Title:
Intradisciplinary Collaboration: Doctorally Educated Nurses Partnering for Patient Outcomes

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References:
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Abstract Summary:
Through intradisciplinary collaboration, PhD and DNP-educated nurse leaders are able to provide evidence-based interventions and transform care in a way neither could accomplish independently. Participants will learn about two implementation science research studies that serve as exemplars in harnessing the complementary skills of doctorally-educated nursing leaders for improved patient outcomes.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to describe the differences between the PhD and DNP roles in nursing research.	1) The Doctor of Nursing Practice (DNP) education: a) Increasing number of graduates and DNP-educated nurse leaders; b) Focus on translation of evidence to practice; c) Improving systems of care. 2) The Doctor of

	Philosophy (PhD) education: a) Nurse scientists; b) Generate new knowledge. 3) Role for DNP in research.
The learner will be able to identify ways in which DNP and PhD-educated nurse leaders may partner in nursing research to improve patient outcomes.	1) Nursing practice expected to be evidence-based: a) Research takes over 17 years to put into practice; b) DNP and PhD working together can transform care through implementation science. 2) Implementation Science (IS): a) Definition; b) Medium for intradisciplinary DNP/PhD collaboration; c) Patients receive evidence-based interventions. 3) Neonatal Intensive Care Unit IS research study: a) Implementing an evidence-based lighting guideline; b) Lessons Learned. 4) Pediatric Intensive Care Unit IS research study: a) Implementing delirium screening and sleep promotion protocol; b. Lessons Learned. 5) Plans to expand partnership.

Abstract Text:

With the advent of the Doctor of Nursing Practice (DNP) role, an increasing number of nursing staff are obtaining this terminal degree and serve as leaders within their organizations (American Association of Colleges of Nursing, 2015). From 2013 to 2014, the number graduates from DNP programs increased over 25 percent, from 2,443 to 3,065 (American Association of Colleges of Nursing, 2015). A DNP-educated nurse leader is focused on translation of evidence to practice and improving systems of care and the education provides nursing leaders the knowledge to assess context, rework systems, and evaluate changes (American Association of Colleges of Nursing, 2006).

In contrast to the DNP preparation, the Doctor of Philosophy (PhD) education develops nurse scientists who will generate new knowledge (American Association of Colleges of Nursing, 2010). The number of graduates with a research-focused doctorate is less than half of those graduating with the DNP (American Association of Colleges of Nursing, 2012). Many PhD graduates become employed in academia, though the number employed in the hospital setting is growing (Brant, 2015). Literature discusses the differences and similarities between the two degrees and theoretically describes way in which the DNP and PhD complement one another (Edwardson, 2010; Melnyk, 2014). There is a role for the DNP in research, and particularly an important role in translational research, or implementation science (Florczak, Poradzisz, & Kostovich, 2014), however, there are few examples of this collaboration in practice.

Research can take over 17 years to be put into practice (Morris, Wooding, & Grant, 2011), yet nursing practice is expected to be evidence-based. The role of the hospital-based nurse scientist is to bridge the gap between practice and research and to encourage a culture of inquiry (Brant, 2015). It would be unrealistic for a hospital-based nurse scientist to be an expert in each clinical area, yet these researchers often serve as resources to entire organizations (Brant, 2015). The PhD nurse leader is able to provide consultation and mentoring throughout the research process, but must rely on others, ideally the DNP nurse leader, for the clinical and systems expertise and understanding of the wide variety of practice settings. When working together in the hospital setting, both the DNP- and PhD-educated nurses are able to transform care in a way neither could accomplish independently.

Implementation science, “the investigation of methods, interventions, and variables that influence adoption of evidence-based healthcare practices by individuals and organizations to improve clinical and

operational decision making" (Titler, Everett, & Adams, 2007, p. S53), provides an opportune medium to cultivate this intradisciplinary collaboration. Two implementation science research studies at a Magnet-designated, academic medical center illustrate this collaborative relationship.

To conduct a research study exploring the effect of cycled lighting on premature infants in the Neonatal Intensive Care Unit (NICU), both clinical expertise and expertise in research methodology were required. The research study began with a clinical question and evidence-based lighting guideline, and evolved into a complex research study. The DNP-educated Clinical Nurse Specialist (CNS) in the NICU provided the clinical expertise and extensive knowledge about the unit and systems that were essential for the study to occur. Likewise, the nurse scientist designed a research study that included patient outcomes, but also explored the barriers and facilitators to implementing the lighting guideline across disciplines in the 45-bed NICU. Through this collaboration, developmentally appropriate lighting and a remarkable change in nursing practice could occur.

Similarly, the DNP-educated CNS of the Pediatric Intensive Care Unit (PICU) approached the nurse scientist with a clinical question regarding the relationship between sleep and delirium for children in the PICU. Together they designed a research study to investigate how delirium screening and a sleep promotion protocol in the PICU could be implemented and to add to the literature on delirium in the PICU. When the variables that influence adoption are understood, the evidence may be translated and put into practice.

While there are differences in the focus of the academic preparation, the PhD and DNP nurse leader share the common focus of improved patient, population, and/or policy outcomes (Melnyk, 2014). Both the DNP- and PhD-educated nurse can contribute to the implementation of best practices. This collaborative relationship allows patients to receive evidence-based care faster than if either leader was working individually.