Comparing the effect of traditional and role-play training methods on nursing students’ performance and satisfaction in the principles of patient education course

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Abstract:

BACKGROUND: Education is considered as one of the most important well-known roles of nurses, which is based on the patients' needs and awareness level. Thus, training the skill to nursing students is highly prioritized. The present study aimed to compare traditional and role-play training methods on nursing students’ performance and satisfaction in the principles of patient education course.

Materials and Methods: The present quasi-empirical study was conducted in 2019 among 36 fourth-semester nursing students at the School of Nursing in Borujen branch. In this regard, the students were randomly divided into experimental (n = 18) and control (n = 18) groups and trained through role-play and traditional methods, respectively. The data were collected using demographic questionnaire, training method satisfaction form, and student performance evaluation checklist (30 items), among which the two last ones were researcher made. Then, data were analyzed by SPSS software version 19 and using descriptive and analytical statistical tests such as Chi-square and Mann–Whitney.

RESULTS: The results demonstrated a statistically significant difference (P < 0.05) between the mean score of students’ satisfaction with teaching method in the control (17.15 ± 0.89) and experimental groups (19.03 ± 1.49), as well as between that of their performance in the control and experimental groups (115.31 ± 2.07 and 118.28 ± 3.59, respectively).

CONCLUSION: Based on the results, role-play training method affected nursing students’ performance in the principles of patient education course higher. Thus, using the method in training students and in-service training for nursing personnel is recommended to education planners and nursing education authorities for improving the skill.

Keywords: Education, nursing students, patient, performance, role-play, satisfaction, traditional training

Introduction

Nursing is considered as the science and art of caring patients based on their needs. The lack of awareness regarding disease and self-care pattern among patients is regarded as one of the most important common nursing diagnoses. Accordingly, education is one of the most main roles of nurses.¹ Nurses start to educate patients after recognizing information deficiencies, planning, and preparing curriculums by priority although a main raised is whether all nurses can teach or not.² Developing the nurses who can well teach required issues to patients and lead to the change in their hygienic behavior is considered as essential for providing a curriculum

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Despite the positive consequences of patient education, the results of research in Iranian health centers show that the important mission of patient education is not done well. Moreover, not only the patient but also the family and the community suffer from this. In this regard, evidence shows that only 31.7% of nurses’ educational activities are performed at the desired level.\(^3\)

One of the important pillars in the process of educating the patient is the ability to communicate effectively. Most medical students, including nursing students, are weak in communicating with the patient. They experience severe anxiety when attending the ward and caring for the patient. It affects their performance. On the other hand, gaining inappropriate clinical experience can lead to student frustration and learning disabilities, and by continuing this problem, the achievement of educational program goals can be disrupted. Role-play is regarded as a type of novel training method, in which learners play a role and can act independently and find an opportunity to use imageries and represent thinking and creativity. In addition, it allows learners to practice in a situation very close to reality, be aware of their different reactions during exposing to various issues, and strengthen their sense of cooperation and mutual communication and interaction, along with increasing their self-confidence.\(^3\)

Achieving all of the objectives requires correct planning to prevent wasting time and failing to take method seriously. The simplicity of the environment of training nursing skills compared to the complexity of real clinical situations is considered as one of the reasons for failing nursing education since students need to experience the consequences of their performance and solve the problems in real situations in order to obtain practical knowledge. Such experience is possible using standard patient and acting through role-play.\(^6\) Role-play is regarded as one of the training methods, which is widely applied to educate the issues requiring communication skills, which is clearly and extensively observed in nursing. In role-play methods, nursing students can perceive a hospitalized patient’s situation and conduct more proper procedures.\(^7\)

Therefore, it seems a necessity to take measures that pave the way for the closeness of the student experience and the real environment. Role-playing is one of the most widely used training methods for teaching communication skills. It has been mentioned. The results of various studies show that the role-playing training method leads to an increase in participants’ communication skills.\(^7,8\)

Considering the importance of patient education on the better improvement of their health level, as well as emphasizing different references on the effect of role-play in enhancing nursing index skills, the present study aimed to compare the effect of traditional and role-play training methods on nursing students’ performance and satisfaction in the principles of patient education course.

Materials and Methods

The quasi-empirical study was conducted in 2019 to assess the effect of traditional and role-play training methods on nursing students’ performance and satisfaction in the principles of patient education course. The statistical population included 36 fourth-semester nursing students at the School of Nursing in Borujen branch, who participated in the study after justifying fully and attracting their consent.

The sample included 36 fourth-semester nursing students who were selected using the simple sampling method. All participants signed informed consent. Information about workshop purpose and procedure was given to the participants orally or in written form. Confidentiality was kept by putting no name or other personal information in the questionnaires.

Studying at the fourth semester of the bachelor of nursing was regarded as an inclusion criterion.

Exclusion criteria included lack of consent for participation in the study, not attending the workshops, and incomplete questionnaires.

The students were randomly categorized into experimental \((n = 18)\) and control \((n = 18)\) groups by considering their attendance list in the course prepared using the SAMA educational software related to Shahrekord University of Medical Sciences based on the even and odd numbers. In addition, no difference was observed between the two groups with respect to demographic variables. First, a 1-day justification workshop was held to familiarize students in
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Experimental

11 (61.11)

118.28±3.59

Statistics (Z)

0.714

17 (94.44)

13 (72.22)

20.12±1.12

17.03±0.75

0.912

7 (38.89)

0.746

P

10 (55.55)

11 (61.12)

16 (88.88)

2 (11.12)

8 (44.45)

0.632

20.22±0.98

1 (5.56)

5 (27.78)

16.98±1.02

0.606

7 (38.88)

115.31±2.07

−2.065

0.000

0.000

44.45

11.12

5.55

11.12

17.88

0.85

0.79

0.85

0.79

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Table 1: Demographic characteristics of participants in the study of group differentiation

| Variable            | Experimental group | Control group | P   |
|---------------------|--------------------|---------------|-----|
| Gender              | Female             | 11 (61.12)    | 13 (72.22) | 0.746 |
|                     | Male               | 7 (38.88)     | 5 (27.78)  |       |
| Marital status      | Married            | 2 (11.12)     | 1 (5.56)   | 0.606 |
|                     | Single             | 16 (88.88)    | 17 (94.44) |       |
| Accommodation       | Dormitory resident | 10 (55.55)    | 11 (61.11) | 0.714 |
|                     | Nondormitory resident | 8 (44.45) | 7 (38.89)  |       |
| Age                 | 20.12±1.12         | 20.22±0.98    | 0.912 |
| Total average       | 17.03±0.75         | 16.98±1.02    | 0.632 |

Table 2: Comparing the mean score of students’ performance between experimental and control groups regarding the patients’ education

| Students’ performance regarding patient education | Mean±SD | P   | Statistics (Z) |
|--------------------------------------------------|---------|-----|----------------|
| Experimental group                               | 118.28±3.59 | 0.000 | −2.065       |
| Control group                                    | 115.31±2.07 |       |               |

SD=Standard deviation
Table 3: Comparing the mean score of training method satisfaction between experimental and control groups

| Training method satisfaction | Means±SD |  P  | Statistics (Z) |
|------------------------------|--------|---|---------------|
| Experimental group           | 19.03±1.49 | 0.000 | -2.140 |
| Control group                | 17.15±0.89 |      |              |

SD=Standard deviation

one. Rafii et al. evaluated the effect of role-play and traditional methods in improving nursing students’ caring skills and found no significant difference between the two methods probably due to small sample size.[6,8]

In addition, Maddi Neshat et al. reported that applying role-play more than one semester can positively influence mood change and empathy among nursing students,[7] which are in line with the results of Karbasi et al. They believed that role-play test is considered as an effective method for advancing the students’ understanding of nursing models and theories. Further, using the method results in encouraging students to have critical thinking about applying the nursing theories of the study and play a professional role.[9] According to Chan, play-role is an effective, active, and empirical technique leading to the facilitation of student learning and better to be associated with problem-based learning method during education.[10]

Role-play is considered as one of the training methods, which is widely utilized for educating communication skills. Nestle expressed that the students learn communication skills through role-play as useful method for discussing and realizing their competencies in curriculums.[11] Bosse represented that using curriculum through role-play increased students’ skills in communication significantly compared to conventional training one.[12]

Most of the medical sciences students such as nursing ones communicate patients poorly and feel severe anxiety during presenting in the ward, which affects their efficiency.[8]

On the other hand, one of the distinguishing features of role-playing is that the observer’s establish an emotional connection with the role-players, and this emotional state has a great impact on learning, because the learners look with all mind. The practice of learning is also better.[13] The role-playing method guides learners to understand social behavior, their role in social interaction and the development of empathy with others, and more effective ways to solve problems. The results show that the method plays a role in increasing the ability of students to empathize with patients and their understanding and support of patients’ physical and psychological problems.[14,15]

Vanwinkle also showed in his research that empathy increases immediately after performing a role.[15]

One of the reasons for students’ better performance can be considered to increase their self-confidence. Solve patient problems carefully.[16]

Ravert and Hunter believe that practicing skills through role-playing leads to better performance and that such students gain more confidence in the clinical environment.[17] Martinez Riera’s study also showed that role-playing helped students to facing real situations and reducing their worries.[18]

The results of different studies indicated the insufficient skill of nurses for communicating patient effectively and appropriately.[19,20] The experts suggested training in controlled environments to acquire skills and improve the ability for doing obtained skill. In other words, the limitation of learning environment and situation to reality leads to more effective learning, which role-play is considered as an appropriate method in this regard. The effect of role-play and other training methods was compared in the medical sciences field in different studies for selecting the best one. Baghdari compared the impact of role-play and group discussion methods on the performance of 30 midwifery interns regarding bad news transmission and reported a significant difference between the mean score ± standard deviation of individuals’ performance after and before training through role-play. In addition, the mean score of individuals’ knowledge in the role-play group increased significantly compared to the group discussion one.[17]

Schwartz applied peaked and traditional methods for educating two student groups, found the lack of advantage in using peaked on traditional method, and suggested conducting further studies to focus and recognize its positive educational outcomes.[21] The results of the two mentioned studies are inconsistent with those in the present study due to the lack of accurate evaluation method, appropriate instrument design, and educational objective-matched educational content. Education development centers and instructors should utilize medical education science to increase the effectiveness of the method. Experiencing under guidance and fitting with requirements are considered as essential issues for focusing key skills and objectives, caring in scenario preparation, providing personal feedback, and performance assessment.[22]

Based on the results, role-play training method resulted in motivating individuals to think about the intended role and was considered as more effective compared to other techniques. In addition, this teaching pattern
sought the problems at its simplest level and rooted in the individual and social dimensions of education.

**Conclusion**

Thus, using this training method, especially in the principles of patient education course, is recommended to educational planners in the school since it results in focusing individuals on patients and their behavior and affecting the strength of students’ communication skills.

The difference in the subjective ability of students in the two groups for learning the provided topics and number and type of the credits passing by students during the study and their psychological state in evaluation and educational meetings are considered as the limitations of the present study, although attempts were made to control through the techniques such as elimination and random allocation as much as possible.

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**Conflicts of interest**

There are no conflicts of interest.

**References**

1. Meleis AI. Theoretical Nursing: Development and Progress. 5th ed. Philadelphia: Lippincott Williams &Wilkins; 2011.
2. O’Shea E. Self-directed learning in nurse education: A review of the literature. J Adv Nurs 2003;43:62-70.
3. Noh GO, Kim DH. Effectiveness of a self-directed learning program using blended coaching among nursing students in clinical practice: A quasi-experimental research design. BMC Med Educ 2019;1:1-8.
4. Utleysmith Q. 5 competencies needed by new baccalaureate graduates. Nurs Educ Perspect 2004;25:166-70.
5. Shearer R, Davidhizar R. Using role play to develop cultural competence. J Nurs Educ 2003;42:273-6.
6. Rafii F, Haghdooost-Oskouie SF, Peyrovi H, Haghanii H. A comparative study of the effectiveness of the clinical practice of fundamental nursing through role-play versus traditional method on caring behaviors of sophomore-level nursing students. Iran J Nurs 2009;20:45-52.
7. Maddi Neshat M, Lashkardoost H, Tabatabaei Chehr M. Nursing students’ experience of training according to problem solving, based on role playing, and video clips in a department of psychiatry. The Journal of Medical Education and Development. 2014;9:57-69.
8. Baer AN, Freer JP, Milling DA, Potter WR, Ruchlin H, Zinnerstrom KH. Breaking bad news: Use of cancer survivors in roleplaying exercises. J Palliat Med 2008;11:885-92.
9. Karbasi F, Khatibian M, Soltanian A. The effect of teaching nurse-patient communication through role-play method on nursing students’ caring behaviors: A quasi-experimental study. Iran J Med Educ 2016;16:120-30.
10. Chan ZC. Role-playing in the problem-based learning class. Nurse Educ Pract 2012;12:21-7.
11. Nestel D, Tierney T. Role-play for medical students learning about communication: guidelines for maximising benefits. BMC medical education. 2007;7:1-9.
12. Bosse HM, Nickel M, Huwendiek S, Jünger J, Schultz JH, Nikendei C. Peer role-play and standardised patients in communication training: A comparative study on the student perspective on acceptability, realism, and perceived effect. BMC Med Educ 2010;10:27.
13. Bosse HM, Nickel M, Huwendiek S, Jünger J, Schultz JH, Nikendei C. Peer roleplay and standardised patients in communication training: A comparative study on the student perspective on acceptability, realism, and perceived effect. BMC Med Educ 2010;10:27.
14. Ward J, Cody J, Schaal M, Hojat M. The empathy enigma: An empirical study of decline in empathy among undergraduate nursing students. J Prof Nurs 2012;28:34-40.
15. Hunter C, Ravert PK. Nursing students’ perceptions of learning outcomes throughout simulation experiences. Undergrad Res J Hum Sci 2010;9:1-8.
16. Whitehair L, O’Reilly M. Media supported problem-based learning and role-play in clinical nurse education. Teach Learn Center 2010;1:1-14.
17. Baghdari N, Torkmannejad Sabzevari M, Karimi Moonaghi H, Rad M, Amir M. The effect of educational approaches on knowledge and attitude of midwifery students in breaking bad news to patients. J Med Educ Dev 2016;9:12-20.
18. Martínez JR, Luís JC, Pérez MM. Roleplaying in the teaching-learning process of the nursing degree. Assessment of graduate (profesionals). Rev Enferm 2011;34:17-24.
19. Ranjbar Ezzatabadi M, Mahdian M, Esfami H, Amini A. Patient education barriers from nurses’ opinions. J Holist Nurs Midwifery 2016;26:36-45.
20. Arian M, Mortazavi H, Tabatabaei Chehr M, Tayebi V, Gazerani A. The comparison between motivational factors and barriers to patient education based on the viewpoints of nurses and nurse managers. J Nurs Educ 2015;46:66-77.
21. Schwartz LR, Fernandez R, Kouyoumjian SR, Jones KA, Compton S. A randomized comparison trial of case-based learning versus human patient simulation in medical student education. Acad Emerg Med 2007;14:130-7.
22. Renning SB, Bjørkly S. The use of clinical role-play and reflection in learning therapeutic communication skills in mental health education: An integrative review. Adv Med Educ Pract 2019;10:415-23.