International Journal of Advanced Nursing Education and Research
Vol.5, No.2 (2020), pp.1-6
http://dx.doi.org/10.21742/ijaner.2020.5.2.01

Asthma Simulated Patient Simulation Team Learning Experience using Hybrid Model Method

Younsook Ju[1] and MuyeongSeak Yang[2]

[1]*Assistant Professor, Department of Nursing, Hanil University, South Korea*
[2]*Associate Professor, Department of Nursing, Jesus University, South Korea*
[1]*angelqueen@hanil.ac.kr*, [2]*medicms@jesus.ac.kr*

Abstract

This study attempted to learn about students' experiences facing problems through team-based simulation learning on asthmatic patients that nursing students can meet in clinical trials using hybrid model methods using asthma-standardized patients and human patient simulators. As this study is a qualitative study to find essential data and the cultural specificity based on the learning experiences of the simulation team about the asthmatic simulated patients, we used the participation-observation method in clinical practice by studying the learning experiences of the simulation team about the asthmatic simulated patients.

Keywords: *Student nurses, Simulation team learning experiences, Clinical experience*

1. Introduction

Nursing education has been studying various practical training methods to enhance field practice and to achieve core skills in each field of practice [1][2]. Various nursing teaching methods for clinical practices have recently been studied to enhance field practices and students' ability to perform manual nursing procedures according to practice fields. For the students to use the nursing practical-manual procedures, a clinical practice education is essential because the students have adaptation abilities related to theoretical knowledge, skill, and attitude through clinical practice education. However, in the clinical practice fields, the students don't have many opportunities to practice the nursing practical-manual skills directly but observe the nursing skills without a direct nursing intervention in the students' plan [3] because there are some difficulties such as lack of conversation with patents, protectors and medical team, refusal response of patients, their poor nursing skills and progressive clinical-practice situation than their theoretical knowledge [4][5]. To solve these problems and provide students with conative learning circumstances for basic understanding and clinical practical ability, a simulation nursing education is being used in nursing education, which is similar to the clinical field. It is reported that simulation education helps acquire practical-manual skills with core fundamental nursing skills as a class process imitating real situations because it uses computerized human patient simulators, scenarios, and standardized patient models. It is also reported that this method provides the students with safe learning circumstances and eliminates risks in actual clinical practice. Likewise, it has a positive effect

Article history:
Received (April 9, 2020), Review Result (May 12, 2020), Accepted (June 16, 2020)

by improving the self-efficacy, learning achievement, and class satisfaction of the students [6][7][8][9].

Further, recently, the Korean Accreditation Board of Nursing Education [KABONE] raised the clinical practice-time criteria from 10% (the second certification evaluation criteria) to 15% as the third certification evaluation criteria, meaning the simulation education increases. Simulation education inspires students to think critically. It promotes the absorption of knowledge related to conversation skills and clinical practice ability through the debriefing stage, in which they debrief their feelings and the interventions they plan when they realize the scenario between educators and learners [10]. Simulation education trains individuals or tea. In the case of team education, groups of 10 fewer are most effective [11]. However, simulation practice education improves the nursing practice ability and trains teams more than individuals.

It is reported that learning based on the team improves the problem-solving skills, interpersonal skills, and learning accomplishment of the students because the students can experience a process of thinking and integration, application, and evaluation of knowledge through active interaction, which can happen in clinical fields.

The learning method based on the team asks the students to change from their passive thinking to conative thinking, so it is necessary to carefully study how the nursing students accept new learning methods like the simulation based on the team and individually experience them.

Many studies found some simulation education methods, such as HPS (human patient simulator) and SP(standardized patients), mainly used in the learning based on the team. There is a limit to realizing the HPS, but using well-trained SP patients can more realistically realize the symptoms of patients than unstructured clinical learning circumstances. Team learning allows team members to classify and practice their roles. Also, they can study actual patients and realize the symptoms and feelings that patients can feel. The students who practice clinical training stress out about responding to patients' requirements in unexpected clinical situations and experience losing their self-respect and tremendous pressure. Especially in case the patients severely complain of pain like dyspnea and quick reaction is needed for treatment, they can feel the significant burden. Therefore, repeated simulation practice, which is similar to actual clinical fields, is essential to safely take care of the patients and for the students to gain confidence. This school organized each team for repeated practice with 4-5 members. Also, each team was asked to select a standardized patient who was the same as the patient in the clinical practice field. Also, they were asked to decide their roles and to write their scenario during the adult nursing clinical practice. According to the study, the scenario makes students think critically, select a proper intervention, and make a connection between the simulation experiences and the clinical practice experiences. We used the HPS when the standardized patient couldn’t realize something like a clinical patient. The scenarios students made were reviewed by two adult nursing professors and two experts who had been pulmonologists for over ten years. This study aims to understand the concrete-fresh education experiences of 4th-grade nursing students who experienced clinical situations with standardized patients.

2. Design method

2.1. Study design and design method

The study design uses qualitative methods and ethnography, such as interviews and observation, to find out the basic materials of the learning experiences of the simulation team about the asthmatic simulated patients. There are many ways to study culture, but the journal focuses on cultural perspectives as a qualitative research method that directly describes culture or lifestyle in society. Depending on how to view the concept of culture or on what to focus research, the Journal of Culture and Technology is expressed in various ways, such as the typical Journal of Culture and Daily Technical Research. The field study technique is used, which enters into the daily life site where human act happens. Participation, observation, and interview are the main methods.

2.2. Selecting the study participant and ethical consideration

The object of study is all 4th grade 11 nursing students in S-myeon in Jeollabuk-do. We explained the purpose of the research and selected participants who wanted to participate. For the ethical consideration, we explained the study purpose and process before starting the study. Also, we received their agreement on anonymity after directly explaining that their interview contents wouldn't be used except for the purpose and that their materials would be used anonymously.

2.3. Data collection

The data collection period was from September 21, 2016, to October 19, 2016, when the materials reached their maximum for four weeks. Participants in the study took courses related to adult nursing, respiratory system disorders, and part nursing. They selected 11 students willing to participate in the study from among the third-year students of the department of four-year nursing who had clinical practice experience in the respiratory system ward. The recruitment began shortly after the clinical practice was completed, and after the simulation class, the participants' consent was obtained and recorded. In addition, to ensure participants' confidentiality, the computer was given a number only researchers knew, removing information related to the participants. The in-depth interviews were conducted once or twice. The first interview was for 1 hour, and the second was for 60 minutes, focusing on the participants' uncertain parts and deficient statements. Also, the interview was conducted in the researcher's laboratory when the participants wanted. The recording date was written and analyzed using the same data.

2.4. Research problem and materials analysis

For the problem of what the team experienced using hybrid model methods to simulate asthmatic patients, two nursing doctors who have experience in qualitative research participated in the materials analysis process to reduce the researchers' subjective views, prejudices, and judgment errors, raise the study's confidence, and match the categorized and related domain contents with the source materials. A Korean literature major also participated in naming and discussing the process. Finally, this study was conducted with counsel and an appraisal from a nursing doctor.

3. Results

3.1. General feature of the participants

The age distribution of the study is 23-24 years old, and the average age is 23.03. The object of study is all 4th grade 11 nursing students in S-myeon in Jeollabuk-do. We explained the purpose of the research and selected participants who wanted to participate. The 4th grade comprises 11 students consisting of 4 Christians and four religions. They are all single. Five students live in their own houses, and six live apart from their families. Four students entered the nursing university with recommendations and advice.

3.2. Result according to the features of the participants

As a result of the Learning experiences of the simulation team about asthmatic simulated patients (the qualitative study), 54 source materials, 10 components, six categories, and four domains were drawn. The four domains are lack of knowledge, Difficulty in human relations, and Critical thinking and confidence.

3.3. Result

As a result of the study, lack of knowledge, Difficulty in human relations, and critical thinking and confidence were drawn from the objects.

3.3.1. lack of knowledge

The students stated that they made many mistakes at first but made fewer and fewer mistakes and could remember things they had learned at school for a long time without forgetting them through rechecking them at the clinical site.

“I could know the rationale of the nursing skills that I didn’t know by applying the nursing process.” (#6)

"By writing the scenarios, I could know diseases well, and it was good to learn the nursing practical-manual skills through the simulation." (#3)

3.3.2. Human relationship

While participating in the education, we experienced pain and trial and error together, and through repeating success and failure, we could see that fellowship was strengthened. As the process progressed, they showed consideration for each other, and it was extended to an accident to understand them by being in the position of a patient who was to be cared for.

"We became close through the group projects. Also, I thought that it's essential to figure out each feature." (#7)

“I realized the importance of cooperation and communication in the nursing field.” (#9)

3.3.3. Critical thinking

Previously, nurses’ nursing activities were often overlooked but often ignored. However, they were carefully monitored, and sometimes, they recognized the importance of basic nursing as they found the wrong nursing behavior.

“Because I could look at the activities of the other teams through a debriefing time, I felt lots of things differently from them, and I could be developed." (#9)

“I could learn things that I couldn’t realize through another team.” (#10)

3.3.4. Confidence

I was very afraid when I approached the patient. When Shin Hwan came from the ward, I thought, “That’s how they do it.” I was scared to approach the patient, but now I’ve seen the professor do it many times and tried it, so I’ve lost a lot of fear [11].

“My thinking skills, understanding, and consideration were improved." (#3)

“Because I realized the scenarios that I wrote, I felt self-confidence and sense of accomplishment.” (#11)

4. Discussion

The study's objective is to realize the various responses of the patients and the importance of communication through the simulation learning program process based on teamwork. They could also improve their clinical nursing knowledge and gain confidence in the team nursing practice. This is the result of the already experienced practice and repetitive learning. Therefore, it is essential to allow the students to practice in clinical fields with standardized patients, and it can improve their practicing skills and confidence in nursing practice skills. This simulation education accords with a study showing that critical thinking ability can be learned and selection ability can be improved.

As a result of this study, the learning experience of the simulation team about asthmatic simulated patients made the students build nursing knowledge and develop their critical thinking skills. Meanwhile, they experience relationship difficulty when they communicate with patients or colleagues. These experiences show that students can take time for self-examination through the learning experience. Also, they can experience acquiring knowledge and human relationships and gain self-confidence through critical thinking.

5. Limitation point of the study

This study was conducted on nursing students in the third year of a four-year university, and generalization is limited.

References

[1] Yoon Me-Ok and Ju Youn-Sook, “The effects of peer mentoring learnings-based preclinical OSCE program on self-confidence on core basic nursing skills and critical thinking disposition for nursing student,” Journal of Digital Convergence, vol.15, no.7, pp.285-295, (2017) DOI: 0.14400/JDC.2017.15.7.285

[2] Harden R.M. “Looking back to the future: a message for a new generation of medical educators,” Medical Education, vol.45, no.8, pp.777-784, (2011) DOI: 10.1111/j.1365-2923.2011.03934.x

[3] Garrett B., MacPhee M., and Jackson C, “High-fidelity patient simulation: considerations for effective learning,” Nursing Education Perspective, vol.31, no.5, pp.309-313, **(2010)**

[4] Bremner M.N., Aduddell K., Bennet D.n., and Van Gesst J.B, “The use of human patient simulators: Best practice with novice nursing students,” Nurse Educator, vol.31, no.4, pp.170-174, **(2006)**

[5] Jocelyn G., Trudy H., Rolando L., and Michelle M., “Team training simulation in perioperative nursing education,” The Journal of Nursing Education, vol.48, pp,388-394, **(2006)**

[6] Judith A. H., Janet M. P., Angela K., Karen H., Marjorie L. P., and Jennifer S. D., “Preparing nurse educators to use simulation technology: A consortium model for practice and education,” Journal of Continuing Education in Nursing, vol.42, pp.496-502, (2011) DOI: 10.3928/00220124-20110502-01

[7] Lewis D., and Ciak A., “The impact of a simulation lab experience for nursing students,” Nursing Education Perspectives, vol.32, no.4, pp.256-258, **(2011)**

[8] Kneebone R., "Simulation in surgical training; educational issues and practical implication," Med Educ, vol.37, no.3, pp.267-275, **(2003)**

[9] Kim H. R., Choi E. Y., and Kang H. Y.," Simulation module development and team competency evaluation," The Korean Journal of Fundamentals of Nursing, vol.18, no.3, pp.392-400, **(2011)**

[10] Frengley R. W., Weller J., Weller J. M., Torrie J., Dzendrowskyj P., and Yee B., et al., "The effect of a simulation-based training intervention on the performance of established critical care unit teams," Critical Care Medicine, vol.39, no.12, pp.2605-2611, **(2011)**

[11] Kim Y.J. and Chin, M.H, "The lived experience of nursing students for essential nursing core skills," Qualitative Research, vol.13, no.2, pp.105-116, **(2012)**

Authors

Younsook Ju, RN, RhD
Assistant Professor
College of Nursing, Hanil University
[55359] 726-15, Waemok-ro, Sanggwan-myeon, Wanju_Gun, Jeollabuk-do, Republic of Korea
Tel: +82-63-230-5676
E-mail: angelqueen@hanil.ac.kr

Muyeong s eak Yang, RN, RhD
Associate Professor
College of Nursing, Jesus University
[54989] 383, Seowon-ro, Wansan-gu, Jeonju-si, Jeollabuk-do, Republic of Korea
Tel: +82-63-230-7758
E-mail: medicms@jesus.ac.kr