Original Article

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

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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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successfully.[3] Todays, educational planners emphasize the implementation of the most beneficial curriculum, and up-to-date, modern, and more efficient teaching methods should be selected to attain educational objectives.[4] The traditional teaching methods highlight lecturing and presenting issues by an instructor to students and are used to teach courses in most educational centers. The method possesses different disadvantages such as passive learning, lack of attention to learners' need, and poor breeding problem solving and creative thinking, and high-level cognitive skills despite its advantages such as providing a large volume of issues to a lot of individuals in a little time simultaneously. However, the nature of most courses is inconsistent with these types of teaching methods.[3]

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.[4]

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.[5]

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

the experimental group with role-play method and scenarios related to educational cases. In this regard, the control group students were categorized into three six-member subgroups and given a 1-week opportunity to assign roles, plan the method of implementing the presented curriculum, and prepare the required environment by a guiding relevant instructor after hearing the teaching topic. At class time, subgroups played the role and provided required education to hypothetical patients. In addition, the instructor and other students in the experimental group observing the implementation of their classmates filled evaluation checklist. Further, a full feedback of strengths, weaknesses, mistakes, and outstanding procedures was provided to students in subgroups at the end of each meeting, and other students in the experimental group had the opportunity to accompany the class by expressing their ideas, criticisms, and suggestions. Furthermore, the control group students were routinely taught through lecture, questioned by the instructor, and practiced on patient's bed. Then, some peaked, who were not in the class under study, were applied to hold final assessment, all students presented curriculum with the topic specified by the instructor, and he filled the checklist. Two expert professors possessing no familiarity with students and being unaware of their presence in the experimental and control groups were selected. Finally, the scores of checklists were summed and compared.

At the beginning of the sessions, the researcher presented the necessary information about the study and its purpose to the participants, and after obtaining consent, an agreement was reached on the time and place of the sessions. Participants were reassured that they were free to leave the study.

Demographic information questionnaire, student performance evaluation checklist (researcher made), and training method satisfaction form (researcher made) were used in the present study, the validity and reliability of which were separately assessed.

The student performance evaluation checklist was designed to investigate students' performance regarding patient education in 30 items, each of which was scored based on the five-point Likert scale (0 = poor, 1 = fair, 2 = somehow, 3 = good, and 4 = excellent). In addition, the minimum and maximum score of the checklist was obtained as 0 and 120, respectively.

Training method satisfaction form included 10 items, each of which was graded on the three-point Likert scale as disagree (0), partly (1), and agree (2). Thus, the minimum and maximum score of the form can be determined as 0 and 20, respectively.

The face and content validity of both questionnaires was assessed by four expert professors from Shahrekord University of Medical Sciences.

The reliability of student performance evaluation checklist and training method satisfaction form was investigated through test–retest with a 1-week interval among 20 nursing students and confirmed by considering $r = 0.85$ and 0.79, respectively.

Finally, the data were analyzed using descriptive and analytical statistical tests such as Chi-square and Mann–Whitney in using the SPSS software (version 19, SPSS Inc., Chicago, IL, USA). In order to observe the research ethics, the students of the control group were formed in the patient training workshop by playing the role.

Results

The number of participants in the study was 36 that were divided into two experimental and control groups. To ensure the homogeneity of the two groups, the demographic characteristics were compared and ensured that the groups were homogeneous [Table 1].

Tables 2 and 3 summarize the comparison of the mean score related to patient education, as well as training method satisfaction between the students in the experimental and control groups, respectively.

Discussion

The results of the present study demonstrated the effectiveness of role-play method on students' performance in patient education and higher students' satisfaction in the method compared to the traditional

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±098	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	Mean±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 carefull.[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.

Conflicts of interest
There are no conflicts of interest.

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