Simulation-Based Learning, Anxiety, and Self-Confidence

Keely K Zunker, DNP-RN, ACNPC-AG

OSF HealthCare

Purpose and Objectives

- By the end of this presentation, the participant will be able to:
  - Define simulation based learning
  - Recognize the benefits of simulation based learning for experienced nurses
  - Select an area of practice that would benefit from simulation based learning

Simulation-Based Learning

- Definition: use of educational scenarios that closely mirror reality to provide an immersive experience while evaluating knowledge of participants
- Benefits:
  - Exposes nurses to low-frequency, high-risk procedures
  - Allows for training in a low-risk environment
  - Ensures competency regardless of experience level

Anxiety and Self-Confidence among Nurses

- Low-frequency, high-risk situations impact confidence and anxiety levels of even the most experienced nurses
- Multiple methods of fostering self-confidence and alleviating anxiety, but none have been standardized
- Simulation-based learning is a viable solution that may be standardized for organizational use

Measuring Anxiety and Self-Confidence

- The study researched whether anxiety would decrease or self-confidence would increase through the use of high fidelity simulation
- Patient population: aneurysmal subarachnoid hemorrhage
- Subjects: experienced ICU nurses in a 17-bed unit
- Design: quasi-experimental
- Methods: Didactic and simulation experience
- Tool: NASC-CDM

Measuring Anxiety and Self-Confidence

- Results: overwhelmingly in favor of use of simulation to reduce anxiety and increase self-confidence in experienced nurses
  - Five of the six paired t-tests conducted showed a statistically significant improvement in self-confidence and decrease in anxiety levels post-intervention (95% confidence interval)
- Implications: standardized competency measurement regardless of skill level; foster self-confidence in nurses caring for high-risk, low frequency patients

Summary and Discussion

- High fidelity simulation helps nurses practice in a safe environment
- The use of simulation helps ensure competency regardless of experience level
- Simulation has strong potential to decrease anxiety and increase self-confidence of nurses who care for high risk, low frequency patient populations

References

- Berkenstadt, H., Haviv, Y., Tuval, A., Shemesh, Y, Megrill, A., Perry, A., Rubin, O., & Ziv, A. (2008). Improving handoff communications in critical care: Utilizing simulation-based training toward process improvement in managing patient risk. *CHEST Journal, 134*(1), 158-162.
- Kak, N., Burkhalter, B., & Cooper, M. (2001). Measuring the competence of healthcare providers. *Operations Research Issue Paper 2*(1). Bethesda, MD: Published for the U.S. Agency for International Development by the Quality Assurance Project.
- Ross, J., Bruderle, E., Meakim, C., Willens, J., & Holmwood, J. (2016). Development of formative capstone simulations to prepare novice students for initial clinical practicum. *Journal of Nursing Education, 55*(10), 587-589. doi: 10.3298/01484834-20160914-09
- White, K. (2011). Nursing anxiety and self-confidence with clinical decision-making scale (NASC-CDM).