The Impact of Clinical Simulation on Beginning Nursing Students Self-Efficacy and Learning

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Use of simulation as an educational tool

- Improves communication skills, collaboration, and critical thinking. (Norman, 2012; Yuan et al., 2012)
- Improves self-efficacy and competency. (Bambini et al., 2009)

National Council of State Boards of Nursing recommends substituting high-quality simulation experience for 50% of traditional clinical hours.

(Alexander et al., 2015)
Background

- Few attempts to determine effectiveness in building self-efficacy prior to the beginning of the clinical experience.
  - Informs the best placement of simulation in the curriculum.
  - Determines usefulness of simulation in preparing the student for the clinical experience.
Background

- Major curriculum change in the School of Nursing
  - Nursing Care of the Childbearing Family
    - Second semester

- Novice student
  - Increased anxiety
  - Limited knowledge and skills
  - Limited hands-on experience
Purpose

- To compare the effectiveness of two educational delivery methods for the clinical setting on beginning level nursing students’ self-efficacy.
  - Traditional lecture
  - High-fidelity human simulation
Methods

- Control/experimental design
  - Students enrolled in the clinical course
    - Pre/post test
    - Obstetric Nurse Self-Efficacy (ONSE) survey

- First week – orientation
  - Pre-test

- Second week – traditional/simulation
  - Post-test

- Third week – clinical unit
  - ONSE survey
Results

- 150 students over four semesters
  - Control – 64
  - Experimental – 80

- 7 instructors
  - Varying levels of experience with simulation
Results

- Knowledge – no significant difference (p=0.25)
Results

Confidence – overall no significant difference (p=.06)
Results

- Confidence – no significant difference (p=0.63)
Results

- Faculty that participated in pilot (p=0.03)
Results

- Comparison between groups
  - Group 1 and 5 vs. Group 3, 6, 7 (p<.05)
Results

- Qualitative data
  - Students
    - Better prepared to initiate care for the laboring woman
    - Less anxious about “not-knowing”
    - Adapted to the new unit quickly
  - Faculty
    - Positive difference in initiation of and confidence in care
Limitations

- Different faculty participating with varying levels of simulation experience
- ONSE – designed for new grads not new students
Implications for Nursing

- Support the use of simulation to assist in enhancing undergraduate students’ self-efficacy in dealing with obstetric patients.
  - Satisfaction in learning
- Need for pilot of design by all faculty
  - Learning opportunities for faculty in use of simulation
- Identifies students who need additional help and guidance