EXPERIENCES OF NURSING STUDENTS ON SIMULATIVE LEARNING PRACTICE: A QUALITATIVE STUDY

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ABSTRACT

For nursing students, the way of learning is important because the nature of nursing education is not only depends on theory but also involves practical part that needs to handle the patients with sound clinical judgment and decision making skills. Moreover, students' performances in clinical settings are also influenced by the ways of learning. The ways they are exposed to the real situations make them more knowledgeable and skilful. Therefore, simulative learning practice was introduced in many nursing institutions as one of the alternative ways to expose students to the practical skills. However, there is still little research done to investigate on understanding the experiences of nursing students regarding the simulative learning practice. Hence, this research aimed to explore the experiences of nursing students on simulative learning practice in International Islamic University, Malaysia (IIUM) at Kuantan, Pahang. A qualitative, phenomenological approach was carried out in February to April, 2017 using a purposive sampling method. Ten nursing students who have been experienced in the simulation were selected as study participants. As the study findings, participants reported that simulation helped them to give exposure and experience the situation that can mimic real condition, and also gained confidence in practical skills. However, all of the respondents stated that the biggest challenge that they faced during simulative learning practice was anxiety and stress. Cooperation within the teamwork and time management also became the barriers for them to perform well at the time of simulation. A debriefing session after simulation played an important role to know the mistakes and reflect back their actions. Absolutely, simulative learning practice is important for nursing students and many studies proved that there are many benefits to students regarding competency skills due to this type of learning.

Keywords: Simulative learning practice, debriefing, challenges, benefits

Introduction

INTRODUCTION

Simulative learning practice is one of the types of learning that being used widely in nursing and medical programs. It is one of the ways to expose the nursing students to the practical settings and let the students experience the real part of the real situation through the scenario and task given to them. This is because nursing students are not only exposed to the theory parts, they should integrate their knowledge in the practice and being experts in the procedure they involved in order to avoid any mistakes that could interfere with the patient's life.

The history of simulative learning practice showed that the simulation had been used in aviation during the World War 2 and being continuously until today by training the pilots to have experience in engine failure, bad weather condition and power shutdown (Ward-Smith, 2008). History has also shown that, the simulation also had been grown in the nursing education before as students already used simulation by practicing injection into the orange. Then after technology have been grown, simulative learning practices have been used parallel with globalization with sophisticated mannequin that can mimic real patient in which it can blink its eyes which is called high fidelity simulation(HFS).

Many studies have shown that simulative learning practice gave good impacts to the nursing students. One of the examples is the simulative learning practice can develop students' critical thinking, knowledge, skills and also improved the teamwork within the team members Botma(2014). Despite the benefits of simulative learning practice, there are also disadvantages and barriers that could make students' dissatisfaction towards this type of learning to decrease their performances. There is still a little qualitative research had been conducted for understanding the experience and problems that faced by nursing students in simulative learning practice. Therefore, this research aims to be a platform to investigate their experiences in simulative learning practice and to investigate the barriers they faced while having this type of learning process.

RESEARCH QUESTION
What are the experiences of nursing students in their simulative learning practice?

RESEARCH OBJECTIVES
General objective
To explore the experience of nursing students in their simulative learning practice.

Specific objectives
1) To describe the student's feelings experienced during simulative learning practice.
2) To discover the problems/challenges/difficulties experienced by students during simulative learning practices.
3) To discover the benefits of the debriefing session in the simulative learning practice.

METHOD

A descriptive qualitative study was conducted on ten (10) nursing students from Kulliyyah of Nursing at IIUM Kuantan Campus to explore the participants' experiences from their points of view towards simulative learning practice. Purposive sampling method was used and conducted in February to April 2017 using a semi-structured interview after undergoing Ethical Committee's approval. Five students from year 3 and five students from year 4 of Kulliyyah of Nursing were selected according to the inclusion criteria such as all have experienced in simulative learning practice, willingness to participate and can speak English well.

The participants were interviewed separately and individually on different time at the same settings, which is in the Usrah Room, International Islamic University Malaysia, Kuantan Campus. The purpose of this study was explained and the consent form was given to the participants. They were given the right to choose either to participate or not in this study. All the participants had been interviewed not less than one hour and they have the right to stop during the time of interviewing. The interview had been conducted in the English and being recorded using audio recorder. The interview consisted of two parts. The first part was the demographic questions about their age, their roles in the simulation, and gender. Then the main interviewed were guided by five semi-structure questions which consisted of their perceptions and experience of simulative learning practice, the advantages of simulative learning practice, the disadvantages of simulative learning practice, the challenges they faced during simulative learning practice and the advantages of debriefing process.

The recordings were then transcribed manually. The thematic analysis was used to divide the theme and categories found in this study. The themes were investigated to identify the relationship between the each category. Then, for the final phase, writing data interpretation and contextualizing based on existing literature was involved.

Data trustworthiness

There are five criteria as proposed from the framework of Lincoln & Guba to determine the 'trustworthiness' in qualitative study which were credibility, dependability, conformability, transferability and authenticity (Polit & Beck, 2012).

Firstly credibility involved two criteria which are firstly the researcher do their study in a way that enhances the believability of findings and then, the researcher also trying to show the believability of their research to the readers (Lincoln & Guba, 1985).To ensure credibility/validity of the research, the study (document) will be rechecked with the participant involve after the data translation took place.

According to Polit& Beck (2012), dependability is the reliability of data instead of time and condition. Meaning that, the data are true at any time and condition and can be used on the same person despite of the similar context. On the other hand, the other also can make the research as their guideline also refers to dependability. To make sure the dependability of research, the data will be submitted and discussed with the expert and supervisor.

Transferability is the way the result of the findings can be used in another setting. As stated by Lincoln & Guba, it is the researcher's responsibility to give enough data to validate the applicability of the research. Then for the transferability of the research, interviews were recorded (audio). To obtain the data, researchers have to listen to it and transcribing the content of the recorded audio. Data saturation is important to make sure transferability in the research. On the other hand, conformability in this research was determined when the raw data will be recorded, respective journal, notes and memos had been taken. Lastly, authenticity in the research occurred when the researcher lets the participants to express their feelings and emotions according to the context of the phenomenon letting the greater understanding about the experiences. Authenticity also was shown by through by respondents' descriptions of the phenomenon and the ways the researcher analyze the data (Polit & Beck, 2012).

RESULTS

The respondents were students of Kulliyyah of Nursing, International Islamic University Malaysia at Kuantan Campus. All of the participants were Malay and able to speak in English fluently. Their age ranged between 23 to 24 years old. Five of the participants were from year three and five of them from year four of undergraduate nursing program. All of the participants expressed their feelings and described their experiences as well. Their experiences were coded into themes which are perceptions of the simulation learning practice, challenges during simulative learning practice, and reflections of the debriefing session and the effectiveness of the simulative learning practice in their simulative learning practice.

Perceptions of the Simulative Learning Practice

Their perceptions of the simulative learning practice varied as they have their own perceptions and values towards this type of learning. Some of the respondents agreed that the simulative learning practice is an effective method as simulation can help in preparing them in real condition especially in critical condition.

> *"This simulation learning practice is good for us to prepare in the critical situations but somehow it will makes us to feel more anxiety and sometimes we do not know it is good action or is it better action for patient…"* (Respondent 3)

Meanwhile, the other participants disagree simulative learning practice is effective as they assumed that it was being used for the assessment marks only.

"The simulation is not affecting my practice at all because the simulation is done at that time only, just for the mark and for the CGPA just for accessor…"(respondent 2)

Challenges during Simulation Learning Practice

All of the respondents stated that, the biggest challenges they faced during simulative learning practice was anxiety and stress. Some participants said they feel anxiety because they are over thinking that if they make mistakes in their actions, they could make the patient die. In addition to that, the feeling of wanted to do the best in performances could make their anxiety to increase if they worried they could not achieve their target. Their anxiety increased because they were being assessed by the lecturers and in front of other people.

"…during simulation I have anxiety because afraid that I will give bad action to the patient and cause patient die…" (Respondent 2)

"…as usual I feel anxiety and nervous also during simulation and I feel I want to do better…" (Respondent 1)

"Anxiety is normal things when we have examination and also eager to do but do not have the courage to do…" (Respondent 6)

"Besides that, I'm also getting very nervous when be assessed and did not very like to be in front of others. This makes me feel more anxiety as the lecturer is assessing me…" (Respondent 8)

In addition, during simulative learning practice, the participants were divided into several groups and the roles were given by lecturers. They also encountered the problems within the team members within the groups. They claimed that they have poor communication between the team members due to lack of practice and blamed each other.

"…it is the challenges if we don't have good communication in the team, we like did not function well…" (Respondent 6)

"The teamwork is not good compared to previously because I think because my groups maybe because we not practice and not study very deep for the scenario…" (Respondent 3)

"… my teamwork at the first very good but after that all become hectic and all seems to be blame to another because they think if patient die then we will fail" (respondent 5)

Moreover, the usual simulative learning practice was conducted within the limited time. Therefore time management is very important for them to save the patient in the scenario given. The participants claimed that they become blank when encountered the unfamiliar condition and equipment.

"Being blank during simulation is the difficulties that have to overcome. This is because, during the real simulation, the time management is important. If we delay so the patient might die" (respondent 10)

"…during simulation there is also the hectic time occur so in that situation we need to respond immediately…" (Respondent 6)

Reflections of the Debriefing Session

The participants agreed that debriefing process was beneficial for them as a debriefing process helped them to reflect their mistakes and they can know their weakness towards their action in the cases given.

"Yes it gave many benefits as it is our session to list out all our weakness and correct what wrong. If there is no debriefing session we don't know our mistakes and may repeat the same mistake again. This may harm the patient." (Respondent 9)

"… very good to do feedback because everyone of us know our weakness and also we know our mistakes?" (Respondent 1)

Some of the respondents also expressed that debriefing gave them encouragement to do better for the next future.

"We also have the others members to give support to us to complement us to give reflection" (Respondent 6)

"…I can learn more from reflection session so that I can improve myself in the clinical posting to perform better action during real situations…"(Respondent 4)

The Effectiveness of the Simulative Learning Practice

The participants listed out many advantages of simulative learning practice and the most common advantages where they could experience the real situation before facing the real condition as they will be posted to clinical settings.

"… is a good technique to expose us about the real situation in the emergency because in this week I posted in emergency and trauma…" (Respondent 1)

In addition to that, the participants also expressed that simulative learning practice increased their confidence level of their skills.

"After the simulation it gave me confidence to face the real situation as I am posted to the emergency ward after that…" (Respondent 8)

Then, the participants also reported that, simulative learning practice is good as it can increase their knowledge and gave the idea to them on how to do with the real situation that lead to reflective thinking.

"…I think it can increase my knowledge on what should we do in the real situation as we know the theory and practical parts are different…" (Respondent 7)

DISCUSSION

Students showed different attitudes toward simulative learning practice as they have their own experiences and views about simulative learning practices. Simulative learning practice can improve student performances in clinical settings that is the same with the previous study as the simulative learning practice could increase their confidence level in managing the real patient, judgmental thinking and improve their communication in giving the health education to the real patient and also promote critical thinking to predict the changes of the patient when giving the appropriate actions (Mohamed, Gonzales& Azazey, 2016). *Meanwhile, there are no relevant literatures and study found that simulative learning practice did not give any benefits to the students as claimed by the participants of this study.*

Students faced difficulties not only in simulative learning practice but also in the other types of learning. Anxiety is the common barriers that could interfere with the simulative learning practice. It is caused by being watched by the examiner and then no realism of the real condition (Cato, 2014)*. However, there is a study claimed that stress and anxiety is actually good for students as it can enhance student performances as stress and anxiety can stimulate the brain to remember more* (Cato, 2014). Therefore, there are many ways to overcome this anxiety which are the students should always practice the procedure to build the confidence level as confidence level can decrease student's anxiety and teamwork also important to alleviate anxiety (Briqech &Abousetta,2009)(Palethorpe & Wilson, 2011).

In addition, teamwork is also one of the challenges in the simulative learning practice as it involved group members. The study highlighted that the importance of teamwork, especially in the health care settings like intensive care, surgery and emergency nursing care (Fatimah,2010). Different roles within the team members teach students on how to have good teamwork. Lack of communication and practice between each role within the team members make simulative learning practice ineffective (Redden, 2015). Therefore, group members should have a good team leader that can lead the group well. This is important to avoid any problems within the team members and plan the time well for each role to act based on the scenario.

The process of the simulative learning process involved debriefing session, which gives many benefits to students. After a simulative learning practice, all the students gather together and gave opinions on their performances. They listed out their strengths and weaknesses and reflect back their actions and mistakes. Students pointed out that debriefing session gave benefits to them as it can be a medium for them to realize their mistakes and perform the correct procedures in the real clinical settings thus improve patient's care and safety (Pivec, 2011). Debriefing session might make student to feel sad because it looks like confession session, however debriefing can give encouragement to the students to perform better for the next simulative learning practice and be a more skillful nurse when they graduated (Fanning &Gaba, 2007).

Despite all of the challenges, there are many studies mention that the simulative learning practice is very effective ways to prepare students to have experiences that mimics the real condition as nursing students must encounter the clinical settings as their requirements to graduate. Thus, simulation experiences prepared the students for the clinical setting (Redden, 2015). One of the participants stated that learning theoretically is different with practically. A simulative learning practice also can increase their knowledge and can maintain the knowledge after simulative learning practice by integrating the knowledge of the clinical sites as simulative learning practice promotes theory-practice integration (Mohamed, Gonzales& Azazey, 2016). Furthermore, active learning, and realistic scenario that was provided during simulative learning practice increase student's learning practice thus ensuring a safe environment for the patients (Edgecombe,2013)(Song & Jeong,2015).

CONCLUSION

This paper presented regarding the experiences of nursing students on simulative learning practice. It proved that there are many benefits as well as some difficulties in this type of learning. This study gave new ideas and information to the nursing educators, lecturers and clinical instructors regarding how the students perceived in simulative learning practice. Then, they can provide a better platform for advanced nursing education in which to make simulative learning practice is more interesting and attract students to perform better and then used this opportunity again in simulative learning practice in future. Besides that, this research is recommended to do in the other medical education fields like pharmacology, medicine to know how the effectiveness of simulation for them.

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