	71.0294±7.56982	P<0.001

RESULTS:

The comparison of demographic data in both groups showed that the both groups were identical and there were no significant different between them (Table 1). To compare the scores mean of nurses' moral sensitivity before intervention between control group and experimental group, independent T-test was used. The difference between score mean of nurses' moral sensitivity was not significant statistically before intervention among two groups (P=0.570) and both score means were equal. Comparing the scores mean of nurses' moral sensitivity after intervention among two control and experimental groups was done by independent T-test. The mean score of moral sensitivity was significantly different among both groups after intervention (P<.001)(Table 2).

DISCUSSION:

The general aim of this study was "determining the impact of education on nurses moral sensitivity in Persian Gulf Martyrdom Teaching Hospital of Bushehr City in 2017". The findings obtained from comparing demographic factors among control and experimental groups showed that both groups did not have any significant difference in terms of age, sex, marital status, education, and work experience variables and they were homogenous. Comparing the scores mean of nurses' moral sensitivity in experimental and control groups before intervention did not show any significant difference statistically (P=0.570). This finding was similar to the findings of Imanifar et al (2015) study which was done on 56 nurses and did not find any significant differences in pre-test scores among two groups [37]. Comparing the scores mean of nurses' moral sensitivity in control and experimental groups after intervention was done by independent T-test. The results showed that there was a significant increase in score mean of moral sensitivity after intervention in experimental group compared to control group (P<0.001). This finding was in accordance with the previous findings of some researchers. For example in semi-experimental study of Choe K et al (2014) it was concluded that students' ethical recognition, skill, and competence were improved after

teaching morals in an active and group discussion way of teaching [38]. Also this finding was in accordance with Baykara research (2015). He indicated that ethics education enhances student awareness toward moral fundamentals violations in hospitals and help them to have more interventions and care in this regard. In this study the researcher believes that ethics education in a discussion manner, according to the experiences of the students in hospital, can have a positive impact on emotional and cognitive view of them [22]. The finding of this study was also in accordance with the findings of Ghasemirad et al (2015) study in which they showed that there was a significant difference in moral sensitivity of medical emergency personnel between experimental and control groups after intervention and the education program had a positive effect on moral sensitivity of the experimental group [39]. However, this finding was not in agreement with the findings of Mayhem (2009) study. Mayhew (2009) declared that as time goes by and the educational programs are passed by the students, no significant change has been seen in moral sensitivity and internalization of the ethical issues among students in some cases [40]. The researcher thinks the reasons are as follow: first, the samples of the above mentioned research are accounting students but in this study the samples are working nurses in the hospitals. Also the educational method in Mayhew (2009) study was not a student active participation and samples had received educational program while in our study samples actively participated in the study and shared their career experiences which can have a positive impact on learning and can enhance moral sensitivity. Furthermore the evaluation domain of moral sensitivity in Mayhes (2009) study was financial reports and issues but in our study moral sensitivity domain related to care and relationship among nurses and patients was evaluated. The study of Azizi et al (2016) showed that nursing ethics fundamental teaching has improved the moral judgment of nurses in experimental group significantly. This finding is in agreement with our finding [41]. Hough (2008) found that the impact of experience and education on moral decision making sensitivity is low and believes that some ethical problems

confuse the nurse and prevent the nurse from appropriate decision making [42]. The findings of Hough (2008) study contradict our finding. This contradictory result has some reasons. The reason is the king of the studies. Hough (2008) study was a qualitative study while our study is a clinical trial study with control group.

CONCLUSION:

The aim of this study was to determine the impact of education on the moral sensitivity of nurses working in Persian Gulf Martyrdom Teaching Hospital of Bushehr city in 1396. The results of this study indicated that transferring knowledge and education by reminiscence can improve moral sensitivity of nurses effectively, so the inclusion of this method into nurses' curriculum as an educational tool can be a step toward facilitating moral sensitivity teaching to nurses. We hope that this method will improve nurses' moral sensitivity and will increase the quality of nursing services. This article is adapted from a nursing M.A dissertation with the following topic: " the impact of transferring knowledge by education on working nurses' moral sensitivity in Persian Gulf Martyrdom Teaching Hospital of Bushehr City in 1396".

LIMITATIONS:

One of the limitations of this study was the number of participants and the other limitation was its restriction to just one hospital as research environment. We suggest other researchers to do this research with more nurses and in different hospitals.

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REFERENCES

- Jahanpour, Paymard A, Pouladi S, Azodi F, Shayan A, Azodi P, Molavi-Yardanjani M, Khalili A. Comparing the Durability of Professional Ethics' Learning in Two Methods of Group Discussion and Multimedia Software, *Research Journal of Medical Sciences*, 2016; 10(3): 120-23.
- Dezhdar S, Fereidoonpoor N, Mostaghni E, Jahanpour F, Ravanipour M. Transition from being OK to NOT OK with tooth loss among a selection of older people in Iran: a qualitative study. *Gerodontology*. 2017; 34(2):215-26.
- Khalili A., Shayan A., Khodaveisi M., Masoumi, S.Z., Soltani, F., Havasian, M.R.e Horiat, F.E.f. Construction of professional ethics questionnaire in midwifery. *Indian Journal of Forensic Medicine and Toxicology*.2017;11(2):237-240.
- Khalili A, Azodi F, Azodi P, Motlagh M.D, Sedighi Z, Jahanpour F. Patient safety situation from the nurses viewpoints in an educational hospital. *Journal of Pharmaceutical Sciences and Research*, 2017; 9(9):1647-50.
- Gashmard R, Bagherzadeh R, Pouladi S, Akaberian S, Jahanpoor F. Evaluating the factors influencing productivity of medical staff in hospitals affiliated Bushehr University of Medical Sciences 2012, Bushehr, Iran. *World Applied Sciences Journal*. 2013; 28(12):2061-68.
- Goethals S, Gastmans C, de Casterlé BD. Nurses' ethical reasoning and behaviour: a literature review. *International Journal of Nursing Studies*. 2010; 47(5):635-50.
- Jahanpour F, Sharif F, Salsali M, Kaveh MH, Williams LM. Clinical decision-making in senior nursing students in Iran. *International journal of nursing practice*. 2010; 16(6):595-602.
- Baghaei R, Moradi Y, Aminolshareh S, Zareh H. The ethical sensitivity of nurses in decision making in Ayatollah Taleghani Hospital, 1391. *Journal of Urmia Nursing And Midwifery Faculty*. 2014; 11(11):900-06.
- Jahanpour F, Rasti R. Viewpoints of nurses and patients on paying respect to the privacy of patients in care. *Journal of Mazandaran University of Medical Sciences*. 2014; 24(111):34-42.
- Comrie RW. An analysis of undergraduate and graduate student nurses' moral sensitivity. *Nursing ethics*. 2012; 19(1):116-127.
- Heggestad AKT, Nortvedt P, Slettebø Å. The importance of moral sensitivity when including persons with dementia in qualitative research. *Nursing Ethics*. 2013; 20(1):30-40.
- Lützen K, Dahlqvist V, Eriksson S, Norberg A. Developing the concept of moral sensitivity in health care practice. *Nursing ethics*. 2006; 13(2):187-96.
- Borhani F, Alhani F, Mohammadi E, Abbaszadeh A. Professional Ethical Competence in nursing: the role of nursing instructors. *Journal of Medical Ethics and History of Medicine*. 2010;3(3):1-8.
- Dezhdar S, Jahanpour F, Bakht SF, Ostovar A. The effects of kangaroo mother care and swaddling on venipuncture pain in premature neonates: A randomized clinical trial. *Iranian Red Crescent Medical Journal*. 2016; 18 (4):29649-57.
- Filipova AA. Licensed nurses' perceptions of ethical climates in skilled nursing facilities. *Nursing ethics*. 2009; 16(5):574-88.
- Yeom H-A, Ahn S-H, Kim S-J. Effects of ethics education on moral sensitivity of nursing students. *Nursing ethics*. 2016; 24(6):644-52.
- Nasiriani K, Farnia F, Nasiriani F. Study of respecting patients rights from nurses point of view employed in Yazd hospitals. *IJFM*. 2007; 13(1):33-7.
- Dehghani A, MOHAMMADKHAN KS. Evaluating of compliance with professional ethical standards in nursing practice from Nursing Staff's Viewpoints in Tehran University of Medical Sciences. 2012; 9(35):208-16.
- Zare N, Namdari M, Jahanpour F. Comparison of axillary, tympanic and rectal body temperatures using a covariate-adjusted receiver operating characteristic approach. *Iranian Red Crescent Medical Journal*. 2010; 12(3):293-97.
- Hariharan S, Jonnalagadda R, Walrond E, Moseley H. Knowledge, attitudes and practice of healthcare ethics and law among doctors and nurses in Barbados. *BMC Medical ethics*. 2006; 7(1):1-8.
- Rabiei Z, Jahanpour F, Azodi, F, Azodi P. Effect of educational multimedia on anxiety before cesarean section. *Iranian Journal of Obstetrics, Gynecology and Infertility*. 2017; 20(5):24-9.
- Baykara ZG, Demir SG, Yaman S. The effect of ethics training on students recognizing ethical violations and developing moral sensitivity. *Nursing ethics*. 2015; 22(6):661-75.
- Başak T, Uzun Ş, Arslan F. Investigation of the moral sensibility of intensive care nurses. *Gulhane Medical Journal*. 2010; 52(2):76-81.
- Udomluck S, Tonmukayakul O, Tiansawad S, Srisuphan W. Development of Thai nurses' caring behavior scale. *Pacific Rim International Journal of Nursing Research*. 2010; 14(1):32-44.
- González-de Paz L, Kostov B, Sisó-Almirall A, Zabalegui-Yáñez A. A Rasch analysis of nurses' ethical sensitivity to the norms of the code of conduct. *Journal of clinical nursing*. 2012; 21(19pt20):2747-60.
- Akbarzadeh F, Jahanpour F, Hajivandi A. The relationship of general health, hardiness and spiritual intelligence relationship in Iranian nurses. *Iranian journal of psychiatry*. 2013;8(4):165-67.
- Schluter J, Winch S, Holzhauser K, Henderson A. Nurses' moral sensitivity and hospital ethical climate: A literature review. *Nursing ethics*. 2008; 15(3):304-21.
- Azodi F, Sharif F, Azodi P, Shirazi Z.H, Khalili A, Jahanpour F. The reasons of tendency toward hookah smoking among teens and youth in Iran - A qualitative study. *Journal of Pharmaceutical Sciences and Research*.2017; 9(9):1642-46.

29. Jahanpour F, Azodi P, Zare N. A comparative study on temperature accuracy between tympanic, rectal, and axillary sites. *Iranian Journal of Medical Sciences*. 2008; 33(1):49-53.
30. Abbaszadeh A, Borhani F, Mohsenpour M. Compatibility of personality and major among freshman undergraduate nursing students of the Kerman University of Medical Sciences. *Iranian journal of nursing and midwifery research*. 2010; 15(2):90-5.
31. Khalili A, Davodi M, Pouladi S, Paymard A, Shayan A, Azodi P, et al. Comparative Study on the Effect of Professional Ethics Education Using Two Methods, Group Discussion and Multi-Media Software on the Knowledge of Nursing Students. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 2016; 7(4):2776-81.
32. Lützn K, Nordin C, Brodin G. Conceptualization and instrumentation of nurses' moral sensitivity in psychiatric practice. *International Journal of Methods in Psychiatric Research*. 1994; 4(4):241-48.
33. Hassanpoor MAH, Mohammadali A Fallahi Khoshknab, Massod% A Abbaszadeh, Abbas. Evaluation of the impact of teaching nursing ethics on nurses' decision making in Kerman social welfare hospitals in 1389. *Iranian Journal of Medical Ethics and History of Medicine*. 2011; 4(5):58-64.
34. Han S-S, Kim J, Kim Y-S, Ahn S. Validation of a Korean version of the Moral Sensitivity Questionnaire. *Nursing ethics*. 2010; 17(1):99-105.
35. Khosravi SH, Ebrahimi MS, Shayan A, Havasian MR, Jamshidi F. Investigation of Early Maladaptive Schemas in Patients with Bipolar Disorder Compared to Healthy Individuals. *J. Pharm. Sci. & Res*. 2017; 9(6):771-74.
36. Mahmoodi Z, Behzadmehr M, Salarzaei M, Havasian MR. Examining High-Risk Behaviors and Behavioral Disorders in Adolescents with Addicted and Non-Addicted Fathers in Public School of Zabol in the Academic Year 2016-2017. *Indian Journal of Forensic Medicine & Toxicology*. 2017; 11(2):251-56.
37. Imanifar N, Seyedin AV, Afshar L, Sharifzadeh G. Comparison effect of teaching ethical principles using narrative ethics and lecture on the moral sensitivity of nurses. *Medical Ethics*. 2015; 9(31):95-125.
38. Choe K, Park S, Yoo SY. Effects of constructivist teaching methods on bioethics education for nursing students: A quasi-experimental study. *Nurse education today*. 2014; 34(5):848-53.
39. Ghasemi Rad N. Evaluation the effect of nursing ethical principles training on moral sensitivity in decisions-making emergency medical center personnel in Rafsanjan state 2014: School of Nursing, Kerman University of Medical Sciences, Kerman, Iran; 2015; 4(5):58-64.
40. Mayhew BW, Murphy PR. The impact of ethics education on reporting behavior. *Journal of Business Ethics*. 2009; 86(3):397-416.
41. Azizi A, Sepahvani M, Mohamadi J. The effect of nursing ethics education on the moral judgment of nurses. *Journal of Nursing Education*. 2016; 4(4):1-8.
42. Hough MC. Learning, decisions and transformation in critical care nursing practice. *Nursing ethics*. 2008; 15(3):322-31.