Evaluating Psych/Mental Health Nurse Practitioner Student Perceptions and Satisfaction with Simulated Patient Scenarios

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Abstract

Simulation in health professional education is not new, particularly the use of standardized patients (SP). SPs are seen as an effective teaching strategy and as a method of protecting actual patients from harm. However, the use of SPs in graduate level psychiatric mental health nurse practitioner (PMHNP) curricula has not been studied in depth, including the use of a standardized instrument specifically developed for simulation to measure student satisfaction and confidence with simulation. The aim of this pilot study was to explore the student perceptions, satisfaction, and confidence in the simulated learning environment using SPs with a sample of PMHNP students. The hypothesis of using simulated scenarios using SPs resulting in high student satisfaction and confidence ratings as measured by the standardized instrument were supported in this pilot study. Narrative comments reflect a positive impact on learning in a non-threatening learning environment.

Simulation in healthcare education is not new, including the use of standardized patients (SP) which are seen as an effective teaching strategy and protecting actual patients from harm (Ziv, Wolpe, Small, & Glick, 2003). This article will describe a pilot study undertaken to measure student satisfaction and confidence and explore the students' perceptions of the educational impact with the use of SP simulation (SPS) in a sample of graduate level psychiatric mental health nurse practitioner (PMHNP) students.

Specific Aims and Research Questions

The aim of this study was to explore the student perceptions, satisfaction, and confidence in the simulated learning environment using SPS in a sample of PMHNP students. The guiding study hypothesis was that the use of simulated scenarios using

SPs will result in high student satisfaction and confidence ratings and positive narrative comments.

Background and Significance

Simulation has been shown to increase clinical skills and judgment (Luctkar-Flude, Wilson-Keates, & Larocque, 2012), increase collaboration and communication (Will & Weinschreider, 2011), and heighten awareness (Foley, Nespoli, & Conde, 1997). In addition, students view simulation as an effective means of learning (Gibbons et al., 2002). Compared with other methods of simulation, such as mannequins or online simulation, SP usage resulted in increased student satisfaction over other methods (Kameg, Mitchell, Choshesy, Howard, & Suresky, 2009). SPs are viewed as an effective means of learning as well as providing student and faculty with valuable feedback (Ebbert & Connors, 2004), decreasing the anxiety level of students (Bramble, 1994), and providing a realistic simulation setting (Gates, Fitzwater, & Telintelo, 2001).

Beginning evidence indicates SPS increases the transfer of learning from SPS activities to the clinical setting (Rutherford-Hemming, 2012). However, when SPS is used for evaluation, this method has been criticized as not being a true reflection of the students clinical performance when use for evaluation purposes (Vessey & Huss, 2002), but this view is not universally supported (Ebbert & Connors, 2004; O'Connor, Albert, & Thomas, 1999).

Specific to psychiatric nursing, SPS has been cited as reducing the risk to an actual patient, promoting active learning, and allowing a standardized approach to learning (Kameg et al., 2009). The use of SPS in both undergraduate and graduate levels has been cited as increasing clinical skills and having the ability to provide rapid feedback (Festa, Baliko, Mangiafico, & Jarosinski, 2000; Shawler, 2008) and allowing reflection (Brown, 2008). There is a paucity of information from the current research in the use of a standardized evaluation method for assessing student satisfaction and confidence building with PMHNP SPS.

Theoretical Framework

Since this study focuses on adult students learning material in the simulated setting, the overarching theoretical framework is based on the Andrological Model of education (Knowles, Holton, & Swanson, 2005), in which adults are thought to come into the

educational activity with varied clinical experiences and a readiness to learn. In this study, participants had previous experience with multiple clinical sites and preceptors which brought together robust previous experiences to the simulation setting. Additionally, participants were graduating from a program with a clinical focus and would directly apply knowledge to management of patients, increasing the importance of simulated activities in their preparation for the new nurse practitioner role.

Research Design and Methods

The research team used a previously developed simulation instrument, the National League for Nursing's (NLN) Student Satisfaction and Self-Confidence in Learning (SSSCL) as an objective measure of student satisfaction and self-confidence with the SPS in this exploratory descriptive study. The SSSCL was developed as part of the nursing simulation research undertaken by NLN and Laerdal Medical (NLN, 2006) and contains 13 items in two subscales: 5 student satisfaction with the simulation activity items and 8 student self-confidence items. SSSCL items are rated on a 5 level Likert scale ranging from 'Strongly Disagree' to 'Strongly Agree' with a neutral category. The reported reliability is based on the two subscales: Cronbach's alpha for the satisfaction items is 0.94 and 0.87 for the self-confidence items (NLN, 2012). The researchers included 3 narrative questions to expand on the quantitative data obtained from the SSSCL.

After IRB approval, SPS activities were scheduled in the PMHNP course as part of the course requirements. A recruitment script announcing the post-simulation survey was emailed to enrolled students requesting participation. SSSCL item responses were uploaded into the Statistical Package for Social Sciences (SPSS) for descriptive analysis. Narrative data were analyzed using content analysis design as outlined by Weber (1990) for identifiable themes. Emergent themes from the narrative responses were compared to the original narrative data as a verification process.

SSSCL Instrument Results

Eleven participants completed the post-simulation survey indicating a 100% response rate. The means for the student satisfaction items ranged from 4.3 to 4.64 indicating an overall rating of 'agree' for each of the five items. Student confidence item means ranged from 3.00-4.73 indicating agreement with all but one item: 'It is the

instructor's responsibility to tell me what I need to learn of the simulation activity content during class time'. The negative wording of this particular item may explain the mean for the item as 3.0 or 'neutral'.

Narrative Response Results

The three narrative questions asked participants how the SPS positively or negatively impacted their learning along with a third open-ended question for any further comments.

Positive Impact

In examining the verbatim responses, the investigators identified several themes regarding the positive impact of the simulation on the participant's learning to survey question 'Describe how your simulated learning experience was positively impacted with the use of standardized patients during this simulation activity'. The first two emergent theme categories, Gave Confidence and Provided Feedback appeared to be closely intertwined. The emergence of these themes was evidenced by written comments such as: "The experience gave me confidence and I knew I would have feedback from my classmates and instructors" and "I loved the input from others that helped to think outside of my own box".

Another emerging theme was Believability/Authenticity, in which participants viewed SPS as credible and believable, mirroring situations they had encountered and expected to continue to encounter in clinical settings as illustrated by comments such as "The two standardized patients were closely representative of patients in psych settings. They both followed their script/role exceptionally well and this provided an experience that mirrored real patient situations . . . they played their part without budging or giving too little or too much information" and "The standardized patients … made the situation believable". Thus, exposure to situations that encouraged the participants to reflect upon their own current clinical behaviors-both therapeutic and less than effective-was perceived as useful.

An additional theme, labeled Facilitating and Enhancing Learning, describes enhancing learning through the "gelling" process depicted by comments such as: "It (simulation) puts you in the environment you will be in when you graduate . . . you need to bring all your working knowledge learned in the PMHNP program together. It really

helps it to gel much better". This theme is further supported by comments "It assisted in learning because the session was discussed post interview. It was a form of learning" and "The simulation experience helped me to enhance the learning of my communication skills."

Several participants commented on how their thinking processes seemed to expand through observing peers interact with a SP and resulting in the Critical and Reflective Thinking theme as a focus of this learning activity and is exemplified with participant comments such as "We all think or approach things so differently so that was a plus to see how others would do the simulation" and "The 'patients' were able to present real life situations that brought up questions that I had previously not thought of."

Lastly, the Support from Peers/Instructors theme was described as support from the group, including the faculty. Some descriptions of group support included "The student group was very helpful in giving constructive feedback. Maybe we are lucky or fortunate enough to have a good group of students who wanted to learn, friendly—so nobody was out to get each other" and "I was positively impacted by the students and instructors providing feedback to me on my performance".

Negative Impact

In analyzing responses regarding negative impacts with SPS, participant's had far fewer comments than the positive learning impact comments. The majority of responses surrounded the major theme identified as Not Negative. Exemplars of this theme include comments such as "Was not negatively impacted", "No negatives", and "I cannot think of any negative comments."

Although the question was directed toward describing negative experiences, two other themes emerged in this response set. One theme identified is Lack of Experience/Accentuated the Things I Still Need to Learn based on comments that SPS evoked a need to learn more and it was "illuminating". Comments about the release of nervousness over time and the understanding that it was a "relaxed" and "non-judgmental" exercise were meaningful since the purpose of using SPs is learning to develop therapeutic relationship with SPs and transferring the positive skills learned to real patients.

The narratives described that the experience did provoke anxiety, resulting in the

theme Anxiety Provoking depicted by “Simulation . . . can be a nervous experience when you don't know what to expect or how to be flexible with your patient” and “I was a bit nervous for the first simulation activity as time went on, I saw how relaxed and nonjudgmental the environment was so in the end, it was still positively impacted.”

Other Comments

The open-ended question requested any other comments. Although the sample size was small, this question garnered 10 responses. The first main theme, Beneficial, indicated that the participants felt that the simulation experience with the SPs was beneficial and useful for gaining more skills “This learning experience is more beneficial than paper pencil tests/quizzes because each person provides something different” and “It was a good experience. I could experience myself gaining more skills to interview the patients”

The second major theme, Working Together, surrounds the concept of working together as a group simulation. In the context of the online didactic environment, and individually precepted clinical experiences, this SPS allowed students to interact with each other in a non-threatening manner as a group as reflected by the participant comment “helps when students are willing to work with one another”. The last major theme, More Simulation, supports preference for more SPS in their education with comments such as “should probably do more” and ‘I thought they were helpful”.

Discussion

The participants in this particular study had been in a largely isolated learning environment of online didactic education and individually precepted clinical experiences before SPS. Thus, this experiential training may have been especially welcomed by the participant group. The exclusively unsynchronized online format may have produced problems for both the students and faculty. For example, how do faculty effectively guide students in their attempts to negotiate an encounter with a patient suffering from emotional pain with no opportunities to observe the nuances of verbal and nonverbal communication of a given student? From the student perspective, the absence of forming a face-to-face group with each other had been reportedly seen as a disadvantage. SPS was seen as a method of connecting students and providing the possibility of a standardized experience for all the participants.

In addition to the interactivity of SPS, the use of the SSSCL helped to illuminate and quantify the positive aspects of simulation as evidenced by high participant ratings for confidence and satisfaction items regarding SPS. The limited interaction of faculty and peers before SPS may explain some of the high ratings on the SSSCL and the positive comments in the narrative responses; in fact the survey was administered immediately after the first simulation-the first shared learning experience in the PMHNP curriculum at the study site. In addition to the high SSSCL ratings, the preponderance of narrative comments was regarding the positive impact on the educational experience. This is consistent with other reported positive impacts from SP simulation activities (Kameg et al., 2009), enhancing learning, and providing faculty and participants with feedback (Ebbert & Connors, 2004; Shawler, 2008). Responses reflected previous studies in that the SP simulation provided a 'realistic' and effective simulation environment (Errichetti et al., 2002; Gates et al., 2001; Humair & Cornuz, 2003; Peabody et al., 2000).

In keeping the results in context, this group of participants was relatively small in contrast to other nurse practitioner tracks at the study site. Also, the previous lack of direct peer and faculty interaction in this program may have biased the enthusiastic responses due to the novelty of the simulation activities. As the body of literature surrounding psych/mental health nurse practitioner simulations is extremely limited, it is difficult to ascertain if similar findings would be found in other samples.

Conclusions

This study helps to build the body of knowledge surrounding simulation with PMHNP students incorporating SPs. Even though the sample size was small, findings include overall positive ratings on the SSSCL instrument in regards to student satisfaction and student confidence. Participants' narrative comments indicate that the simulation was a satisfying positive learning method that enhanced learning and gave confidence. The combined SSSCL ratings and narrative comments reflect an overall positive learning experience for the PMHNP students.

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