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Promoting Mobility in the ICU: An Interprofessional Educational Initiative

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Interprofessional education (IPE) has long been a part of the American Association of Colleges of Nursing's Baccalaureate Education for Professional Nursing Practice (AACN, 2008), Master's Education in Nursing (AACN, 2011), and Doctoral Education for Advanced Practice Nursing (AACN, 2006) Essentials documents. It is anticipated that any new Essentials documents will continue to support the necessity and value of IPE. Many nursing schools have already incorporated IPE experiences into their curriculum in part due to the AACN mandate and evidence that teamwork and collaboration can promote positive patient outcomes. Requirements by the accreditation bodies of other health professions may mandate or strongly recommend interprofessional education and collaborative practice in their curricula.

The World Health Organization (WHO) states that "interprofessional education occurs when two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes" (WHO, 2010, p. 7). Given this definition as the standard used today, more professions are collaborating in IPE activities. In recent years, the National League for Nursing (Speakman, Tagliareni, Sherburne, & Sicks, 2015) affirmed the IPEC Core Competencies for Interprofessional Collaborative Practice (Interprofessional Education Collaborative, 2011; Interprofessional Education Collaborative, 2016) that identified these core competencies within four domains: values and ethics, roles and responsibilities, interprofessional communication and team and teamwork. Inherent in these domains are the concepts of mutual respect and shared values, knowledge of one's own role and those of other professions, communication, and team dynamics.

A Cochrane review by Reeves, Perrier, Goldman, Freeth & Zwarenstein (2018) examined 15 studies related to interprofessional education and its effects on professional practice and patient/client care. All 15 studies utilized a modified PICO approach comparing the effectiveness of IPE interventions to that of no educational interventions. Positive outcomes were noted in the care of patients with diabetes, the culture of the emergency department as well as overall patient satisfaction. In addition, the effectiveness of IPE was demonstrated in collaborative team behavior as evidenced by the emergency department and operating room teams; practitioners involved in the management of care regarding cases of domestic violence as well as mental health practitioner competencies. It is also noteworthy that 4 of the studies reported both positive and neutral outcomes while 4 other studies found no impact on professional

practice or patient care if IPE interventions were instituted. Further research was suggested to assess the impact of IPE on professional practice and patient outcomes. Lim and Jones (2018) used a structured literature review model to examine the experiences of pre-licensure nursing students following IPE experiences. This qualitative analysis of 13 papers suggests that nursing students have a better understanding of professional roles and teamwork communications following an IPE activity while also reporting some examples of role disparity within the team. However, summative findings do not indicate the focus of these IPE activities, only the composition of the IPE teams.

Few studies describe the use of nursing students and physical therapy students involved in IPE activities (Lefebvre, Wellmon, & Ferry, 2015). The most recent publication by Cunningham, Foote, Sowder and Cunningham (2018) describe a mixed-methods study to examine the components of IPE along with students' attitudes and confidence in working with an interprofessional team. The authors cite an increased respect for other disciplines along with increased confidence and empowerment in the participation and use of an IPE team.

Cranford and Bates (2015) identified six steps to a successful implementation of IPE in the curriculum. These include: accepting the challenge, building an interprofessional team, creating objectives, developing the game plan, evaluating the collaborative effort, and following up and going forward. These steps can form the framework for developing an IPE activity that involves as few as two or more professions depending on the objectives and availability of interprofessionals and various professions within the academic or organizational setting.

Using a framework that was previously developed by the University at Buffalo's Office of Interprofessional Education, 2 nursing faculty and 1 physical therapy faculty, who is also the Assistant Vice President for Interprofessional Education, initially brainstormed the idea of an IPE activity involving pre-licensure nursing students in their last semester of study and Doctor of Physical Therapy (DPT) students in their second year of study.

Both groups of students had or would have experience in the ICU setting.

The IPE activity focused on mobility of critically ill patients in an ICU who were intubated and/or on mechanical ventilation. Because many of our new nursing graduates elect to enter critical care for their first job, it was decided to focus the IPE activity on evidence-based practices related to mobility. The underpinnings of this activity was the evidence that when nurses and physical therapists work collaboratively in the ICU to mobilize patients to their highest functional level every day, patients have better functional outcomes and fewer days with delirium, fewer days requiring mechanical ventilation, both in the ICU, and in the hospital. Strong interprofessional communication and teamwork skills between nurses and physical therapists are therefore essential for providing high quality mobilization interventions for patients in the ICU.

Outcomes were developed that related to the roles and responsibilities of both the nursing and physical therapy professions in regards to patient mobilization in the ICU that included early mobility assessments and protocols to determine readiness for mobility, barriers to mobility in mechanically ventilated patients, and components of the ABCDEF bundle. Students' preparation for the IPE activity was imperative and included reviewing the:

- AACN Early Progressive Mobility Protocol

- Confusion Assessment Method for the ICU (CAM-ICU) flowsheet
 - Mobility Daily Assessment and Treatment Algorithm
 - Richmond Agitation and Sedation Scale (RASS)
 - An interdisciplinary article on mobility of patients in the ICU
- Students were also required to complete the Interprofessional Collaborative Competencies. Faculty utilized the survey in a pretest/posttest design to assess collaborative competencies before and after the IPE activity.
- Students were assigned to a random group comprised of both nursing (n=4) and physical therapy (n=2) students. At the start of the small group activity, initial introductions were made and students shared their respective roles and responsibilities. The small group activity then focused on developing an interprofessional plan related to intubated patients' mobility in the ICU setting. A large group debriefing session followed that included a discussion of the care plan and roles and responsibilities of professionals in the interprofessional team that may be involved in mobilization efforts of these patients. Discussion also centered on early mobility assessments and protocols to determine readiness for mobility. After completion of the IPE activity session, students were then required to submit two post-activities:
- Completion of the Interprofessional Core Competency Attainment Scale [ICCAS]
 - A reflection paper regarding the interprofessional activity
- Students' comments during the debriefing regarding the value of this IPE activity were very positive. Students verbalized a better understanding of the roles and responsibilities of members of the healthcare team that could be extrapolated to other healthcare sites such as non-critical care units, rehabilitation, and home care. Determining readiness for mobility and following mobility protocols was seen as an interdisciplinary effort related to patient outcomes. Results of the ICCAS will also be presented along with the challenges of developing and implementing this IPE activity.

Title:

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Keywords:

ICU, Interprofessional Education and Mobility

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Abstract Summary:

Nursing and physical therapy students participated in an IPE activity regarding mobility of critically ill patients. Outcomes related to the roles and responsibilities of both professions in regards to patient mobilization in the ICU, barriers to mobility, and components of the ABCDEF bundle were discussed and examined.

Content Outline:

Introduction: Interprofessional education activities are becoming the norm in many schools of nursing. An IPE activity involving physical therapy and nursing students

related to mobility issues of critically ill patients, especially those on mechanical ventilation, will be presented. Evidence shows that patients have better functional outcomes and fewer days with delirium and also fewer days requiring mechanical ventilation when early mobilization is instituted.

Body: Students' preparation for the IPE activity was imperative and included reviewing the:

- AACN Early Progressive Mobility Protocol
- Confusion Assessment Method for the ICU (CAM-ICU) flowsheet)
- Mobility Daily Assessment and Treatment Algorithm
- Richmond Agitation and Sedation Scale (RASS)
- An interdisciplinary article on mobility of patients in the ICU

Students were also required to complete the Interprofessional Collaborative Competencies. Faculty utilized the survey in a pretest/posttest design to assess collaborative competencies before and after the IPE activity.

Students were assigned to a random group comprised of both nursing (n=4) and physical therapy (n=2) students. At the start of the small group activity, initial introductions were made and students shared their respective roles and responsibilities. The small group activity then focused on developing an interprofessional plan related to intubated patients' mobility in the ICU setting. A large group debriefing session followed that included a discussion of the care plan and roles and responsibilities of professionals in the interprofessional team that may be involved in mobilization efforts of these patients. After completion of the IPE activity session, students were then required to submit two post-activities:

- Completion of the Interprofessional Core Competency Attainment Scale [ICCAS]
- A reflection paper regarding the interprofessional activity

Conclusion: Students' comments during the debriefing regarding the value of this IPE activity were very positive. Students verbalized a better understanding of the roles and responsibilities of members of the healthcare team that could be extrapolated to other healthcare sites such as non-critical care units, rehabilitation, and home care.

Determining readiness for mobility and following mobility protocols was seen as an interdisciplinary effort related to patient outcomes. Results of the ICCAS will also be presented along with the challenges of developing and implementing this IPE activity.

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