

**Title:**

Simulation: Effects on Communication, Leadership, Clinical Reasoning, and Interprofessional Collaboration Skills in Nursing Students

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Education Posters Session 2

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collaboration, communication and simulation

**References:**

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Baptiste, D., Reese, K., & Bauman, E. (2015). A mixed-methods international multisite study to develop and validate a measure of nurse-to-physician communication in simulation. *Nursing Education Perspectives, 36(6)*, 383-388.

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**Abstract Summary:**

This poster presentation will demonstrate the effect of a high fidelity, multi-patient simulation on leadership, interprofessional collaboration, communication, and clinical reasoning skills in senior level nursing students. The patients in this simulation exhibit a variety of complex medical conditions present in today's healthcare environment

**Learning Activity:**

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to describe the effect of high fidelity simulation on leadership,	Learner will be provided with results of pre/post simulation tools to ascertain the

communication, interprofessional collaboration and critical thinking skills in senior level nursing students.	relationship between simulation and effects upon leadership, communication, clinical reasoning, and interprofessional collaboration skills. The learner will be provided with themes acquired from qualitative data to ascertain student perceptions of simulation and its effects upon leadership, communication, clinical reasoning, and interprofessional collaboration
The learner will explain significance of simulation as a teaching strategy in nursing education.	The learner will be provided with results of a twenty-four question NCLEX style, instructor created exam that was administered pre and post simulation. Results of paired t tests will be available to show differences in mean scores of the Instructor designed exam.
The learner will identify the significance of evaluating interprofessional communication as it relates to nurses and physicians.	The learner will be provided with mean scores obtained while evaluating nurse/physician communication using the IICR (ISBAR Interprofessional Communication Rubric). The learner will be provided with mean scores for each section of the tool; thereby allowing the learner to evaluate strengths and weaknesses in communication.

**Topic Selection:**

Education Posters Session 2 (24194)

**Abstract Text:**

**Purpose:** To evaluate the effects of high fidelity simulation on baccalaureate nursing students' clinical reasoning, interprofessional collaboration, communication, and leadership skills while caring for multiple patients with complex health problems in a hospital setting.

**Background:** Nurse educators are challenged on a daily basis to provide evidence based theoretical knowledge in the classroom as well as providing students with meaningful clinical experiences. With healthcare shifting to the home care setting, the availability of clinical sites for nursing students is at a premium. Simulation is a teaching strategy that has been embraced by educators in both academia and healthcare settings as a key teaching strategy when trying to connect theoretical concepts with clinical applications.

As the complexity of patient care intensifies, it is crucial that nursing education provides experiences that foster the development of critical thinking and clinical reasoning skills. Healthcare professionals can be brought together in a simulated scenario that allows students to practice real life situations and develop skills such as professional communication and collaboration in order to provide safe, high quality care. The American Association of Colleges of Nursing (2005) states that critical thinking is a key element of nursing education and must be incorporated across the curriculum (Kaddoura, 2010). In order to

assimilate critical thinking skills into both clinical and theory courses, simulation has been used to create situations that a student may or may not experience in their educational journey

A crucial component of nursing education is fostering the development of professional communication skills. Critical errors are often the result of a breakdown in communication between members of the healthcare team. Communication among members of the healthcare team is an integral part of patient care. According to the Joint Commission the second most identifiable cause of sentinel events in today's healthcare is poor communication (Joint Commission as cited in Foronda et al, 2015).

**Design:** Study was mixed methods pretest posttest design. The Jeffries Simulation Model (2005) will guide simulation and debriefing. This model provides the background for relating the components of simulation. The components include teacher, student, educational practices, design characteristics and simulation structure. These elements were planned to influence outcomes (Foronda et al 2015). This simulation was comprised of multiple patients in a hospital unit setting with a variety of complex health problems. Participants randomly select their role in the simulation; roles include charge nurse, registered nurse, licensed practical nurse, and certified nurse assistant. The simulation was paused at a predetermined point and participants switched roles. Prior to switching roles, patient report is given so that continuation of care will occur between team members. Each participant had the opportunity to perform in the role of registered nurse in the simulation. Participants assessed patients and intervened appropriately depending on patient needs and condition changes. Additional members of the healthcare team, including physicians, were available to assist participants as needed during the simulation. Participants were able to communicate via telephone and in patient rooms with other members of the healthcare team when there was a change in patient condition

**Sample:** Participants were a convenience sample of students enrolled in a senior Leadership in Nursing course. This course is taught in the final semester of their baccalaureate nursing program. Course content includes instruction on leadership concepts crucial to the new graduate nurse.

**Data collection:** A demographic questionnaire, Mayo High Performance Teamwork Scale and Interprofessional Collaborative Simulation Experience tool was completed by each student prior to the simulation and collected by a staff member that was not part of the research team. An instructor designed NCLEX style 24 question exam was completed on Blackboard prior to simulation. The Mayo High Performance Teamwork Scale and Inter-Professional Collaborative Simulation experience tool was completed upon conclusion of simulation by each student and collected by a staff member that was not part of the research team. An instructor designed NCLEX style 24 question exam was completed on Blackboard upon completion of simulation.

Communication skills will be evaluated using the IICR (ISBAR Interprofessional Communication Rubric) developed by Dr. Cynthia Foronda, assistant professor Johns Hopkins University, and Dr. Eric Baumann, assistant dean DeVry Medical International that focuses specifically on communication. The ISBAR has a specific focus on identifying the speaker at the beginning of the conversation. The tool consists of 15 items that have been specifically designed to evaluate communication in an acute healthcare setting (Foronda et al, 2015). Permission has been given by Dr. Foronda to use this tool in our research study.

**Data analysis:** This evidence based research study is still in progress. There have been 2 cohorts who have completed the simulation. Final simulation dates will be in spring 2017. SPSS Version 22 will be used to analyze the data. Descriptive statistics will be used to describe the characteristics of the participants. Tentatively, cross tabulations will be used to determine differences between the pre-test and the post-test. Correlational statistics will be chosen to measure relationships among the demographic variables and the perceptions. In addition, *t*-tests will be used to determine differences in the means of the Instructor designed exams. Qualitative data will be analyzed using NVIVO software.

**Results:** Results presented will include the pre/posttest comparison. Themes from qualitative data will reflect participant insight and outlooks into the benefits of simulation in nursing education. Implication for nursing education and practice will be reported.

**Conclusion:** Results of this project will be used to evaluate the effectiveness of simulation as a method to augment communication, leadership, critical thinking and inter-professional skills in senior level nursing students. The simulation opportunities facilitate practice in a safe environment to develop the aforementioned skills necessary to function as a new graduate registered professional nurse.