

Patient Safety: The Power of Immersion Simulation for Nursing and Respiratory Therapy Students

Peggy Ann Ursuy¹, Linda DiClemente¹, and Nicholas Prush²

[1] School of Nursing, University of Michigan – Ann Arbor, [2] Respiratory Therapy, College of Health Sciences, University of Michigan – Flint

Background

The intent of interprofessional education (IPE) is for students in health profession programs to break down silos in academia in order to learn and train with one another before beginning professional practice. Students will ultimately work together as part of interprofessional practice teams (O'Brien & Mould, 2016). Faculty for nursing and respiratory therapy know and understand the importance and dynamics of an interprofessional working relationship in practice and education. This relationship promotes patient safety and improves outcomes. According to Kleib, Jackman and Duarte-Wisnesky (2021), IPE knowledge is integral in teamwork and collaboration by sharing learning in a non-threatening manner. Following the Exposure-Immersion-Competency IPE Framework, student learning can be enhanced with common learning outcomes relating to communication skills, teamwork, and leadership in the simulation lab (Interprofessional Education Collaborative Expert Panel, 2011).

Methods

Nursing and respiratory therapy faculty at a midwestern university, from two separate campuses, created and implemented a pilot IPE pediatric care simulation experience which brought together 14 pre-licensure, junior level, undergraduate, baccalaureate nursing students and 4 licensed, undergraduate, baccalaureate respiratory therapy students for a single day of training (4 hours), at the school of nursing, clinical simulation laboratory. The training day focused on the interprofessional education competencies (IPEC) of roles and responsibilities, team and teamwork, and communication. Group discussions included "Speak Up for Safety," which addressed communication, teamwork, and patient safety concepts originated in high-reliability training. All students, nursing and respiratory, participated in two different hands-on pediatric clinical simulation cases using high-fidelity manikins, followed by a group debrief of the cases.

The training was evaluated by student learners at the completion of the training day. The format for evaluation included using a Qualtrics questionnaire which assessed learner perceptions of the value of the role and responsibility discussion, the "Speak Up for Safety" (communication, teamwork, and safety) discussion, two pediatric care simulation cases, and a simulation debrief session at the end of the training. Qualitative support for each item valued was part of the survey.



Participant Comments:

- ★ "I feel as though more of these simulations are needed. Even credentialed healthcare professionals working within the hospital could benefit from regular scenarios to help improve interprofessional communication."
- ★ "Loved the code situation, I feel so much more comfortable."
- ★ "Any interaction and team collaboration with another profession is always valuable."
- ★ "Good experience for interpersonal communication."
- ★ "Loved hearing other perspectives and experiences from different professions."
- ★ "I was better able to understand my role and the RT's role in the situation, and how we can collaborate together."



Results

The post-training survey results indicated 100% of students reported the two IPE simulation case experiences as being highly valuable. This was followed by the "Speak Up for Safety" discussion and the simulation debrief session also being rated as highly valuable. The roles and responsibilities discussion was ranked as valuable to students. Qualitative comments supporting the highly valued IPE simulation cases and discussions reinforced the student's high ranking of the training.

Lessons Learned

The findings of the pilot immersion IPE simulation indicated that students' perception of the hands-on simulation, debrief session, and the discussion on communication, teams, and patient safety were highly valued. Given the significant relationship between safety, communication, and teamwork, it is necessary to promote undergraduate student and pre-licensure students' participation in immersion IPE experiences. These experiences are suggested to reinforce course content (knowledge), clinical care (skill), with emphasis on communication and safety to promote better patient outcomes.

Faculty reflection revealed the immersion IPE experience required a high degree of faculty effort, time, and coordination to create and implement the training day. Organizing the schedules of two different disciplines on two different campuses was challenging. Multiple teaching and practice schedules, logistics between two campuses and coordinating with the staff at the simulation center was an effort that led the IPE experience to the last weeks of the semester. In addition, there were challenges in the coordination of learning objectives, learning content, and developing a simulation case that required faculty attention in order to successfully deliver the immersion experience for nursing and respiratory therapy students.

Next Steps

When this training is offered again, faculty would implement a pre-and post evaluation measure of the training for students to evaluate. Faculty would also invite other IPE partners to join in the training session. Potential health care professions include graduate advanced practice nursing (nurse practitioner) program, physician assistant (PA) program, medicine, occupational therapy, or social work.

References

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