

Research Article

The effect of two methods of patient and speech on clinical self-efficacy of nurses in the care of heart patients in 2017

Zeinijahromi M.*

Msc in Critical Care Nursing Medical Ethics Research Center,
Jahrom University of Medical Sciences, Jahrom , Iran
Email:m.zeini@jums.ac.ir +98 917 891 1369

ABSTRACT

Introduction: Educational methods can be used to improve the self-efficacy of nurses in caring for heart patients. The purpose of this study was to investigate and compare the effects of patient and speech methods on self-efficacy in nursing clinical practice in the management of patients with heart disease in 2017.

Method: Semi-experimental study. The study population was Nurses of the Cardiology Corps of Jahrom University of Medical Sciences hospitals. Sixty six of them were selected by simple sampling method and randomly divided into two lecture and Patients' groups. To collect the data, a self-efficacy questionnaire was completed in nurses clinical practice before and after the intervention. Data were analyzed by SPSS software version 16 and paired t-test and independent t-test.

findings: There was a significant difference between mean score of self-efficacy before and after intervention in two groups of lecture and Patients ($P < 0.05$). Also, there was no significant difference between mean score of self-efficacy before intervention in two groups ($p > 0.05$).

Conclusion: Patient education improved nurses' self-efficacy in caring for heart patients than lectures.

Key words: patient, speech, self-efficacy, nursing care, cardiac patients

INTRODUCTION:

Cardiac patients, as the most common heart disease, are caused by an ischemic coronary artery disease and lead to progress towards myocardial damage and heart failure (1, 2). In the syndrome, the life of patients is threatened, which despite progress in treatment, is still an important factor in increasing mortality and disability in the community (3). Nurses play an important role in the care of these patients. One way to empower nurses caring for patients with heart disease is to improve their self-efficacy (4). Based on the theory of self-efficacy, increasing the beliefs of individuals about their abilities and talents leads to favorable effects on performance (5, 6), improvement of cognitive, social, emotional and behavioral skills (7), and increasing the ability to apply knowledge and skills And professional (8). One way to improve the self-efficacy of nurses is to provide appropriate training in clinical skills along with

acquiring an informed ability in nursing care, especially in special sectors (9). Unfortunately, at the moment, many of the nursing educational efforts are less than expected and practically a reality is seen as a small part of its goals (10). In Iran, there is a lack of attention to the educational needs of nurses and the poor quality of providing programs and the inability to carry out the principled and proper implementation of programs (11, 12). The diversity of teaching and learning styles in recent years has attracted the attention of educational experts (13) more than other factors. According to the experts, efficient and effective education is the most important factor in learning process (14). In creating effective learning, the teaching method is of particular importance (15). In each educational system, with the aim of improving the quality of education, educational changes, such as the use of new teaching methods, are appropriate to the

content of the education subject (16). Lecture as a teacher-centered approach is still the most common learning method (17). , 18), which consists mainly of oral presentations by the professor or speaker (19). Although this method saves time and resources (20, 21), it lacks the opportunity to interact and participate in learning (20, 22). Despite some studies on the effect of nursing patient education, there is little empirical evidence regarding the results of using these methods, and further research is needed (27). This study aimed to investigate the effects of patient and speech techniques on Clinical self-efficacy of nurses in caring for patients with heart disease in cardiac care units of Jahrom University of Medical Sciences hospitals in 2017.

METHOD:

This was a semi-experimental study that was carried out in the fall of 1395 with the participation of the Isfahan University of Medical Sciences and Jahrom University of Medical Sciences in the cardiac care departments of Jahrom. Samples consisted of 62 nurses with inclusion criteria including willingness to participate in the study, had a minimum baccalaureate and had more than 3 months experience in cardiac care (28). Written consents were drawn from the samples for participation in the study. Sampling was done first and then randomly assigned to two lecture and patient groups (each group was 31). The data gathering tool was a self-efficacy questionnaire in clinical practice. The first part included demographic information, and the second part, self-efficacy questionnaire on clinical practice, which was developed by Charghi and colleagues in 2008. This questionnaire consists of 4 fields and 37 items. Areas include: "Patient Review", 12 items, "Nursing Diagnosis and Planning", 9 items, "Carrying out Care Plans", 10 items, and "Health Care Appraisal" is 6 items. Data of nurses before and after intervention in two groups of lectures and Patients

collection was done by nurses' self-assessment method in both groups before and after the study. This questionnaire is on a scale of four degrees Likert 0 to 100% and 0 to 20% (I'm not at all sure), 30 to 40% (not sure), 50 to 70% (fairly sure) and 80 to 100% (complete assurance). I have. The ranking of the "I'm not sure" score to "have complete confidence" is from 1 to 4, so that the minimum and maximum points are 37 and 148. Lower scores indicate self-efficacy in lower clinical performance and higher scores indicating higher self-efficacy. The total score of the total points was ranked in three levels: low (74-37), moderate (111-74.1) and high (148-111.1). The face and content validity of this questionnaire, which was surveyed in 2008, was 97%, and for reliability, Cronbach's alpha was 94% (8, 29). To analyze the data, SPSS software version 16 and descriptive statistics (frequency and mean), and Chi-square, Mann-Whitney, T-test and independent tests were used.

Finding:

In this study, 62 nurses participated in two groups of 31 people. Interventions in the form of training on the care of patients with heart disease were performed in two groups: lecture and Patients' methods. Of the nurses, 48 (77.4%) were female. The mean (SD) age of the participants (7.40) was 32.27. Most (90.3%) of the nurses had a bachelor's degree and 58.1% were officially employed. The mean (SD) of the total history and history of attending the cardiopulmonary bypass (7.84) was 9.62 and (5.69) was 6.30. There was a significant difference between the two nurses in terms of age (P = 0.435), sex (P = 0.220), work experience (P = 2.339), degree (P = 0.3394) and type of employment (P = 768).Tables 1 and 2 show the mean and comparison of self-efficacy scores of nurses before and after intervention in two groups.

Table 1: Comparison of mean score of self-efficacy

paired t-test		After the intervention Mean (sd)	Before intervention Mean (sd)	Group Variable
P Value	t			
0/038	-0/701	127/68(16/81)	(25/07) 114/55	Lecture Group
0/000	-4/555	131/09(12/25)	113/64(25/85)	Patient group

Table 2 Comparison of mean score of self-efficacy of nurses before and after intervention in two groups of lectures and Patients

Independent t test		Patient group Mean (sd)	Lecture Group Mean (sd)	Group Variable
P Value	F			
0/648	0/211	113/64(25/58)	(25/07) 114/55	Before intervention
0/037	4/616	131/09(12/25)	127/68(16/81)	After the intervention

Ind

pendent T-test shows that there is no significant difference between mean score of self-efficacy before intervention in two groups ($P = 648$). Independent t-test also shows that there is a significant difference between mean score of self-efficacy after intervention in both groups ($p = 0/37$).

DISCUSSION:

Findings of this study showed that in standardized Yimar method, nurses' self-efficacy was significantly higher than lecture method (30). Standardized patient education method, unlike lecture method, is an active learning. The use of active learning methods has been successful in various studies (31-33). Active learning and participatory learning, in contrast to the lecture method, lead to greater learning, longer information retention and more student enjoyment of the class (34). In the study of Sheikholeslami and Behsun (2014) (2014), the teaching of copying of infectious patients by Patients was considerably more accurate and of higher quality than traditional methods, and all students were fully satisfied with the patient's educational method (35). In a study by Landscape et al. (2015), Patients' education has improved the clinical decision-making skills of nurses in the intensive care unit (36). Yoo (2003) and Owen and Ward-Smith (2014) reported that standardized patient education for nursing students has promoted clinical judgment, patient assessment, and communication skills (37, 38). In Sedgheyan et al. (2014), using clinical simulation with mannequins improves the ability of medical students in the emergency department (39). In another study (2011), standardized patient education has promoted midwife teamwork and teamwork in emergency care from eclampsia patients (40).

In the present study, nurses participated actively while providing standardized patient education and feedback based on their knowledge and experience. In Landscape and colleagues (2015), feedback through this method has played an important role in the training of nurses in the

intensive care unit (36). According to Endacott et al. (2012), feedback in simulated environments is an important strategic key in increasing clinical decision making skills in emergency situations (41). Standardized patient education is very effective in promoting problem-solving skills and integrating and integrating clinical information; therefore, clinical and communication skills are a valuable resource (35). In this study, lecture training also significantly increased the awareness of nurses in caring for patients with heart disease. In the study of JafariManesh et al (1394) (2016), lecture-based education has increased awareness of nurses (42). In some other studies, teaching through lectures has had a positive and significant effect on learner learning and reminder (43, 44). In spite of the emergence of new techniques and the spread of knowledge, lectures as a teacher-centered approach are still considered an important educational method (45) safe and easy (46, 47). The findings of some studies are contradictory to the present study. In the study of Gordon et al. (2006), there was no difference between the standardized teaching methods of the patient and the lecture (48). In the study of Maneval et al. (2012), the use of standardized patient method did not affect the skills of nurses in critical thinking and critical decision making (49). In Lotfi et al. (2010), the difference between standardized patient education methods and critical thinking method was not found in undergraduate students of the operating room (50).

The contradiction between these studies with the present study can be due to factors such as the content of the training, the examples, the manner in which they are performed and the variables under consideration.

CONCLUSION:

Standardized patient use can improve the level of nursing awareness in various care settings, including caring for heart disease patients. Using the traditional lecture method is also effective. Although the use of standardized patient-based education can lead to sustainability of analysis skills, problem solving, critical thinking and sustainable learning. Also, according to the findings of this study, it is suggested that, along with the method of lecture training, a new patient standardized approach to in-service continuing education be used by nurses to enhance and deepen their learning outcomes.

ACKNOWLEDGMENTS:

We are grateful to the research assistants of Jahrom University of Medical Sciences, nursing offices, nurses of hospitals who participated in this research, and all those who helped us with the approval and implementation of this study.

REFERENCES:

1. Zagharitafreshi M, Rasouli M, Sajadi M. Simulation in nursing education: A review article. *Iranian Journal of Medical Education*. 2013;12(11):888-94
2. Khalifehzadeh A, KarimyarJahromi M. The impact of Synergy Model on nurses' performance and the satisfaction of patients with acute coronary syndrome. *Iranian journal of nursing and midwifery research*. 2012;17(1)
3. Mettananda C, Rothwell P, Li L, Mehta Z, Gutnikov S. Comparison of risk factors for stroke subtypes versus acute coronary syndrome A population-based study. 2016
4. Lu M, Tang J, Wu J, Yang J, Yu J. Discharge planning for acute coronary syndrome patients in a tertiary hospital: a best practice implementation project. *JB I database of systematic reviews and implementation reports*. 2.34-318:(7)13;015
5. Rostami H, Ghahramanian A, Golchin M. *Journal of Nursing and Midwifery Urmia University of Medical Sciences*. 2011;9(3):0
6. Hosseini M, Azimzadeh E. Correlation between self-efficacy and nurses' conflict management strategies. *Journal of Health Promotion Management*. 2013;2(4):16-23
7. SH AANSL. Relation between self-efficacy sense and emotional intelligence with job burnout among the personnel of Islamic Azad university of Tabriz. *Journal of Educational sciences*. 2009;2(7):99-119
8. Haghani F, Asgari F, Zare S, Mahjoob-Moadab H. Correlation between Self-Efficacy and Clinical Performance of the Internship Nursing Students. *Research in Medical Education*. 2013;5(1):22-30
9. Salimi T, Karimi H, Shahbazi L, Dehghanpour M, Hafezieh AParandeh K, et al. Evaluation of Clinical Skills of Final Year Nursing Students in Critical Care Units. *The Journal of Shahid Sadoughi University of Medical Sciences*. 2005;13(3):60-6
10. Aitken L, Marshall A, Chaboyer W. *ACCCN's Critical Care Nursing: Elsevier Health Sciences*; 2016.
11. farmani p, zeighami mohamadi s. Viewpoints of the nurses in social security hospital of Karaj and Shahriar on nursing continuing education (2009). *Iranian Journal of Medical Education*. 2011;11(3):336-8
12. Ebrahimi H, Mohammadi Hosseini F, Amirnia M, Mehraee A, Jamali V, Hejazi SA. Factors Influencing Nurses' Participation in Continuing Education Programs in Tabriz University of Medical Sciences. *Iranian Journal of Medical Education*. 2012;12(7):518-26
13. Darvishzade MAS, Sakineh% A Garrosi, Behshid% A Hassanzade, Akbar. Reviewing Learning Styles Regarding Medical Students of Kerman University of Medical Sciences and Providing a Teaching Method Appropriate based on Their Views. *Strides in Development of Medical Education* . 84-376:(3)10;2013
14. RImaz S, Zarei F. Exploring the teaching and learning approaches from the viewpoint of postgraduate students and their lecturers. *Iranian Journal of Health Education and Health Promotion*. 2013;1(3):67-82

15. Adib-Hajbaghery M, Rafiee S. Comparing the Effectiveness of Group Discussion and Lecture Methods on the learning of medical sciences students: A Review Study. *Iranian Journal of Medical Education*. 2016;16(0):53-62.
16. Savery JR. Overview of problem-based learning: Definitions and distinctions. *Essential readings in problem-based learning: Exploring and extending the legacy of Howard S Barrows*. 2015:5-15.
17. Monzavi A, Sadighpour L, Jafari S, Saleh N, Kharazi Fard MJ. Viewpoints of Clinical Dentistry Students on the Factors Affecting the Quality of Lectures in Theoretical Courses. *Iranian Journal of Medical Education*. 2012;11(7):832-41.
18. Ghafourifard M, Haririan H, Aghajanloo A, Ghanei R. Comparison of case-based and lecture teaching methods the viewpoint of nursing student. *Education Strategies in Medical Sciences*. 2013;6(1):7-12.
19. Mollazadeh H, Kameli A, Mirhosseini F, SHOja M. Comparing the effect of education by lecture and multimedia software on learning of fundamental of nursing in nursing students. *Journal of North Khorasan University of Medical Sciences*. 2014;6(1):151-9.
20. Kianian T, Zare M, Ildarabadi E, Karimi Moonaghi H, Saber S. Evaluation of training competency of health care workers in training clients and patients. *Journal of nursing education*. 2014;3(1):60-51:(
21. Hafezimoghadam P, Farahmand S, Farsi D, Zare M, Abbasi S. A comparative study of lecture and discussion methods in the education of basic life support and advanced cardiovascular life support for medical students. *Turkey Journal of Emergency Medicine*. 2013;13(2):59-63.
22. Noohi E, Abbaszadeh A, Sayed Bagher Madah S, Borhani F. Collaborative learning experiences in problem-based learning (PBL) education: a qualitative study. *Journal of Qualitative Research in Health Sciences*. 2013;1(4):255-67.
23. Asadi A. The Role of Standardized Patient in Medical Education and How to Prepared. *Research in Medical Education*. 2007;1(1):47-51.
24. Zaghari tafreshi M, Rasouli M, Sajadi M. Simulation in nursing education: A review article. *Iranian Journal of Medical Education*. 2013;12(11):888-94.
25. Maas NA, Flood LS. Implementing high-fidelity simulation in practical nursing education. *Clinical Simulation in Nursing*. 2011;7(6):e229-e35.
26. Reese CE, Jeffries PR, Engum SA. Learning together: Using simulations to develop nursing and medical student collaboration. *Nursing education perspectives*. 2010;31(1):33-7.
27. Cheraghi F, Shamsaei F, Shaikholsalmi F, Hasantehrani T. Relationship between Self-Efficacy and Learning and Study Strategies in Nursing and Midwifery Students of Hamedan University of Medical Sciences. *Iranian Journal of Medical Education*. 2013;13(4):331-40.
28. Mustapha K, Gilli Q, Frayret J-M, Lahrichi N, Karimi E. Agent-based Simulation Patient Model for Colon and Colorectal Cancer Care Trajectory. *Procedia Computer Science*. 2016;100:188-97.
29. Pishgahi A, Dareshiri S, Owlia MB, Halvani A, Noori Majelan n, Salman Roghani H, et al. The Effect of Active Learning Method on Stability of Information and Satisfaction of Physiopathology Students in Yazd University of Medical Sciences. *Iranian Journal of Medical Education*. 2010;9(3):208-15.
30. Ghasemian Safaei H, Farajzadegan Z. Active participation of student s in teaching. *Iranian Journal of Medical Education*. 2012; 11 (9): 1129-30.20
31. Naderi A, Baghaei R, Mohammad por Y, Aliramaei N, Ghorban zadeh K. Comparison of the Effect of Competency-Based Education Model and Traditional Teaching on Cognitive and Clinical Skills Learning among ICU Nursing Students. *Iranian Journal of Medical Education*. 2012;12(9):698-708.

32. Momeni Danaei S, Zarshenas L, Oshagh M, Omid Khoda SM. Which method of teaching would be better cooperative or lecture? *Iranian Journal of Medical Education*. 2011;11(1):24-31.
33. Zia sheikholeslami N, Bahsoun M. New method of education in prescription of various infectious diseases through simulated patients. *Strides in Development of Medical Education*. 2014;10(4):504-6.
34. Manzari Z, Shahraki Moghaddam E, Heshmati Nabavi F, Mazloom SR, Khaleghi E. The effects of teaching by using standardized patients on critical care nurses' clinical decision making. *Iranian Journal of Critical Care Nursing*. 2015;8(2):69-78.
35. Yoo MS, Yoo IY. The effectiveness of standardized patients as a teaching method for nursing fundamentals. *Journal of Nursing Education*. 2003;42(10):444-8.
36. Owen AM, Ward-Smith P. Collaborative learning in nursing simulation: near-peer teaching using standardized patients. *Journal of Nursing Education*. 2014;53(3):170-3.
37. Sadeghnezhad H, Khazaei T, Nasiri A. Comparing the Effect of Concept Mapping to Clinical Simulation on Emergency Medical Students Clinical Decision Making. *Iranian Journal of Medical Education*. 2014;14(3):241-51.
38. Siassakos D, Fox R, Crofts JF, Hunt LP, Winter C, Draycott TJ. The management of a simulated emergency: better teamwork, better performance. *Resuscitation*. 2011;82(2):203-6.
39. Endacott R, Scholes J, Cooper S, McConnell-Henry T, Porter J, Missen K, et al. Identifying patient deterioration: using simulation and reflective interviewing to examine decision making skills in a rural hospital. *International Journal of Nursing Studies*. 2012;49(6):710-7.
40. Jafarimanesh H, Zand S, Ranjbaran M, Varvani Farahani P, Sadrkia GR. Comparing the effectiveness of SMS and lectures on the job training for nurses. *Iranian Journal of Medical Education*. 2015;15(0):579-88.
41. Henderson A, Cooke M, Creedy DK, Walker R. Nursing students' perceptions of learning in practice environments: a review. *Nurse education today*. 2012;32(299-302):
42. Heron PR. Effect of lecture instruction on student performance on qualitative questions. *Physical Review Special Topics-Physics Education Research*. 2015;11(1):010102.
43. Hora MT. Limitations in experimental design mean that the jury is still out on lecturing. *Proceedings of the National Academy of Sciences*. 2014;111(30):E3024-E.
44. Pearce RS, Okwuashi LO. Lecturing versus Teaching in Foundation and First Year Mainstream Chemistry. *Journal of Modern Education Review*. 2013;3(7):568-75.
45. Gaberson K, Oermann M. *Clinical teaching strategies in nursing*: Springer publishing company; 2010.
46. Maneval R, Fowler KA, Kays JA, Boyd TM, Shuey J, Harne-Britner S, et al. The effect of high-fidelity patient simulation on the critical thinking and clinical decision-making skills of new graduate nurses. *The Journal of Continuing Education in Nursing*. 2012;43(3):125-34.
47. Lotfi M, KHANI H, FATHI AE, Mokhtari M. Effect of compound education simulation and critical thinking strategies on clinical decision making in surgical technologist students. 2011.