A MULTI-CASE SIMULATION TO AID IN TRANSITION TO PRACTICE

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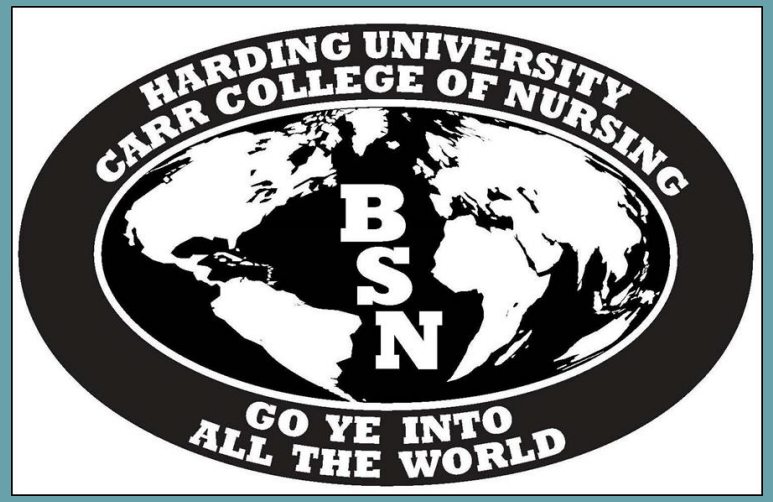

Introduction

- Complex, chaotic hospital environment
- Novice nurses need leadership skills (Marquis & Huston, 2017)
- Novice nurses feel unprepared to handle difficult challenging clinical environment (Radovich et al, 2011)
- Retention rate for new RNs 83% which means 17% leave their jobs during first year (Blegen et al, 2017; Kovner et al 2014)

Transformational

- Proposal to implement a multi-case simulation
- Final semester course (Leadership)
- Change from a group of students caring for 1 patient to a group of students would care for multiple patients
- Use cases from content taught in previous medical-surgical courses
- No prep the night before (*nurses do not prep before work*)
- Culminating simulation experience for students
- Planning: CC, Simulation coordinator, graduate student
- Initial Pilot group of 7 students fall 2015

Purpose & Goals

- To define how simulated learning simulations can enhance leadership skills and address lack of transition to nursing practice
- Goals:
  - conduct an evaluation of current students to determine perceived confidence with providing nursing care in an independent manner
  - determine if simulation enhanced leadership skills needed for nursing practice such as delegation, conflict management, and critical thinking

Methods

- Seniors students in leadership participated in 2 spaced simulated activities utilizing 4 patients
- Simulation included 2 standardized (live) patients and 2 high fidelity manniquins
- Sign confidentiality and video recording consents
- Leadership Simulation objectives and orientation were shared prior to simulation
- **Pre-briefing**: review of charts, choose a charge nurse discuss role of charge nurse, development of SOAP for each patient, discussion of each patient with priority plans
- **Simulation**: brief simulation update to time, pyxis, bedside report from previous nurse, simulation
- **De-briefing:** review and discussion of simulation
- **Documentation:** update & revise SOAP with final prioritization of problems, complete unfinished documentation (assessment, nurses notes, MAR, new orders)

Methods continued

- **Simulation 1:**
  - occurs week 5 & 6 of semester
  - 4 patients with medical surgical problems
  - conflicts focus on patient, family and/or chart conflicts
  - Skills: environmental assessment, patient assessment, communication, am medication administration

- **Simulation 2:**
- Occurs week 10-12 of semester
- same 4 patients but 48 hours later in care
- Staff and family conflicts
- Skills: environmental assessment, patient assessment, communication, PRN medications, clinical skills: IV start, foley insertion, NG tube insertion, trach care and suctioning

Methods continued

- IRB consent obtained from University IRB committee
- Students completed simulation evaluation after each simulation
- Students watched simulation 1 and completed self-evaluation then one on one debrief with course coordinator
- Consent obtained after 2nd simulation to avoid any Hawthorne effect
- No identifying data collected with evaluations

Data Collection & Analysis

- Data collected over 5 semester spring 2016 to spring 2018
- Researcher-developed questionnaire to address Leadership components and transition to practice based on NLN simulation evaluation
- Likert scale questions reflecting teamwork, critical thinking, assessment, transition to practice, conflict resolution, communication, confidence in performing skills, delegation, areas of personal improvement, time to reevaluate care
- Readiness to practice nursing ranked on a 1-10 scale
- Questionnaire peer reviewed prior to implementation

Results Metrics

Students Evaluations after Simulation 2 End of Semester All Combined (Spring 2016 to Spring 2018)					
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Did you feel the simulation process enhanced your ability to work as a team? (N = 121)	80.2% (97)	19.0% (23)	0.8% (1)	0	0
Do you feel the simulation process enhanced your critical thinking skills? (N=121)	77.7% (94)	22.3% (27)	0	0	0
Do you feel the simulation process enhanced your assessment skills? (N=121)	62.0% (75)	36.4% (44)	1.7% (2)	0	0
Do you feel the simulation process will assist you in **transitioning into nursing practice?** (N=120)	**77.4%** (94)	**19%** (23)	2.5% (3)	0	0
Do you feel the simulation process allowed you to practice handling conflict resolution? (N=121)	76.0% (92)	17.4% (21)	5.0% (6)	0.8% (1)	0.8% (1)
Do you feel the simulation process enhanced your communication skills? (N=121)	81.0% (98)	18.2% (22)	0.8% (1)	0	0
Do you feel the simulation process enhanced your confidence in nursing skills? (N=121)	67.8% (82)	25.6% (31)	4.2% (5)	0.8% (1)	0.8% (1)
Do you feel the simulation process enhanced your delegation skills? (N=121)	62.0% (75)	28.9% (35)	9.1% (11)	0	0
Do you feel the simulation process allowed you to see areas of personal improvement? (N=121)	80.2% (97)	19.0% (23)	0.8% (1)	0	0
Do you feel the post-simulation allowed you to assess and reevaluate actions taken during the simulation process? (N=121)	76.9% (93)	22.3% (27)	0.8% (1)	0	0

Results & Metrics: conflicts and preparation for career

All Combined (Spring 2016 through Spring 2018)			
Likert scale (1 to 10) N=121	Mean	Median	Std. Deviation
After participating in the competency simulation, how confident do you feel with handling conflicts?	8.179	8	0.9411
After participating in simulation and competency, how prepared do you feel for beginning your nursing career?	8.171	8	1.2611

Results & Metrics Comparison of Means

Skill	Mean	SD	t	df	sig (2-tailed)
Assessment skills #1	4.4	.658	2.722	115	.007
Assessment skills #2	4.61	.524			
Skills confidence #1	4.32	.669	3.666	113	.000
Skills confidence #2	4.64	.597			
Delegation skills #1	4.25	.686	3.229	114	.002
Delegation skills #2	4.54	.639			
Communication skills #1	4.69	.465	2.048	115	.043
Communication skills #2	4.81	.455			
Conflict resolution #1	4.51	.666	2.435	115	.016
Conflict resolution #2	4.71	.633			

Barriers/Obstacles

- Takes many faculty members and volunteers
- Time and coordination to run 3 groups of students in a day
- Coordination of simulation lab with other courses
- Simulation realistic and stress involved which students are told about ahead of time
- Adaptations to prepare for simulation with clinical orientation
- Changes to debriefing and included 1-on-1 debriefing with course coordinator

Discussion

- Students viewed the simulation as helpful, beneficial, and realistic
- Students liked being able to work more independently but have a peer resource with charge nurse
- Students had opportunity to self-identify areas to improve
- Between 1st & 2nd simulation student evaluation of assessment skills, delegation skills, communication skills, conflict resolution and confidence improved
- Compared students preference for simulated (live) patients to high-fidelity mannequin: 52% preferred live simulated patients, 28.1 % benefited from both, and only 14% preferred working with high-fidelity mannequins. Need to do a cost analysis.

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