Managing the Panic: High-Fidelity Simulation Prior to the First Clinical Experience of Undergraduate Nurses

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Background
Transiting from the classroom to the clinical setting can be both exciting and anxiety-provoking for undergraduate nursing students. Nursing educators prepare students to proficiently integrate and apply nursing knowledge and skills into practice, but rarely address the anxiety associated with application in the clinical setting with “real” patients. Use of clinical simulation to bolster student confidence in professional communication and fundamental skills may reduce student anxiety prior to their first clinical experience. A recent study found that when undergraduate students completed one clinical simulation prior to their first clinical experience, student anxiety decreased and self-confidence in clinical decision-making increased (Ross & Carney, 2017). The purpose of this study is to replicate the previous study but examine the use of multiple clinical simulations on student anxiety and confidence among 2nd year baccalaureate nursing students prior to their first clinical experience.

Methods
Design: This is a replication study of a descriptive pre/post-test design conducted at a large public university. Sample: Convenience sample (N=88) of 2nd year undergraduate BSN students enrolled in a fundamentals clinical course. Instrumentation: The Nursing Anxiety and Self-Confidence with Clinical Decision Making (NASC-CDM) Scale (White, 2011) was used to obtain data upon receiving permission from the author. This 27-question self-rating Likert scale has two subscales to measure anxiety and self-confidence in clinical-decision making of nurses. Good internal consistency reliability has been reported for anxiety (α = 0.97) and confidence (α = 0.98) subscales (White, 2014). Procedure: Participants completed three simulations, including one with standardized patients and two using high-fidelity simulators. Simulation objectives included: communication, professionalism, physical assessment, and skills application followed by a debriefing session. All participants completed the NASC-CDM before the initial simulation and after the third simulation. Institutional Review Board approval obtained from the site prior to beginning the study.

Results
Paired t-tests were used to compare participants’ anxiety and self-confidence levels with clinical decision making pre and post three simulations. Although there was improvement in overall self-confidence and a decrease in anxiety after the simulation intervention, results indicate no statistically significant difference in anxiety or confidence levels following the three simulations. On review of individual questions, 10 out of 27 questions showed a statistically significant decrease in anxiety with clinical decision making while 3 of 27 questions showed a statistically significant increase in self-confidence with clinical decision making.

Conclusions
Evidence from the literature suggests that the initial transition into the clinical setting can be negatively impacted by increased levels of anxiety experienced by undergraduate nursing students. Data from past fundamental clinical course evaluations at this institution suggest that students experience high levels of anxiety that may impede their application of knowledge and emerging critical thinking skills during their first clinical experience. Evidence from this project suggests that bridging didactic and clinical courses with authentic simulation experiences creates opportunities for integration and application of fundamental skills in a safe, low-stakes environment and may decrease student anxiety to enhance the clinical learning experience. Limitations: The NASC-CDM scale may have limited the ability to accurately evaluate this intervention because several questions did not directly relate to the objectives of the simulation intervention. Therefore, the NASC-CDM could be modified to more accurately measure the specific objectives of these simulations in future studies. Further research is indicated to confirm the significance of simulation in the reduction of anxiety and the building of self-confidence in undergraduate nursing students prior to entering the clinical setting.

References

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