Interprofessional Quality and Safety Education through Simulation
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Background: Quality and safety competencies for health professions students have been identified by multiple professional groups and accrediting bodies. Attainment of these competencies requires knowledge and execution of specific skills. High-fidelity simulation provides students the opportunity to practice clinical skills and quality and safety competencies in a safe, non-threatening environment. Interprofessional simulation scenarios can be constructed that require nursing and physical therapy students to use clinical and teamwork skills to achieve patient-centered care goals and prevent adverse events.

Level of Educational Program: Undergraduate nursing students, doctor of physical therapy students (DPT).

Targeted Learning Outcomes:
• Identify the knowledge and skills needed to function as an effective member of an interprofessional team
• Plan and effectively implement patient care strategies as a member of an interprofessional team during simulation
• Demonstrate effective interprofessional teamwork and communication skills during simulation

Teaching-Learning Activities: 29 undergraduate nursing students and 41 DPT students received education regarding teamwork and communication using AHRQ’s TeamSTEPPS™ team training curriculum. Content was delivered in either the classroom setting (DPT) or via on-line modules (nursing). The high-fidelity simulation experience required DPT students to mobilize a patient with a traumatic brain injury while nursing students assessed skin and vital signs and monitored lines and tubes. The simulated patient was at risk for aspiration due to tube feeding, skin breakdown due to immobilization and incorrect application of an orthosis, and unstable vital signs due to poor tolerance for postural changes. The simulation experience lasted 20 minutes followed by a 40-minute interprofessional debriefing.

Evaluation Approach: We conducted a pre- and post-simulation assessment of student attitudes toward interdisciplinary education using the Interdisciplinary Education Perception Scale, which consists of three subscales: Competency and Autonomy; Perceived Need for Cooperation; and Perception of Actual Cooperation. DPT students’ post-simulation perceptions were significantly greater than their pre-simulation perceptions for all three sub-scales. Nursing students’ post-simulation perceptions were significantly greater than their pre-simulation perceptions for one sub-scale—Perceptions of Actual Cooperation.

Bibliography: