Nursing Students Perceptions of the Use of High-fidelity Simulation in PBL/PBL

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Background

- High Fidelity Simulation (HFS) is a teaching and learning tool using human like simulators to re-create real life patient situations
- In PBL, real-world care scenarios are used to facilitate learning
- Traditionally, Standardized Patients have been used to enhance student learning... **BUT** this cannot mimic physiological change in more acute situations

*(Barrows, 1996; Gaba et al, 2001; Jeffries, 2007; Leigh & Hurst, 2008)*
Literature Review

- Research has primarily focused on the use of simulation in professional practice
- Few studies have explored the use of simulation in nursing theoretical courses
- Findings suggest:
  1. simulation enhances clinical reasoning and bridges theory with professional practice
  2. students benefit from combined pedagogical approaches
  3. students demonstrate improved clinical performance

(Lasater, 2007, Liaw, Chen, Kliailin, Brammer, O’Brien & Smarasekera, 2009; Murphy et al., 2011; Ogilvie et al, 2011; Reilly & Spratt, 2006, Sinclair & Ferguson, 2009; Wong, Cheung, Chung, Chan & Chan, 2008; Wotton et al., 2010)
Research Question

- What are nursing students’ perceptions of the use of high-fidelity simulation in the Level Two Nursing Concepts in Health and Illness course?
Research Design

- A descriptive, qualitative research design, specifically case study methodology by Stake.
- A case may be ‘simple or complex’ …. ‘a child or a classroom’ ….or ‘an event, a happening’
- Instrumental Case = case of interest, being examined to provide insight into an issue.
- The case is second year nursing students, taking N2N04 and who have utilized High Fidelity Simulation in PBL (Stake, 2005)
Participants

- Convenience sample of 19 Level 2 BScN students enrolled in a theoretical nursing course
- Have participated in a PBL scenario with the use of HFS (adult with COPD and/or older adult with delirium)
Data Collection

- Three focus groups conducted at 2 sites of a Collaborative BScN program
- Semi-structured interview guide was developed and pilot tested
- Moderator and field observer facilitated each focus group
- Sessions were audiotaped and transcribed verbatim
Data Analysis

- Thematic analysis using a categorical aggregation was used to identify a collection of ‘instances’ from the data.
- Triangulation was utilized to strengthen insights and interpretations.

(Stake, 2005)
Findings

1. Bridging theory and practice

   “opportunity to connect how we can actually use PBL to benefit our clinical practice”
   “it was a really nice bridge for the gap between PBL and clinical”

2. Integrating knowledge from other courses

   “actual nursing interventions…. that you can pull from clinical as well as research done in PBL and other courses”
   “helpful in incorporating the pathophysiology of COPD as well as like pharmacology because we actually got to use the treatments that we had wanted to implement …”
Findings (cont’d)

3. Enhancing confidence for practice

“more comfortable in the real life clinical setting…. we can always take back what we did”
“confidence booster…I did this really well or where I need a little more focus”

4. Learning together

“showed how difficult it is to communicate between 2 nurses when you’re trying to perform a task…..
“good experience of working collaboratively with like others and learning how to facilitate and delegate our individual skills”
Findings (cont’d)

5. Learning in a safe environment

“our decisions are protected….we can always take back what we did”

“if you make a mistake you’re going to remember that mistake…and you’re not going to harm anyone in the process of learning what you’re doing”
Implications

Integrating HFS in a PBL classroom:

- Enhances students' confidence when going to professional practice settings
- Helps students to make connections between theory concepts and practice application
- Allows students to be actively engaged in their own learning
- Provides an opportunity for students to learn with and from each other
- Supports educator creativity in using HFS when discussing acute patient care scenarios in PBL
Limitations

- Simulation centre variability
- Faculty expertise in integrating simulation in PBL
References


