DNP ESSENTIALS AND ITS APPLICATION TO CLINICAL PRACTICE: PRACTICUM I SYNTHESIS PAPER

TEXAS WOMAN'S UNIVERSITY

DNP PRACTICUM I

NURS 6035

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April 20, 2019

Introduction and Background

The doctor of nursing practice (DNP) role is swiftly emerging across the United States in various practice settings, especially in universities, hospital organizations, and healthcare organizations (Malloch, 2017). The DNP is a terminal degree because it is "the most advanced clinical leadership role in nursing" (Singleton, 2017). The DNP was born in 2004 and is a practice-focused degree designed to complement the research-focused PhD degree (Tyczkowski & Reilly, 2017). Nurses with a DNP degree are prepared to integrate nursing science, transform more complex healthcare through their leadership role, and translate evidenced-based practice information to improve the quality of care (Malloch, 2017; Singleton, 2017). This advanced nursing degree prepares nurses with advanced knowledge in population health models, evidence-based practices, and innovative ways to care for patients at different specialties. These specialty roles include leadership, research, clinical practice, policy, advocacy, and education that advance the translation of available evidence into practice (Malloch, 2017).

As a student completing the doctorate in nursing practice, it is my responsibility to assume a leadership role with the expectation of making healthcare changes. I must ensure that personal, professional, and organization quality align with DNP essentials. Also, I must ensure professional integrity.

As a leader with an advanced degree, skilled role modeling is fundamental to the profession. Malloch (2017) explained that the DNP-prepared nurse is a role model who forms the basis for high-level coaching and mentoring of clinicians and aspiring leaders of the community. As a mentor, the DNP professional serves as a resource to facilitate discussion in the resolution of complex healthcare issues and to guide the work of challenging professionals (Malloch, 2017).

From an evidentiary perspective, the DNP professional effectively advances knowledge for changes in the system within the organizational infrastructure driven by the highest level of evidence (Fencl & Matthews, 2017; Malloch, 201; Pencak, Staffileno, Hinch, & Carlson, 2017; Singleton, 2017). As an evidence expert, the DNP professional guides the healthcare system in eliminating non-valued practices and supporting extant evidence to improve the quality of care. In digital healthcare, innovation in medicine and health, the DNP professional can facilitate organization-wide changes in practice delivery where challenges become opportunities (Malloch, 2017). Malloch (2017) added that the research aspect of work is an integral component of all change and innovation in the organization.

In clinical practice, the DNP professional is a carrier of new knowledge and disseminates this information in the system context and interactions of the organization in which nursing occurs. As a leader in clinical practice and an advocate for policy, the DNP professional must seek membership in healthcare boards outside of the organization to influence local, state, and national level health policy through interprofessional partnership and collaboration. The strong foundation learned in systems theory, complex science, and vast clinical experience provide a guide in the promulgation of evidence and the advancement of clinical processes.

The DNP-prepared educator can add light in sharing knowledge and skills to future leaders of the profession by teaching students the DNP essentials at the start of their advanced degree career to enhance the students' understanding of their role. A study by Dols, Hernandez, and Miles (2017) reported that faculties face barriers and challenges in educating DNP students due to lack of knowledge about evidence-based practice and quality improvement projects. As an educator, the knowledge I gained from this program complemented my vast clinical experience and research exposure at MD Anderson Cancer Center. This background will assist

me as a highly qualified educational scholar. I have adopted standards and guideline tools from the American Association of Colleges of Nursing (AACN) and the National Organization of Nurse Practitioner Faculties (NONPF) to ensure consistency in my discourse. Dols et al. (2017) stated that the DNP program directors recommend maintaining consistency across programs and developing DNP project standards with clear definitions and concrete examples in conjunction with the AACN DNP essentials and NONPF competencies. Volkert and Johnson (2018) reported that embracing the accreditation standard is an essential component of their clinical/professional roles.

DNP Essentials in Clinical Practice

DNP Essential IV: Information systems/technology and patient care technology for the improvement and transformation of healthcare

During the NONPF 45th 2019 conference in Atlanta, the main theme was innovation and technology, which included the "Internet of Things" (IoT). IoT has been the topic of conversation in many workplaces, including medicine/health. As a concept, IoT affects how we live and how we work. The most popular technology, smartphone use, has skyrocketed (Morgan, 2014). Most IoT initiatives in healthcare revolve around the improvement of care such as remote monitoring and telemonitoring as main applications.

Another innovation where many initiatives exist is tracking and monitoring based on IoT and Radio frequency identification (RFID). RFID systems use radio waves at several different frequencies to transfer data. An example of RFID is the use of sensors. Gait and balance functions decline throughout the course of dementia and patients are at risk of falling (Dolatabadi, Zhi, Flint, Mansfield, Iaboni, & Taati, 2019). In healthcare and hospital settings, RFID technologies include applications such as monitoring equipment, out of bed detection, and

fall detection (Dolatabani et al., 2019). At a rehabilitation facility when Dr. Cuadra works as a hospitalist, I participated in educating the nurses about the importance of the newly installed dual-sensors on all patient beds and wheelchairs. Correct use of the dual-sensors will help decrease falls. Most falls in rehabilitation centers and nursing homes occur in the resident's room, especially during attempts to get in or out of bed (Capezuti, Brush, Lane Rabinowich, & Secic, 2010). Educating the nurses about the purpose and function of this cutting-edge invention is important. The staff must intervene promptly by attending to the patient's needs—before falling occurs.

The informatics course I took equipped me in the adoption of modern technology in the stage of digital medicine. Increased use of IoT in healthcare application in the years ahead is necessary for our growth and better health outcomes. The electronic health record (EHR) transforms health and medicine through the immediate availability of health information everywhere and anytime (AACN, 2006).

The use of data and the analysis of the evidence in fall prevention using the "Bed-Exit Alarm" ensured patient safety and improved the nursing practice as stated on NONPF core competency. Use of information technology resources is integral to the role of DNP professionals in aligning with the quality improvement application (AACN, 2006). Smartphones are used to notify or remind patients of their doctor's appointment.

Whether we like it or not, it is time to adopt innovation based on digital technology. As a practicing NP, I use information technology as a means of communication to improve the care of my patients.

DNP Essential VI: Clinical prevention and population health for improving the nation's health

Another role of a DNP leader is to identify gaps in the care of individuals, communities, and populations. The evaluation and assessment of my community's population health will provide the nurse practitioner data that she can tailor the preventive services based on the people's needs. Expanding sites for the delivery of preventive services beyond clinical settings is a promising public health strategy for increasing their use and closing the gap between current recommendations and what people receive.

Dr. Emilia Cordero invited me to provide services to the community through a health fair by providing flu vaccinations; gynecologic exams (specifically, cervical cancer screening); breast cancer screening; screening for diabetes, hypertension, and heart disease. Clinical preventive services included immunizations, screening tests, and counseling to prevent the onset or progression of disease and disability. These screenings are important methods for maintaining the health of the community. The risk reduction and health promotion activities I provided are in line with improving the health of the people (AACN, 2006) through screening and early detection of diseases, and cancer prevention.

With the fulfillment of the practicum I experienced in clinical prevention and population health, I identified the needs of the people in the community and improved population health. I increased my confidence as a leader in the community in coordinating health fairs. The interprofessional collaboration of other healthcare providers like the community health workers, "promoters," and the members of the community contributed to the success of this program.

DNP Essential VIII: Advanced Nursing Practice

One of the foundations of evidence-based practice is grounded in clinical practice and decisions with the best and most reliable evidence available (Glynn, 2006). My journey to advanced practice nursing included a critical appraisal of the literature. I analyzed and

synthesized information to determine the best information for my scholarly project and applied my answers to the clinical questions in my practice. I was able to sift through the available evidence to find the most outstanding evidence based on their location in the hierarchy. A better understanding of the levels of evidence from credible sources enhanced my clinical practice.

As a DNP-prepared leader and educator, I gained knowledge and skills to advance the nursing profession. From an educational perspective, essential implications include the adoption of innovation in the use of technology to improve the health of individuals. The data stored in the new equipment used in the clinical setting provides rich information that a nurse scientist, researcher, and leader can use in more advanced healthcare management. As an educator in the clinical area, I had the opportunity to teach my patients during a "lunch and learn program" nutrition and its effects on diabetes and hypertension. Teaching the patients how to read the food labels and the significance of calories, sodium, sugar, and carbohydrates content found on the box helped them understand more about healthier food choices and preparation.

For DNP-prepared nurses, the quest for knowledge and the expansion of their accomplishments on the translation of research to clinical practice are critical components for their role in achieving the goal of positive patient outcomes. I gained full nursing and scientific knowledge from the mentorships of Dr. Ricardo Cuadra and Dr. Emilia Cordero. With their guidance in clinical, organizational, and administrative fields, I was able to meet the challenges in the ever-changing and complex healthcare environment. I learned to build interprofessional collaborative relationships and partnerships with my preceptors and the other healthcare professionals I worked with during this experiential journey.

Worldviews

During the early stage of my nursing career, my worldview was aligned with bedside nursing and caring as instilled by Florence Nightingale. Florence Nightingale highly valued education and advocated raising the standard of education for the nurses; emphasizing that nursing is a calling, a vocation, but more than this she must be a religious and devoted woman (Rieg, Newbanks, & Sprunger, 2018). As I walk through this educational journey, my worldview has changed as the healthcare environment has changed to a more complex one. Merriam-Webster dictionary defines worldview as "a comprehensive conception or apprehension of the world especially from a specific standpoint." Worldviews are sets of beliefs and assumptions that are deeply embedded and largely implicit in how cultures interpret and explain their experience (Tilburt, 2010).

The exposure I had with NONPF executives and scientists changed my worldview of the future. The healthcare revolution which started in the 1870s, the germ theory of disease, antiseptic techniques, and advances in anesthesia, made life-saving surgeries possible and drove significant and lasting advances in public health (Haughom, 2014). The discovery of penicillin in 1928, the treatment of disease by physician-prescribed medication, and the adoption of randomized controlled trials (RCT) ushered in the era of evidence-based medicine in the 1940s and defined healthcare as we know it today (Haughom, 2014); RCT remains the gold standard for evidence-based medicine. These advances laid the foundation for a core component of the next revolution: data-driven healthcare. The data is used by researchers and scientists in process-improvement projects to improve the quality, efficacy, and cost of care. Data-driven healthcare also creates the possibility of delivering care that is highly personalized to each patient, while shifting more control and responsibility from doctors to the largest untapped healthcare workforce in the country, the patients and their families (Haughom, 2014).

The increasing focus on the quality and cost of care, evolving state and federal regulations, and the growing emphasis on reimbursing for value rather than transactions will push the data-driven healthcare trend forward (Haughom, 2014). One could ask, how long will it be before we see the results of this latest healthcare revolution? Five years? Ten years? Longer?

The future is here. Innovative healthcare organizations are already demonstrating the results of data-driven healthcare. As a DNP-prepared nurse, I can adapt data from RCTs. For quality improvement projects, I can merge RCT data with operational and clinical data from my patients. Texas Children's Hospital used the data for a quality improvement project and focused on appendectomy outcomes that resulted in a 36% reduction in length of stay, a 19% reduction in average variable costs, a 19% decrease from diagnosis to surgery, and a 53% increase in the percentage of patients receiving recommended antibiotics (Haughom, 2014).

In nursing education, the development and implementation of evidence-based practice and integration of technology must be a priority to keep up with future trends in healthcare. As a leader and educator, we must incorporate innovation with the aim of excellence in nursing practice. Better healthcare delivery is needed to complement the traditional value model. As a DNP educator, I can make a difference by elevating the level of knowledge of my students and nurses through the application of proven processes with positive outcomes and the use of technology and innovation in academia and clinic settings.

Conclusion

The Affordable Care Act (ACA) provided a new framework for the delivery of healthcare in the United States. The ACA transformed the very foundations of traditional American healthcare and changed the focus from late-stage, high-intensity, illness-focused, tertiary, interventional health service to a much stronger value-driven focus on achieving the highest

levels of health for communities and populations (Porter-O'Grady, 2014) with emphasis on volume-based incidences of service to value-driven integration of care. Porter-O'Grady (2014) stated that the expectations of the ACA represent a shifting foundation for American healthcare and led to the potential for different roles and relationships in the delivery of health service, shifting the locus of control from illness to health.

A DNP-prepared nurse can actively participate in this change through clinical prevention and population health for improving the nation's health by ensuring that all patient encounters must include preventive care and health promotion. Health fair events with screening, health promotion, and cancer prevention mean reaching out to the medically uninsured population. A critical consideration of significant changes in nursing practice that nurse leaders must address is strengthening the community and neighborhood. The doctorate-prepared nurse will serve as a change agent by moving hospital-based nursing practices to sites and settings outside the hospital (Porter-O'Grady, 2014).

In summary, the DNP preparation provided me with a better understanding of evidence-based practice. I am competent to recognize the different levels of evidence applicable to different clinical circumstances. I will still see the same complex patients I have been seeing and will still teach nursing students enrolled in the FNP program with a focus on advanced clinical decision-making skills and critical thinking, and I will deliver and evaluate evidence-based care to improve patient outcomes. The innovation in healthcare pushed me to become a change agent to continue the delivery of the technology-driven world which also changed my worldview.

References

- American Association of Colleges of Nursing. (2006). The essentials of doctoral education for advanced nursing practice. Retrieved from http://www.aacnnursing.org/Portals/42/Publications/DNPEssentials.pdf
- Capezuti, E., Brush, B. L., Lane, S., Rabinowitz, H. U., & Secic, M. (2010, July 1). Bed Exit

 Alarm effectiveness. *Archive in Gerontology and Geriatrics*, 49(1), 27-31. https://doi.org/10.1016/j.archger.2008.04.007.
- Dolatabadi, E., Zhi, Y. X., Flint, A. J., Mansfield, A., Iaboni, A., & Taati, B. (2019, May-June).

 The feasibility of a vision-based sensor for longitudinal monitoring of mobility in older adults with dementia. *Archives of Gerontology and Geriatrics*, 82, 200-206.

 https://doi.org/10.1016/j.archger.2019.02.004
- Dols, J. D., Hernandez, C., & Miles, H. (2017). The DNP project: Quandaries for nursing scholars. *Nursing Outlook*, 65(1), 84-93. https://doi.org/10.1016/j.outlook.2016.07.009
- Fencl, J. L., & Matthews, C. (2017, October). Translating evidence into practice: How Advanced Practice RN's can guide nurses in challenging established practice to arrive at best practice. *AORN Journal*, 378-389. https://doi.org/10.1016/j.aorn.2017.09.002
- Glynn, L. A. (2006, July). A critical appraisal tool for library and information research. *Library Hi Tech*, *24*(3), 387-399. https://doi.org/10.1108/07378830610692154
- Haughom, J. (2014). The rising healthcare revolution: The future is here. Retrieved from https://www.healthcatalyst.com/data-driven-healthcare-works-physician-group-perspective
- Malloch, K. (2017, January). Leading DNP Professionals: Practice competencies for organizational excellence and advancement. *Nursing Administration Quarterly*, 41(1), 29-38. https://doi.org/10.1097/NAQ.00000000000000000

- Morgan, J. (2014, May 13). A simple explanation of the "Internet of Things" [Blog post].

 Retrieved from https://www.forbes.com/sites/jacobmorgan/2014/05/13/simple-explanation-internet-things-that-anyone-can-understand/#2f659d131d09
- Pencak-Murphy, M., Staffileno, B. A., Hinch, B., & Carlson, E. (2018, February 2018).

 Promoting clinical scholarship in DNP programs. *The Journal of Nurse Practitioners*, 14(2), e31-e39. https://doi.org/10.1016/j.nurpra.2017.12.003
- Porter-O"Grady, T. (2014, February). From Tradition to Transformation: A Revolutionary Moment for Nursing in the Age of Reform. *Nurse Leader*, *12*(1), 65-69. https://doi.org/DOI: https://doi.org/10.1016/j.mnl.2013.08.006
- Reig, L. S., Newbanks, R. S., & Sprunger, R. (2018). Caring from a Christian. *Journal of Christian Nursing*, 35(3), 168-173. https://doi.org/10.1097/CNJ.0000000000000474
- Sherrod, B., & Goda, T. (2016, September). DNP prepared leaders guide healthcare system change. *Nursing Management*, 47(9), 13-16. https://doi.org/10.1097/01.NUMA.0000491133.06473.92
- Singleton, J. K. (2017). An enhanced cultural competence curriculum and changes in transcultural self-efficacy in doctor of nursing practice students. *Journal of Transcultural Nursing*, 28(5), 516-522. https://doi.org/10.1177/1043659617703162
- Tilburt, J. C. (2010). The role of worldview in health disparities education. *Journal of General Internal Medicine*, 25(Suppl.2), 178-181. https://doi.org/10.1007/s11606-009-1229-9
- Tyczkowski, B. L., & Reilly, J. (2017, July-August). DNP prepared nurse leaders: Part of the solution to the growing faculty shortage. *JONA*, 47(7/8), 359-360. https://doi.org/10.1097/NNA.0000000000000494

Volkert, D., & Johnston, H. (2018, September-October). Unique issues of DNP students: A content analysis. *National League for Nursing*, 280-285. Retrieved from www.neponline.net