ORIGINAL RESEARCH

Student evaluation of a health history assessment with standardized patients

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ABSTRACT

Background: Students previously reported they did not feel well prepared for health history assessment in the clinical setting. Students felt that more experience prior to beginning clinical would better prepare them to adequately complete a health history assessment.
Methods: First semester nursing students in a pre-licensure baccalaureate program participated in a simulation where they collected health history data on a standardized patient prior to beginning hospital clinicals. Six weeks later, students evaluated the simulation's effectiveness in preparing them for clinical.
Results: Out of a 14-item survey, where agreement indicated effectiveness, two items had a mode of 0 (do not agree), five items had a mode of 1 (somewhat agree) and seven items had a mode of 2 (strongly agree). The mean of all questions was 1.31.
Conclusions: Overall, students found the simulation beneficial and effective in preparing them to complete a health history assessment in the clinical setting.

Key Words: Nursing, Simulation, Health history, Standardized patients

1. INTRODUCTION

Educators are continually looking for opportunities to improve students' performance and level of confidence in the clinical setting. The use of simulation as a learning strategy has been employed throughout nursing curriculums as a way of educating students in a less threatening, standardized environment.[1] A current theme regarding health history assessments was identified among first semester nursing students in a Bachelor of Science in Nursing program in the eastern United States. Many students felt prepared to assess vital signs, complete bathing, and transfer patients in the clinical setting due to the ability to perform these skills successfully at check-off times satisfactorily. However, the health history assessment was a recurrent area of students' feedback year after year as they were transitioning from the laboratory setting to the clinical area. Students felt they were least prepared to gather patient data and collectively perform a health history on a patient in a health care facility. Based on this feedback, the health history assessment simulation with standardized patients (SPs) was created and implemented.

2. SAMPLE/METHOD

For the simulation, each student was assigned to an SP for a one-on-one health history assessment. All SPs were upper-level nursing students who had previously taken this course. This allowed the SPs to know what information the student would be seeking or should have asked. SPs were instructed to provide assessment data specific for a certain complaint,

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such as a sprained ankle or dehydration. Props were used while playing the role, like a walking boot or a concentrated urine sample.

The health history assessment had been reviewed with the students in the classroom setting, which gave them background information on how to collect the data and explanations regarding the health history questions. Prior to the simulation, students were only given the chief complaint of the patient. Students then completed the data collection for the first time with an SP in the lab setting rather than in the clinical setting. The students were given one hour to complete the health history assessment. Faculty observed the students via audiovisual resources and were not present in the room at the time the assessments were completed.

Following the simulation, SPs gave students immediate written feedback on the process, using a five-item feedback form. These items focused on the student's introduction, therapeutic communication, use of safety and privacy measures, and performance of skill. During the debriefing period, groups of three to four students met with the simulation coordinator. The feedback from the SPs was addressed and students were allowed a brief time to discuss an overall view on how things went with their patient. Then, each individual SP's assessment was reviewed with the respective student. Based on the assessment data collected, students were assisted in identifying that patient's main problem, which led to developing a nursing diagnosis, a care plan, and a teaching plan for their patient. The students submitted their health history assessment with a finalized care plan and teaching plan for the lab instructor to review and give individual feedback on.

Although Kol et al.[2] discussed the use of SPs in assisting with skills acquisition and communication processes, not all scenarios were exactly the same. With high fidelity simulations, faculty can control the specifics of what happens, allowing for sameness throughout each group. With SPs, although the scenarios may be the same, each student will not have the same experience, potentially affecting the debriefing period.

Approximately six weeks after the simulation, students were asked to evaluate the experience. This survey was created by the authors based on the objectives and goals of the simulation. This time frame allowed students to have completed several clinical hours in the hospital. Students were asked to anonymously rate 14 questions as do not agree, somewhat agree, or strongly agree. Agreement on the items indicated a positive view of the simulation's effectiveness. Do not agree was assigned a numeric value of zero (0). Somewhat agree was assigned a numeric value of (1). Strongly agree was assigned a numeric value of two (2). Students were also able to write additional comments if they desired. The survey was voluntary and was completed in person. After surveys were collected, the students were assigned a number to their papers as data were entered into a spreadsheet in excel. All paper surveys were then destroyed by shredding after data were finalized. Data were saved on a password protected computer. IRB exemption status was received from the university where the School of Nursing was located. Descriptive statistics were used to describe the survey results.

3. RESULTS

A total of 47 students (90%) participated in the 14-item survey. The students responded more favorably to items that pertained to interpersonal skills, such as working with live patients and gaining feedback from others. However, students scored items that addressed intrapersonal skills, such as confidence and anxiety, less favorably. Individual means ranged from 0.9 to 1.8. The overall mean for the survey was 1.31, which was interpreted as a beneficial and effective simulation experience.

Students overall ranked the following two survey items as a mode of zero (0) or do not agree: "I felt less anxious my first day of clinical because of the simulation" (mean 0.89) and "I felt better prepared to care for real patients after the simulation" (mean 1.19). The following five items were ranked as a mode of one (1) or somewhat agree: "I felt more confident that I will be able to recognize changes in my real patient's condition" (mean 0.87), "I felt more confident in my decision-making skills" (mean 0.94), "I felt that completing the simulation helped me understand classroom information better" (mean 1.10), "I felt the simulation made me more comfortable with therapeutic communication" (mean 1.13), and "I felt the simulation made me more comfortable with the paperwork" (mean 1.30). The remaining seven items were ranked as a mode of two (2) or strongly agree: "My assessment (paperwork and physical assessment) skills improved" (mean 1.34), "I felt challenged in my thinking and decision-making skills" (mean 1.39), "I felt the live patient responses were appropriate for the simulation requirements" (mean 1.53), "I felt the feedback on my paperwork submission was valuable to making improvements for clinical" (mean 1.55), "I was able to complete all requirements of the paperwork with what was available during the simulation" (mean 1.55), "I felt the live patients offered a better experience than if manikins would have been used" (mean 1.74), and "I felt debriefing and group discussion were valuable" (mean 1.79).

Table 1. Evaluation survey data

	Mean	Mode
I felt better prepared to care for real patients after the simulation	1.19	0
I felt the simulation made me more comfortable with the paperwork	1.30	1
I felt the simulation made me more comfortable with therapeutic communication	1.13	1
I felt less anxious my first day of clinical because of the simulation	0.89	0
I felt more confident in my decision-making skills	0.94	1
My assessment (paperwork and physical assessment) skills improved	1.34	2
I felt more confident that I will be able to recognize changes in my real patient's condition	0.87	1
I felt that completing the simulation helped me understand classroom information better	1.10	1
I felt challenged in my thinking and decision-making skills	1.39	2
I felt debriefing and group discussion were valuable	1.79	2
I felt the feedback on my paperwork submission was valuable to making improvements for clinical	1.55	2
I felt the live patients offered a better experience than if manikins would have been used	1.74	2
I felt the live patient responses were appropriate for the requirements simulation	1.53	2
I was able to complete all requirements of the paperwork with what was available during the simulation	1.55	2

There were 17 students (36%) who added a narrative comment. Of those comments, six (6) students gave feedback on how the simulation could be improved regarding information to be given or covered prior to beginning the simulation. Comments regarding improvement include the need for more information to be given on the patient prior to starting and the need for additional time to review the paperwork prior to the simulation. One student commented that the process was confusing and felt they needed more information on how simulations occurred prior to starting, as this was their first simulation experience. Three students stated the experience better prepared them for clinical. Of the comments provided, three students specifically addressed debriefing and these students reported that they found this aspect to be most helpful of the simulation experience. An additional comment regarding debriefing reported that the student wished equal time would have been spent on care plans and teaching plans as the care plan took longer to adequately cover. One student wished that additional simulations or scenarios could be completed prior to starting clinicals. Other comments included topics such as the need to have SPs who were not nursing students so that the paperwork was not known by the patient, the scenarios were unrealistic, patients were too "extreme" in their complaints and responses, and some SPs provided incorrect feedback on their evaluations of the student based on faculty observed the students via audiovisual resources.

4. Conclusion

Students found the experience overall beneficial and the simulation effective in preparing them to complete a health history assessment in the clinical setting. Future modification could include the requirement for a student to complete a health history assessment on a peer prior to the simulation for future students. This would be in addition to covering the health history assessment information in class. An SBAR (situation, background, assessment, and recommendation) report could be given by the instructor prior to beginning the simulation. The ability to use volunteers other than students from the nursing program could be considered. Additional modifications could also include more questions on the survey regarding student's perceptions psychologically about what they were feeling during the simulation. Although there is much research available praising simulation for the positive teaching-learning results for students, Gharaibeh at al.[3] discussed that not all students feel that simulation has positive effect on learning. Many students leave the simulation area feeling stressed or uncomfortable even if the objectives of the simulation are met. In addition, Stephen et al.[4] stated that even though a simulation scenario may go flawlessly, students may still perceive psychological distress throughout the simulation process. If we want to grasp the learner's perspective, this would be an important item to gather.

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No additional data are available.

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