

Research Journal of Pharmaceutical, Biological and Chemical Sciences

Comparative study of the impact of professional ethics education using lecture and multimedia software on knowledge of nursing students.

Arash Khalili¹, Saeedeh Almasi², Fatemeh Joonbakhsh³, Hassan Ahmadinia⁴, and Masoumeh Davodi^{5*}.

¹Department of Pediatric Nursing, School of Nursing and Midwifery, Hamadan University of Medical Sciences, Hamadan, Iran.

²Department of Pediatric Nursing, School of Nursing and Midwifery, Hamadan University of Medical Sciences, Hamadan, Iran.

³Department of Pediatric Nursing, School of Nursing and Midwifery, Hamadan University of Medical Sciences, Hamadan, Iran.

⁴student of PHD in Biostatistics, Department of Biostatistics, Hamadan University of Medical Sciences, Hamadan, Iran.

⁵Instructor, Department of Medical Surgical Nursing, School of Nursing and Midwifery, Yasuj University Of Medical Sciences, yasuj, Iran.

ABSTRACT

Not specified pattern for ethics curriculum will be a lot of features, skills and abilities that should not be neglected in terms of ethics curriculum. The aim of this study was to determine the impact of professional ethics education using lecture and multimedia software based on knowledge of nursing students in the field of professional ethics. A quasi-experimental study of two groups before and after nursing and population were students of the School of Nursing and Midwifery of Hamedan University of Medical Sciences Semester 4 and 6 that were trained in two groups and multimedia presentations. First, all students are then assigned to two groups arrived census and number of samples in each group was 30. Test before training, immediately after training using the standard professional ethics of nurses. Data using the t test and analysis of variance for repeated measures analysis software spss version 20 were analyzed. The mean score of knowledge in multimedia 14.53 and 13.61 respectively in group discussion. But the difference was not significant between the two groups in terms of multimedia group had higher scores. The findings show that there are significant differences between pre-test and post-test mean score in multimedia ($p=0.025$). The nursing professional ethics education both lecture and multimedia to enhance learning in the nursing students but this is about more than lecture method was multi-media approach, so we can use both methods, especially methods of presentation used for training professional ethics of nursing.

Keywords: professional ethics of nursing, lecture, multimedia

**Corresponding author*

INTRODUCTION

Nursing degree in Medical Sciences is an independent whose mission is to provide health services, care, treatment and rehabilitation in order to provide the highest standards, maintain and improve public health and the discipline is built on the basis of professional ethics (1,2). In fact, professional ethics, observance of ethical standards in nursing profession that in order to comply with these standards, nurses' beliefs, behaviors, and beliefs based on professional and ethical standards, maintain and promoted. Implementation of nursing care based on professional ethics, leading to increased patient satisfaction and the well-being index because compliance with the code of professional ethics, to show that nurse to patient demands respect and revere him consider the (3). The researches different views on nursing activities, especially in the ethical dimension (4). Some contacts with colleagues and patients, medication administration, patient's rights, accountability, moral reasoning and ethical performance has been examined, but the scope of nursing ethics as all duties (5). No clear pattern for ethics curriculum will be a lot of features, skills and abilities that should not be neglected in terms of ethics curriculum. So ethics in place improve the country's education system, choosing appropriate curriculum content and the style is very impressive (6). While much attention has recently been the subject of nursing ethics, but ethics in education, methods and models of teaching that would strengthen nursing competence, not a lot of information (7). Lack of information on professional ethics education has caused the accepted methods and nursing professional ethics education that could provide a useful, not apply to the extent that, despite the international community's increasing emphasis on the importance of nursing and professional ethics as a fundamental virtue, the concept of the nursing profession does not have its rightful place in education (3,8). This is one of the issues that have fueled the absence or lack of pattern recognition and nursing ethics training methods (9). A few years in the Western countries, increasingly expanded multimedia education and training has been accepted as a stylist. E-learning technology and coupled with multi-media education methods provided background that many educational ideals such as independent learning, self-directed learning in any place, learning depends on the specific time, teaching and collaborative learning and provide rapid feedback and evaluation of learning, is even more fulfilled (1,10). On the other hand, in many developed countries still dominate the lecture as a way to educate for reasons such as the need for large facilities, the ability to offer a lot in a short time to learn not-so-good despite the large number of contacts used (11). Because professional ethics in the past few years more and more attention and also considering the contents of professional ethics as well as the unwillingness of nursing professional ethics classes for reasons such as daily preoccupations, inability to attend re-education classes and the like (2,12). The researchers went on to study as compared with the effect of lecture and multimedia software based on knowledge of nursing students in the field of professional ethics to accomplish.

MATERIALS AND METHODS

This is quasi-experimental study of before and after. The study population consisted of nursing students Semester 4 and 6 Term in Hamedan University of Medical Sciences. Inclusion criteria included the willingness of students to participate in study and nursing student at the University of Medical Sciences in Semester 4 or 6 and Exclusion criteria included being a guest at the school for less than 2 semesters. After preparing the list of students from Schools, Students 4 and 6 on the draw and were assigned randomly into two groups. After the lecture and multimedia groups with a draw, the names of individual students (4th semester 6th semester is separate and separately) written on paper and dumped in a box and remove the paper, the students were on were predetermined and this work continued until the completion of the sample. The number of students in each group according to the same study, 30 patients was considered (3). Data collection included two-part questionnaire (5 questions) personal information and the second part contains 21 questions with yes and no responses were evaluated by the knowledge (correct answer and score a wrong answer was zero). Tools were included professional ethics Jahanpoor et al (13) compared with the amount of content validity, content validity index 0.73 and 0.90 Kuder-Richardson reliability and 0.65 using Pearson's correlation coefficient 0.73 in 2014 in Bushehr was standard. Researcher after obtaining the approval of the Vice President of Research and Business Code of Ethics Committee, introduced a necessary Hamadan University of Medical Sciences and Health Services, and in this study was obtained. The aim of this study clearly to students of both groups was described and written informed consent to participate in the study were collected. Educational multimedia file groups in the study Khalili et al (6) was prepared in 2015 in Bushehr a combination of photos, PowerPoint, video clips and presentations, along with the questionnaire was designed based on a single question was put on the CD.

In the first session after the lecture group pre-test, researcher each question for about 60 minutes and explained to the audience responded to all questions. For this group post-test was performed immediately after the lecture and answer questions. For multimedia, pre-test and after collecting the questionnaires, multimedia content in the space provided for this group was spread quite slowly for 45 minutes and immediately after the broadcast, multimedia, post-test was conducted. Information collected in this study using SPSS version 20 statistical software analysis and descriptive statistics were analyzed. In this study were analyzed using descriptive statistics and percentages, minimum and maximum, mean and standard deviation were used to describe the participants. For the comparison of two independent groups t test, to compare mean before and after treatment in each group paired t-test and the mean values in excess of two independent groups ANOVA was used. All participants for the study ethical issues such as freedom, respect for integrity, the findings in the study, and compliance framework in the research study were observed.

Findings

According to the study, no significant differences in gender distribution (p=0.555). The results showed that the age distribution partners and the largest participants in the lecture group 34 years and the youngest is 21 years old while participating in the multimedia age 19 years and the smallest is 27 years old. In terms of interest in the field of data analysis in the lecture it became clear that 56.3 percent of participants were interested in their field but in multimedia 84.4 percent were interested in their field.

Table 1: Prevalence and demographic characteristics of (gender and age) nursing students participating in the study

Variable	Specifications	Lecture group		Multimedia group		Chi square	df	P value
		Number	percent	Number	percent			
Sex	Femail	18	47/4	20	52/6	0/349	1	0/555
	Male	19	54/3	16	45/7			
		Mean	SD	Mean	SD	T test		
Age		22/64	2/11	20/69	1/59	4/11	71	0/000

Table 2: Mean and standard deviation of ethics in nursing, speech and multimedia in both groups before and after intervention

Ethic		Before intervention	After intervention	p-value (Paired t-test)
		lecture	13/21± 1/65	13/61± 3/07
	multimedia	12/94±2/34	14/53±2/56	0/025
	p-value (t-test)	0/572	0/178	

DISCUSSION

Results of statistical analysis states although the pre-test mean score of knowledge of professional ethics in the method of 'multimedia presentations but this is not a significant difference between the results of this part of the study Daneshmandi et al (14) examined the effect of self-aid and buddy training using lecture and multimedia software package on performance level military personnel in Tehran was conducted on 300 nurses in the line. Also with these findings, studies Ramezani (15) and Funi (16) and Meshki et al (17) also gained but these findings by studying the Farshi et al (18) that there is no statistically significant difference in education in two ways multimedia and lecture does not match the cause of this discrepancy can be attributed to the content of education and group discussion of educational excellence in their study was because of group discussion is a student-centered approach and Varank (19) also expresses the opinion that the multimedia teaching methods and lectures on teaching students no significant difference although both approaches could increase learning motivation. Siavash Wahhabi Nia et al (20) also confirms the claim of Farshi and Varank and say in both lecture and multimedia increasing the motivation and learning, but this amount was not significant between the two groups. In their study of triage education course learning content that the content of this study is different. Khalili et al (6) reported in their study that a multimedia approach compared with group discussion method could be effective method of teaching it was also expected however, this method is a superior method compared to using multimedia and the result is not far-fetched. T test results showed that the scores after training in multimedia approach to education was significantly different than the study Khalili (6), Meshki (17), Daneshmandi (14) but with the Wahhabi Nia (20) and Farshi et al (18) did not

match the cause of non-conformance can be due to property for this study, certain conditions are because nurses because life is busy and less time spent to learn and use multimedia packages and his efforts to learn the classroom or retraining courses. Hasy study findings from data analysis using t-test showed that the difference between lecture and multimedia after the intervention, there was no statistically significant difference with the Farshi (18) and Varank (19) but with the Wahhabi Nia (20) and Meshki et al (17) did not match the looks most of these non-conformance can be trained because the content is mentioned in the studies.

CONCLUSION

The results of this study showed that both lecture and multimedia both on professional ethics for nurses and can be used both methods to teach professional ethics in nursing benefit however, no significant difference was observed in the superiority of multimedia presentations in this study confirms the superiority of the multimedia approach is to lecture. So, according to the findings of this study can be a multimedia approach as a more efficient way to benefit the professional ethics of nursing.

ACKNOWLEDGEMENT

Hamedan University of Medical Sciences is the study of approved projects. Deputy of the Hamedan University of Medical Sciences and all of the students were willing to cooperate and participate in the study, is sincerely grateful.

REFERENCES

- [1] Jahanpour F, Khalili A, Ravanipour M, Nourouzi L, Khalili M, Dehghan F. Investigating Awareness Amount of Nursing Students of Medical Sciences University of Bushehr about Ethic in Nursing Profession. *Armaghane-danesh, Yasuj University of Medical Sciences Journal (YUMSJ)*, 2014,19(3).
- [2] Negarandeh R, Ghobadi S. A Survey of Knowledge and Attitudes of Zanjan Hospitals Nurses and Midwives towards Ethical Issues. *Journal of Zanjan university of medical Sciences* 2008; 36(9): 55-9.
- [3] Khalili A, Davodi M, Pouladi S, Paymard A, Shayan A, Azodi P, Azodi F, Molavi Vardanjani M, and Jahanpoor F. 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): 2776-2781.
- [4] Ali Mohamadi N, Almasi S, shayan A, Dehghan M, Hassan Ahmadi Nia and Arash Khalili. Investigating the Emergency Nurse's awareness of professional ethics of nursing. *International Journal of Advanced Biotechnology and Research (IJBR)*, 2016; 7(3): 1424-29.
- [5] Almasi S, Khalili A, Dehghan M, Jonbakhsh Najaf Abadi F, Ali Mohammadi N, Cheraghi F. The effect of telephone follow-up after ambulatory surgery on pain management for children at home by parents. *International Journal of Medical Research & Health Sciences*, 2016, 5, 7S:263-267.
- [6] Jahanpour, Paymard A, Pouladi S, Azodi F, Shayan A, Azodi P, Molavi Vardanjani 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.
- [7] habibipour B, khalili A, Davoodi M, Talebianpour M.S, Mobaser N. Multimedia, teaching method that has been neglected: A systematic review. *International Journal of Medical Research & Health Sciences*, 2016, 5, 9S:479-481.
- [8] Bekhadianpour N, Khalili A, Bargrizan S, Hossaini Motlagh A, Paymard A, Vahdatnejad J. Comparison of Knowledge of Medical and Paramedical Intern about of CPR, 2015. *International Journal of Medical Research & Health Sciences*.2016; 5(9):128-131.
- [9] Yariipoor S, Khalili A, Joonbakhsh F, Talebianpour M.S, Almasi S. Systematic Review of Pain assessment scales in newborns under maxillofacial surgery Admitted to the surgical ward. *International Journal of Medical Research & Health Sciences*, 2016, 5, 10:41-44.
- [10] Mirzaei MS, Jahanpour F, Paymard A, Shamsizadeh M, Shayan A, Khalili A. Assessment of the Relationship between Awareness on Ethical Codes and Nursing Errors Reported by the Staff of the Educational Hospital of Bushehr in 2014. *Sci J Hamadan Nurs Midwifery Fac*. 2016;24(2):113-119.
- [11] Davoodi M, khalili A, Talebianpour M.S, Naderi Dareshori A, Kheradmand K, Bashti S. Investigating the Effect of using Mentha pulegium Powder in Controlling Non-Bacterial Diarrhea in Adults. *International Journal of Medical Research & Health Sciences*, 2016, 5, 9S:482-485.

- [12] Negarandeh, R. Protect the patients and the need for national ethical guidelines for nurses. Proceedings of the Second International Congress of Medical Ethics in Iran. 2009n : 1:5:191-3.
- [13] Jahanpour F, Khalili A, Pouladi S , Zoladl M, Dehghanian H . Construction and Evaluation of Nursing Ethics Questionnaire. Armaghane-danesh 2014; 19(9): 788-796.
- [14] Daneshmandi, M., Asgari, A.,Tadrisi, A.,Ebadi, A., Mokhtari noori, J. Effect of self- and buddy-aid education by lecture and multimedia software package methods on the knowledge level of personnel. Iranian Journal of Military Medicine 2011 : 1:13: 7-10.
- [15] Ramezani, S. "Using the influence of multimedia training techniques and lectures on academic motivation Arabic Lesson 3 students learning centers in Tehran." Journal of Educational Psychology. 2011 : 2 : 1:7: 119.
- [16] Fani M.M, Mehravar S, Mehrabi M, Level of Learning and Satisfaction through Traditional Methods and the Use of Multimedia: A Comparative Study , media 2014; 5(7): 72-78
- [17] Meshki, M,. Shafaghi K., Sayedi Sani, K, Comparing the effectiveness of nutrition education and group discussion in two ways, depending on the area of multimedia learning for pregnant women. sums journal 2014; 21(3): 441-453.
- [18] Farshi M, Babatabar Darzi H, Mahmoudi H, Mokhtari Nouri J. Comparison of nursing care learning in air evacuation and transport by lecture and e-learning methods. Iranian Journal of Military Medicine. 2012:14(1):27-31.
- [19] Varank İ. A comparison of a computer-based and a lecture-based computer literacy course: A Turkish case. Eurasia Journal of Mathematics, Science and Technology Education 2006:2(3):112-123.
- [20] Vahabi S . collique.Comparing the Effect of Triage Education in Lecture and Multimedia Software on Nurses Learning. Iranian Journal of Critical Care Nursing 2011:4:1:7.