

**Learning through debriefing:
Undergraduate nursing students' perspectives**

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Abstract

Because of the importance of feedback given to learners during post-simulation debriefing, it is critical that educators understand the characteristics of debriefing that allow learners to engage in the complex cognitive processes that lead to learning. This qualitative study will use an interpretive phenomenological method, guided by experiential and social learning theory, to identify the characteristics of debriefing that lead to learning. The primary investigator in this study has completed basic and advanced training in post-simulation debriefing, and has personally debriefed over two hundred simulations during the past three years. The PI's initial study of students' experience in debriefing was completed as part of a doctoral-level qualitative research class. This study will extend that initial work, as well as contribute to the foundation for future dissertation research focusing on best practices in debriefing.

Significance

Debriefing following a simulated clinical experience is believed to be the most important component of the experience. Two comprehensive reviews of simulation-based medical education identified feedback as the most important variable to promote effective learning (McGaghie, Issenberg, Petrusa, and Scalese, 2010 and Issenberg, McGaghie, Petrusa, Gordon, and Scalese, 2006). Shinnick, Woo, Horwich and Steadman (2011) found that students who were not debriefed following a simulated clinical experience had lower post-test scores compared to those who were debriefed, in whom post test scores dramatically increased. The monograph published following the research consensus meeting of the Society for Simulation in Healthcare (Raemer, Anderson, Cheng, Fanning, Nadkarni, and Savoldelli, 2011) called for qualitative research specifically looking at the characteristics of debriefing that convey the greatest advantage in terms of learning. Qualitative research provides nursing educators the opportunity to generate the rich understandings of the complex environment in which our understanding can be found (Regehr, 2009). Two previous qualitative studies have reported on students' experience in debriefing (Cantrell 2008 and Lasater 2007). In these studies, faculty demeanor, use of probing questions, and timing of debriefing were identified as elements of debriefing that were important to students. Further qualitative studies were called for to explore how faculty demeanor and other elements influence student learning during debriefing. Nursing educators can benefit from this understanding. This study provides the opportunity to understand the cognitive processes our students engage in during debriefing that advance their learning, and the characteristics that facilitate the learning process. From this, we have the potential to generate best practices in debriefing, and by doing this, close the performance gaps in nursing students.

Question

What is the learning experience of undergraduate nursing students during post simulation debriefing?

Methodology

This qualitative study will use interpretive phenomenology methods as described by Van Manen to explore the cognitive processes students engage in to further their learning during post simulation debriefing. The conceptual framework guiding the study is experiential and social learning theory. The principle investigator will work with a research team composed of an experienced qualitative researcher who holds a PhD and two research assistants who are PhD students and who have completed a doctoral level course in qualitative research. Approval for the study will be obtained from the university Institutional Review Board.

The study will be conducted at a large urban university with an enrollment of approximately 500 entry level nursing students. This study will use a convenience sample of students enrolled in the Bachelor of Science program who will be participating in two required high fidelity simulations during their first medical surgical nursing course. Enrollment in the course is approximately 80; it is expected that at least four focus groups of six students each will be required to identify categories.

The primary data collection technique is focus groups. Students will participate in two simulated clinical experiences, each of which will be followed by debriefing. The debriefing will be conducted using the Debriefing with Good Judgment Model (Rudolph, Simon, Dufresne, & Raemer, 2006). Debriefing will be conducted by the primary investigator, and will consist of oral debriefing only (no video playback). Debriefing will last at least 30 minutes, but no longer than 60 minutes. Following the two simulations and debriefings, students will volunteer to participate in a focus group. The focus groups will be conducted by one of the research assistants. The research assistant will conduct the focus group in a private room away from the simulation lab using open-ended questions (based on the conceptual framework) in a semi-structured format. Field notes will be recorded by a second research assistant and will include information such as: the direction of interactions (e.g. learner to learner vs learner to faculty), non-verbal communication (e.g. eye contact, head nodding/shaking), and notes regarding the environment such as seating arrangements. The focus group will be audio recorded for subsequent transcription. The focus group will last approximately one hour. Participation in the focus groups is voluntary; course grades will not be affected by participation (the simulation experience is not graded).

Data analysis will be completed using the following procedure. Focus group discussions will be transcribed by the research assistants and the PI individually. The PI and research assistants will then verify the transcribed interactions by listening to the audiotape while reviewing the transcript developed

by another member of the team. During this process, any identifying data will be removed. Independent analysis will be followed by team analysis once accuracy of data has been verified. The PI will consult with the experienced qualitative researcher to ensure accuracy at each stage of coding. Once codes are complete, codes will be evaluated and grouped into themes, and subsequently categories. Participants will be invited to join a voluntary discussion group to review and verify categories that emerge from the analysis. Any corrections/revisions based on participant feedback will be incorporated. A final draft of categories will be reviewed by the experienced qualitative researcher for accuracy.

The following strategies will be used to ensure trustworthiness of data. Researcher bias will be clarified. The PI is vested in debriefing, and believes that debriefing is essential to learning in clinical simulation. Awareness of this bias and peer review of data will assist in decreasing this bias. Prolonged engagement will be achieved through the one hour focus group and with follow-up discussions to verify themes. Peer review and peer debriefing will assist with validation of findings. An audit trail will be kept to record all methods used for data collection, coding decisions and final analysis. All records will be kept in a locked file that can only be accessed by the PI.

The main limitation to this study is the sample size. Because of the size of the sample and the purposive sampling technique, the results may not be generalizable to all nursing students.

Outcomes

The main outcome of this qualitative study is identification of the characteristics of the debriefing process that lead to learning. From this information, best practices in simulation can be identified. These proposed best practices can guide further research as well as practice.

Evaluation

The outcomes will be evaluated through an iterative process of peer review of coding, oversight by an experienced qualitative researcher, and by returning to the participants for verification of themes.

Timeline	
August, 2012	Obtain IRB approval Assemble research team; provide training
September, 2012	Finalize interview questions for focus groups
October, 2012	Conduct simulations and focus groups; transcribe discussions
November, 2012	Verify accuracy of transcripts
December, 2012	Code data, identify themes and categories; verify with participants
January, 2013	Develop manuscript; submit to Clinical Simulation in Nursing
June, 2013	Present results at INACSL meeting

Budget	
\$250.00	Coffee shop gift cards for participants in focus groups (25 @ \$10.00 each)
\$125.00	Coffee shop gift cards for participants in discussion groups to verify data analysis (25 @ \$5.00 each)
\$125.00	Office supplies for transcription: audio recorder, computer paper, printer cartridges.

References

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