

ABSTRACT

DEVELOPMENT OF A BACCALAUREATE COMMUNITY HEALTH NURSING COURSE GROUNDED IN NIGHTINGALE'S FRAMEWORK

A Thesis Presented to the Faculty of Regis College, Weston, Massachusetts

BY

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The lack of theory in Community Health Nursing (CHN) education is significant. Nightingale's theory, with its emphasis on environmental effects on health, could guide CHN, and teaching her theory's points in CHN courses could better prepare future nurses to provide care. The purpose of this scholarly practice project was to learn nursing students' perceptions of using the Nightingale Environmental Adaptation Theory of Nursing Practice (NEATNP) in their community health nursing education experience, and how this helped them to understand the importance of theory in practice. The objective of this scholarly practice project was to develop, implement, and evaluate a baccalaureate level CHN course grounded in the *Nightingale Environmental Adaptation of Nursing Practice*. The researcher has developed and implemented the CHN course, including didactic and clinical instruction. The course was followed by an evaluation, a descriptive qualitative study design using focus groups for data collection. The Classic Analysis Strategy method, used for data analysis, revealed that the baccalaureate students had positive perceptions of this CHN course, with some suggestions for the course in the future. Their positive perceptions and the enthusiasm demonstrated in the focus groups confirmed the researcher's belief that there is a need for theory, specifically the NEATNP, in baccalaureate nursing education.

Keywords: Nightingale, theory, environment, nursing education, community health.

Running head: COMMUNITY HEALTH

DEVELOPMENT OF A BACCALAUREATE COMMUNITY HEALTH NURSING

COURSE GROUNDED IN NIGHTINGALE'S FRAMEWORK

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DEVELOPMENT OF A COMMUNITY HEALTH NURSING COURSE

Chapter 1: Introduction

Community Health Nursing (CHN) has evolved from the era of Nightingale to the present time of the Affordable Care Act. Ever enduring, Nightingale's Environmental Adaptation Theory of Nursing Practice (NEATNP) is applicable to today's CHN practice. This scholarly practice proposal (SPP) will describe the development of a baccalaureate CHN course grounded in Nightingale's framework. Chapter one will focus on the problem, background, significance, objective, research question, and philosophical assumptions pertaining to this scholarly project proposal. The Rosswurm-Larrabee Model for Evidence-Based Practice will be the framework for this SPP.

Health care is changing, with nursing care more commonly delivered in the home or a community health center instead of the hospital (Luthy, Backstrand, & Callister, 2012). As health care delivery models change, nursing education also needs to shift to accommodate this change. Studies (Abbott, 2013; Hjälmhult, 2009) show the need for better preparation for community health nursing (CHN) in nursing education programs. It is important that theory is integrated in to a CHN course. While inquiries to CHN professors (personal communication, November 6, 2014) show some use of theory-based curricula in CHN education, including Nightingale, there is no evidence of a course grounded in Nightingale's theory.

Community health nursing education could be enhanced by Nightingale's theory, with her attention to the environmental influences on health. With community health's focus on the environment, her points of the importance of cleanliness, clean air, water, drainage, and sanitation are relevant today. Nightingale did not call her points the meta-paradigm concepts of nursing theory since that term did not exist at her time, but each of the concepts is addressed in her writings. The four concepts are the environment, the person, health, and nursing. The

emphasis on the environment was both internal and external to the patient, and nursing is the route to achieving health. Nightingale asserted that nurses should alter the environment to improve conditions surrounding the patient, allowing healing to occur. This grew out of her observations that poor environments led to poor health and disease. Nightingale believed that the patient was an individual or the family unit and also saw the need to address the physical, spiritual, social, and psychological aspect of the person, as any of these could affect illness. Nightingale's perception of health is consistent with the modern concept of health, that it is a relative state with the natural laws governing the state of health. Lastly, Nightingale saw the goal of nursing is to place the patient in the best possible condition for nature to act. This is accomplished through alteration of the environment to provide the best conditions to allow nature to heal a patient (Selanders, 2005).

Nursing education can benefit from Nightingale's theory in CHN courses. The purpose of this scholarly project is to develop, implement, and evaluate a baccalaureate CHN education course grounded in Nightingale's theory.

The framework for this project is the Rosswurm-Larrabee Model, an evidence-based model "derived from theoretical and research literature related to evidence-based practice, research utilization, and change theory" (Rosswurm & Larrabee, 1999, p. 318). It guides practitioners through the process of change. This model was chosen because it has been successfully applied to nurses implementing change to evidence-based practice. Since this project is changing the practice of nursing education by adding Nightingale's theory to a CHN course, the model will guide the process. Following the steps will aid the researcher in assessment implementation, and evaluation of the project (Rosswurm-Larrabee, 1999). The steps of the Rosswurm-Larrabee model are: assess the need for change; link the problem with

intervention and outcomes; synthesize the best evidence; design the practice (or education program) change; implementation and evaluation; and integrate and maintain. The first and second steps assess the need for change and link the problem with intervention and outcomes, will be addressed in this chapter (Rosswurm-Larrabee, 1999).

Statement of the Problem

Today, health care is transitioning to nursing care delivered in the home or community health center, rather than hospitals. Acute care centers provide only 30% of nursing services (Luthy, Backstrand, & Callister, 2012). Fewer hospitals hire new nursing graduates while most of community health practices would hire new graduates (McCurdy, 2011). Nursing education programs need to better prepare students for the shift from hospital care to care in the home and community (Albutt, 2013; Hjälmhult, 2009). The Institute of Medicine (IOM) found that most nursing schools still educate students for acute care rather than community settings. Current education does not promote the skills nurses need to negotiate with the health care team. They also need to help patients to access health and social service programs today's community health environment. The intricacies of care coordination are not adequately addressed (IOM, 2011).

Additionally, there is a lack of theory focusing environmental influences on health such as Nightingale's in CHN education. Since Nightingale's era, nurse educators have recognized the importance of teaching students about the environmental influences on health and illness (Gerber & McGuire, 1999), but her theory has not been identified as providing the framework for a CHN course.

In their CHN textbook, *Community/Public Health Nursing Practice* (2009), Maurer and Smith approach family and community assessments from a general systems framework.

“General systems theory provides an umbrella for assessing and analyzing the various clients and their relationships with dynamic environments” (p. 7). General systems theory utilizes nursing’s unique perspective and can organize data collection necessary to develop the body of knowledge distinctive to nursing.

One school, College of the Ozarks (2015), integrates Nightingale’s theory into its nursing curriculum. Also, a nursing professor at Kings College of London uses a Nightingale application to show her work in environmental influences on health (R. Wall, personal communication, March 22, 2015). However, there is still a theory-practice gap. The theory-practice gap reflects nursing educators’ challenge to enhance the convergence of theory and practice, so what is taught in the classroom strengthens what is practiced in the clinical site. Part of the solution to closing the theory-practice gap is to acknowledge the significance of both in nursing students’ education and to recognize their need to be congruent. Student clinical experiences should provide opportunity for them to translate theoretical knowledge into actions. Clinical experience is limited in its capacity to compensate for inadequate theory (Happell, 2009).

Background

Community health nursing has evolved in recent years. The following section will describe CHN and the evolution of CHN practice. It will also explore the impact of theory on CHN education and practice.

Description of community health nursing. Long before hospitals assumed the greater role of caring for the ill, nurses worked in community settings with emphasis on environmental influences on patients’ health. Nurses in the community setting acted as investigators and educators assessing homes for dangers and working with communities to help people understand the effects of environmental hazards. Historically, community health nurses have seen the

importance of surroundings as they cared for clients in their homes and workplaces (Gerber & McGuire, 1999).

In 1893, Lillian Wald organized the Nurses Settlement of New York City, later known as the Henry Street Settlement. She coined the term public health nursing, and is considered the first American community health nurse. Wald included nursing in schools, clinics, and community health centers. Community health nursing, a term defined in 1960, expands on the term public health nursing. Community health nursing as it is known today is the synthesis of public health and nursing (Maurer & Smith, 2009).

Community health nurses focus on improving the overall health of the community. They need well-developed assessment and teaching skills, and self-reliance. In addition, community health nurses provide direct care in clinics and patient homes making sophisticated procedures formerly performed in hospitals available in outpatient clinics. Patients often leave the hospital with complex care needs and treatment plans in place that will be implemented by the visiting nurse (Mayo Clinic, 2013).

Community health nursing practice. Since patients are discharged from hospitals earlier in the course of their illness in current health systems, requiring complicated nursing management at home, the role of the home care nurse is increasingly important (O'Reilly, 2005). The Centers for Disease Control (2015) reports 4.7 million people receive home health care each year. The mean length of service is 315 days, and the median is 70 days. Complex health care needs add to the strain of their care (O'Reilly, 2005).

The Association of Community Health Nurse Educators identifies some of the skills needed to negotiate with the health care team, listing 15 core knowledge and basic competencies for entry-level community health nursing. These include communication,

epidemiology and biostatistics, community/population assessment, policy development, assurance, health promotion and risk reduction, illness and disease management, information and health care technology, environmental health, global health, human diversity, ethics and social justice, coordination and manager, and emergency preparedness, response, and recovery (ACHNE, 2010). These competencies are needed to improve patient care and should be taught in CHN education courses, both in didactic and clinical settings.

Impact of nursing theory on community health nursing education and practice.

Theory application in CHN practice was still at the tentative level of development in 1999 (Kulbok, Gates, Vicenzi, & Schultz). Scholars in CHN lamented the lack of nursing conceptual frameworks guiding their practice (Falk-Rafael, 2000). Theory development has not focused on CHN. However, there is evidence of models and theories utilized in CHN (Dalton & Cloutterbuck, 2009; Maurer & Smith, 2009; personal communication, November 6, 2014). Falk-Rafael (2000) recognized criticism of nursing theories: they focus on individuals and are developed within the framework of disease, such as the framework *Maintaining Hope in Transition*. This framework utilizes transition theory when treating patients with heart failure, helping patients to cope with the diagnosis of heart failure and guides development of nursing interventions (Davidson, Dracup, Phillips, Padilla, & Daly, 2007). Falk-Rafael used Watson's theory of human caring in her practice as a community health nurse. As early as 1979, Watson (as cited in Falk-Rafael, 2000) offered a critique of the medical dominance of health care and acknowledged that there are nonmedical determinants of health, such as age, genetics, and environment. The qualitative difference of health and disease in Watson's theory is a noteworthy departure from the biomedical model. Falk-Rafael noted that recent research provided evidence that effective CHN practice cannot separate the community from the

individuals within it. Falk-Rafael (2005) posits nurses are at the intersection of public policy and individual patient's lives; thus, they are ideally suited to include sociopolitical advocacy as Nightingale did in her practice. Two foci for community health nurses framed by caring are the immediate needs of the disadvantaged and the social structures that exclude some for the benefit of others. Falk-Rafael notes, "if ever Nightingale's vision and example are both essential for the public's health and relevant to nursing, it would be now" (p. 212).

Another framework used to teach CHN is the Clutterbuck Minimum Data Matrix (CMDM) model, first used in 2006. The CMDM, based on general systems theory of Von Bertalanffy, provides a framework for problem solving for CHN. It is an evolving conceptual model designed to guide education and practice in CHN. The CMDM model was developed to prepare nursing students and practitioners for changes occurring in the health care system, and to more effectively plan care for an increasingly diverse population. It also inspires students to promote wellness, and supports culturally competent care. Dalton and Clutterbuck (2009) used this model to guide the selection of content and teaching and learning strategies in a baccalaureate CHN course in Massachusetts.

In addition to Watson's theory and the CMDM model, general systems theory guides CHN practice by providing an umbrella for evaluating various clients in their dynamic environments. For example, family and community assessments are approached from a general systems framework (Maurer & Smith, 2009).

As previously noted, the Armstrong McDonald School of Nursing at the College of the Ozarks also uses Nightingale to frame its CHN course.

The B.S.N. program's organizing framework is grounded in the concepts of Truth (Biblical worldview), character, critical thinking, creating a nourishing

environment (CNE), and reflects the tenets of Florence Nightingale, the visionary founder of professional nursing. There is an emphasis on holistic patient-centered care through creating a nourishing environment to foster the patient's healing journey.

(College of the Ozarks, 2015, para. 8).

Many CHN educators still do not use theory in their courses. One CHN educator (personal communication, November 6, 2014) reported using a multitude of theory, including Nightingale, but did not use a specific theorist to frame CHN education. Additionally, some other educators (personal communication, November 8, 2014) reported using no theory in their CHN courses or some theory but no nursing theory.

Nursing has evolved from Wald's public health nursing in the 1800s to in-patient hospital care in the 1900s and now back to community-based care. Today, there is a greater demand for health care provided in the community. As CHN practice and education continue to evolve, it is important that theory guides them. Nightingale's environmental theory is an excellent one to frame nursing education in CHN.

Significance

The lack of theory in CHN education is significant. The current pattern of nursing school graduates increasingly employed in the community suggests the need for a strong CHN education based in theory. The complexity of patients the nurse will care for in the community and the lack of interest in CHN as a career choice also illustrate the need for a strong CHN course in baccalaureate nursing programs.

Today's nursing graduates need to be prepared to provide community care. Nightingale's theory, with its emphasis on environmental effects on health, could guide CHN, and teaching her theory's points in CHN courses could better prepare future nurses to provide care. There is no

apparent CHN course grounded in Nightingale's theory. Since many of today's nursing school graduates will be working in the community, Nightingale's theory is important as it provides an appropriate theory to guide their education in CHN.

Today, only 30% of nursing services are provided in acute care centers (Luthy, Blackstrand, & Callister, 2012), and only 39% of hospital jobs accept applications from new graduates, while most if not all of community health providers would consider hiring new graduate nurses (McCurdy, 2011). The employment trends are shifting to community nursing as the emphasis in care migrates from treatment to health promotion and prevention.

Peter McMenamain, an ANA Senior Policy Fellow and Health Care Economist (2013), notes that the Affordable Care Act is creating up to 30 million more people who could be eligible for subsidies through the state health insurance exchanges or qualify for Medicaid. This is a population that tends to defer care, do not comply with their medication regimes, and fail to see a primary care provider for annual physicals and other preventative health services.

Dr. McMenamain predicts that when this group has access to expanded care, they will be looking for the range of services community nurses provide. For example, community health nurses will be needed to assist with preventative care in community health centers, provide care for homebound patients and older patients in adult day facilities. Dr. Molle, a nursing professor, reports there is a "shortage overall in the type of nurses qualified for health care we are moving into" (Wood, 2011, para 9), and notes the need for more community health nurses.

Community health continues to be an area of low priority for nursing students and graduates not familiar with this specialty. Often, when students participate in their community health courses, they have already decided to pursue specialties such as an intensive care, pediatrics, obstetrics and gynecology, emergency, or psychiatric nursing (Williams & Bihan, 2013). A CHN course

with a strong theoretical foundation, in both the didactic and clinical portions, could provide more interest in this specialty as a career. The purpose of this project is to develop and conduct a course grounded in the Nightingale Environmental Adaptation Theory of Nursing Practice. As today's nursing students study CHN, using Nightingale as an example could promote the essential skills of critical thinking, self-reliance, and adaptability. In the community health setting, care is holistic, focusing on the patient, family, and home environment. Critical thinking, self-reliance, and adaptability are essential skills for the community health nurse, in addition to assessment, listening, and evaluation skills (Gerber, 2013). Nightingale embodied the qualities of authenticity, expertise, and flexibility.

There is a lack of research regarding the use of nursing theory in CHN education. This is significant, as research is necessary to promote evidence-based nursing education and practice. Today, Nightingale's theory with its emphasis on the effect of the five points of light, water, air, cleanliness, and drainage on patients' health, could guide research and nursing education. These points are the major focus of "Notes on Nursing" (1860). Even though these points were written in the mid 19th century, their ideas are still relevant. While there are studies on the effect of these points, they do not attribute these constructs to Nightingale, but they validate her belief that the environment has an important effect on health.

The purpose of this scholarly practice project is to develop, implement and evaluate a CHN course based on the NEATNP. Evidence shows that theory is intricately intertwined with scholarship and nursing theory that evolves from practice and is used in education is an indicator of scholarliness in nursing (Meleis, 2007). This has importance to nursing education and practice because while studies regarding CHN and theory have been conducted, an evidence-

based practice project regarding the use of Nightingale's theory in CHN education has not been conducted. This study is aimed to augment the body of knowledge regarding CHN education.

Project Objective

The objective of this scholarly practice project is to develop, implement, and evaluate a baccalaureate level CHN course grounded in the *Nightingale Environmental Adaptation of Nursing Practice* (NEATNP). The Rosswurm-Larrabee model that guides practitioners through the process of change will guide the project. This model was chosen because it has been successfully applied to nurses implementing change to evidence-based practice. Since this project is changing the practice of nursing education by adding Nightingale's theory to a CHN course, the model will guide the process.

Research Question

What are nursing students' perceptions of using the Nightingale Environmental Adaptation Theory of Nursing Practice in their community health nursing education experience?

Philosophical Assumptions

The foci of these assumptions pertain to the relationship between theory and CHN, the importance of CHN education, and NEATNP. Assumptions guiding this work include the following:

1. Community health nursing is an emerging and valid specialty, requiring a unique and specialized skill set.
2. Theory based education produces competence and confidence in students.
3. Nursing is both an art and science, dependent on compassion and common logic, and the utilizations of research (Selanders, 2005).

4. Community health nursing education is optimized when based on research and grounded in a theoretical framework.
5. Nightingale's theory with its emphasis on the environment is well connected to CHN, where the goal of the nurse is to create an environment where a person can heal.
6. Understanding its historical antecedents, which include Nightingale and her theory, enhances current nursing education.
7. Nightingale's essential concepts are salient, and CHN education programs would benefit from applying Nightingale's theory to their clinical praxis.

Chapter II: Review of the Literature

Introduction

The review of literature fulfills step three of the Rosswurm-Larrabee Model: to synthesize the best evidence. The purpose of this literature review is fourfold, to review: theories used by CHN educators in their courses; how baccalaureate nursing students are prepared to practice CHN; Nightingale's theoretical points used in recent research but not attributed to her framework; and how Nightingale's theoretical points have been appropriated in nursing education. The researcher used Academic Search, CINAHL Complete, Health Source, and MEDLINE Complete databases, using the following search terms: "nursing education," "community health nursing (CHN)," "theory," "use of theory," "baccalaureate nurse," "nursing students," "practicums," "preceptors," "Nightingale," "Florence Nightingale," and "Nightingale's Environmental Adaptation Theory of Nursing Practice." The review covered dates from 1993 to 2014 plus one book, Nightingale's *Notes on Nursing: What it is and What it is Not* from 1860. The search was begun in May 2013 and is ongoing.

The review of literature is divided into two sections. The first section is a discussion of the theoretical framework for this project, Nightingale's Environmental Adaptation Theory of Nursing Practice and its application to nursing. Also described is an example of the NEATNP at the College of the Ozarks in Branson, MO. The second is an empirical review divided into three subsections: students' preparation for CHN, the use of theory in CHN, and the use of Nightingale's points in research.

Nightingale's Environmental Adaptation Theory of Nursing Practice

Florence Nightingale is the premier advocate of knowing the effect of the environment when providing nursing care. Her attention to environmental factors affecting health is as

relevant to nursing today as it was in 1860, when she wrote *Notes on Nursing: What it is, What it is Not*. The concept of working to improve the environment of the patient is a basic tenet of nursing, regardless of the disease process. Nightingale saw nurses as specifically educated to assume this role. Additionally, in 1893, she added *Sick Nursing and Health Nursing* from the perspective of how it works in establishing nursing practice. She considered sick nursing the treatment of illness, and health nursing the prevention of illness, especially by adjusting the environment to promote health (Selanders, 2005).

Nightingale made significant advances related to a wide range of health issues. Since Nightingale, nursing has been a crucial part of the planning and implementation of actions taken to meet the goals of community health. Nightingale advanced the art and science of nursing by establishing a clear educational foundation required for practicing the profession (Savage & Kub, 2009).

Nightingale's Biography. Nightingale was brilliant in mathematics, with a sophisticated understanding of statistics. She synthesized a wide and deep body of information on nursing, medical reform, hospital design, sanitation, philosophy, and religion. By the age of 30, Nightingale became one of the most knowledgeable people on hospitals and health care in Europe. In the Crimean War in 1854-1856, Nightingale's leadership and extensive data collection and analysis were the key to British Army medical reforms (Selanders, 2005). She wrote extensively about sanitation conditions and used statistics to document that her methods reduced the mortality rate in the war. Her publication *Notes on Hospitals* in 1859 included her work on sanitation, and her *Notes on Nursing* in 1860 was the influential text for the theory and practice of modern nursing. In 1860, she started the first modern secular school of nursing, the

Nightingale Training School of London. By the time of her death in 1910, Nightingale's influence was felt in over 20 countries (Selanders, 2005).

Nightingale's Legacy. Nightingale's work is as relevant today as it was in her lifetime. Her attention to the impact of the environment on health is one of the primary foci of nursing care today. One nursing educator (N. Street, personal communication, October 18, 2014) has said that Nightingale should be considered the expert and the foundational philosopher of nursing much as the framers of the Constitution are regarded as the founders of the United States of America.

Nightingale was the first to articulate modern nursing values and beliefs. She stated that people were connected to their physical environments and either flourished or deteriorated in relation to their living conditions. Nightingale raised questions about why impoverished people lived in conditions imperiling their health. Her sense of social justice became the overriding theme of her work. Nightingale's values could be used today to motivate nurses to mobilize resources to promote social justice and improve the lives of those who are suffering (Hegge, 2013).

Nightingale also recognized the importance of health promotion. In her curriculum for the first training school for nurses, she focused on one full year dedicated to furthering the health of communities and addressing social and health reforms. Nightingale wrote that it would be more cost effective to maintain children's health than to build hospitals to cure disease (Falk-Rafael, 1999).

Nightingale's theory lists the five points essential for health: pure air, cleanliness, pure water, efficient drainage, and light. Regarding pure air, Nightingale stated that outside air must find its way into every corner of the house, and if the air is stagnant, sickness is sure to follow.

This attention to air quality demonstrated the first modern thinking about the relationship of the environment to health (Shaner-McRae, McRae, & Jas, 2007). Old wallpaper and dirty carpets and furniture were sources that could contaminate the air and add to uncleanliness in the home. People using impure water would be sickened during disease epidemics. She believed that disease and ill health were introduced into houses from sewers and drains running near homes. Nightingale was also convinced that lack of light arrested physical growth and promoted scrofula and rickets among children. Nightingale (1860) observed that people living in dark houses were in poorer health, showing a need for homes with good lighting.

Nightingale's (1860) concepts of fresh air, fresh water, cleanliness, light and sanitation, though not attributed to her, have been emphasized relative to environmental influences on health. For example, Ainsworth (2014), a health writer specializing in the history of medicine and primary care, described the healthful effects of fresh air in his essay. He noted that in the 1930s, resorts were developed where health professionals would prescribe two weeks holiday for "run-down" members of the Russian proletariat. Ainsworth also reported that the Friendly Societies Act of 1875 ran sanatoria, serving the "working class who benefitted from a prescription for a good rest and a blast of ozone laden air" (p. 14). He advised writing prescriptions for fresh air for today's patients. Another of Nightingale's essential points for health, fresh water, was the subject of Miller and Gibson's (2012) article regarding children's health and wellbeing. They noted that even mild dehydration could have negative effects. Drinking well throughout the day is important to ensure the bladder stretches to its full capacity, enabling children to recognize the sensation of a full bladder.

The lasting benefit of Nightingale's theory is the legacy of values she contributed to modern nursing. Nightingale is credited with enhancing health care by developing nursing

schools and improving sanitary conditions in hospitals and homes (Tourville & Ingalls, 2003). She valued nursing education and established the Nightingale School, which emphasized a combination of clinical and classroom experience. Nightingale also valued the importance of the environment, as it was commonly understood to exist. Nightingale's legacy was her effort to improve the state of public health through the identification of practice based on education and research (Dossey et al., 2005).

Nightingale changed the status of nursing from that of domestic help to that of a vocation (Bostridge, 2008; Cook, 1913; Dossey, 2000 as cited in Selanders & Crane, 2012). Nightingale was the first to call nursing a profession, perhaps her greatest contribution to nursing (L. Selanders, personal communication, March 23, 2015).

The NEATNP meets the qualification of a theory as it addresses all the components of the nursing paradigm: environment, the person, health, and nursing. The following model illustrates Nightingale's nursing process. It is a "four-step sequence: observation, identification of the needed environmental alteration, implementation of the alteration, and identification of the current health state" (Selanders, 2005, p. 104). Reproduced with permission from Dr. Louise Selanders (Appendix A).

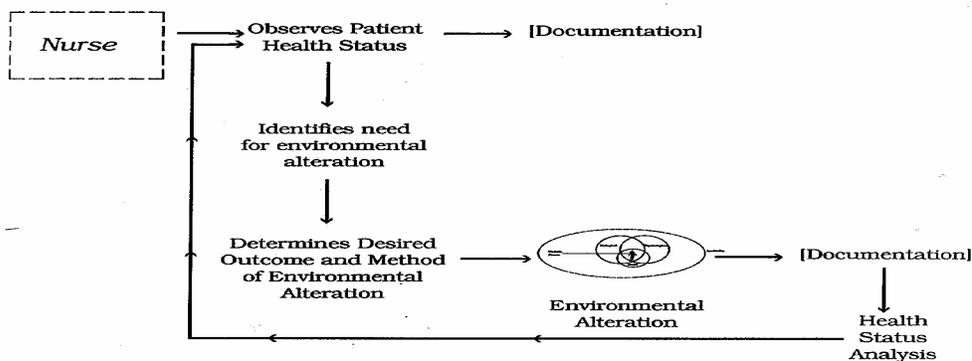


Figure 2. Nightingale's Model for Nursing Practice

An example of this model in use could be the student conducting a windshield survey. A windshield survey is a community assessment, done while driving around the community. The student looks through the car windshield, collecting data (Stanhope & Lancaster, 2006). Using Nightingale’s model, the student observes general health status of the community, identifies need for environmental adaptation, and plans alterations that are feasible and attainable. After implementing alterations, the student evaluates current health status of the community.

The Use of Nightingale in College Education. The Armstrong McDonald School of Nursing at the College of the Ozarks (C of O) in Branson, Missouri includes the Nightingale model and theory-based curriculum.

In its mission statement the College of the Ozarks compares its goals with Florence Nightingale outcomes. The college’s goals address its commitment to develop students in the academic, Christian, vocational, patriotic, and cultural areas. The following table summarizes their comparison:

College of Ozark Goals	Florence Nightingale (FN) Outcomes
Academic: To provide a sound education based in the liberal arts.	FN created formal education for nurses. Her <i>Notes on Nursing</i> framed the principles of nursing.
Christian: To foster the Christian faith through the integration of faith with learning, living and service.	FN described having a calling from God to do his work. She sympathized with human need and her nursing interventions included praying with patients.
Vocational: To promote strong work ethic, encouraging the development of good character and values.	FN’s visionary educational and vocational reforms have influence of modern health care and her writings continue to be a resource for nurses.
Patriotic: To encourage an understanding of American heritage, civic responsibilities, love of country, and willingness to defend it.	FN came to renown during her service to England during the Crimean War. Through her reforms of the soldiers’ environment mortality was drastically reduced within six months. The healing environment she created included attention to fresh air, clean water, nourishing food, sunlight, and adequate septic systems.

Cultural: To cultivate an appreciation of the fine arts, an understanding of the world, and adherence to high personal standards.	FN believed that nurses should have a well-rounded education, including fine arts. She used music therapy to soothe the suffering of those in pain, and brought beauty to institutions by gardens and paintings.
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(College of the Ozarks Mission, 2009)

Although Nightingale was Christian, (Dr. Selanders, personal communication, June 18, 2015), she emphasized, “Nursing exceeded the boundaries of religion and should be seen as a basic human response to those in need.”

Professor Diane Smith (personal communication, April 17, 2015), CHN professor at College of the Ozarks, shared her use of Nightingale’s theory in the course. She includes Nightingale’s role in the Crimean War and her work in India. Professor Smith also integrates Nightingale’s five points when teaching population health and family health and home nursing.

Dr. Rosemary Wall, a visiting history professor at King’s College of London’s Nightingale School of Nursing and Midwifery, has developed a Nightingale software application (app) for smartphones. Dr. Wall feels that the app helps students relate Nightingale’s interactions with aspects of London’s history of war, poverty, etc., which helps explain Nightingale’s broader interests (personal communication, March 22, 2015). Dr. Ian Noonan, a nursing professor at King’s College, shared that he assigns Dr. Wall’s app to students before his seminar on hospital architecture. Dr. Noonan stated that students see how Nightingale’s thoughts about light and ventilation influenced the design of the original parts of St. Thomas Hospital that remain (personal communication, April 9, 2015).

Empirical Literature

Overview. The review of empirical literature covered studies regarding students’ preparation to work in CHN settings, the use of theory in CHN education, and the use of

Nightingale's points in research. Findings confirm the lack of student preparation for CHN and the lack of theory use in CHN, while Nightingale's points were used but not credited to her.

Researchers (Albutt, 2013; Diem & Moyer, 2010; Hjälmhult, 2009; Marshall & Shelton, 2012; Mtshali, 2009) studied nursing students' perceptions of their preparation to perform CHN. Chalmers, Bramadat, and Andrusyszyn (1998) explored the use of theory in CHN education. Other researchers (Meesters & Waslander, 2009; McEnany & Lee, 2005; Hobday & Dancer, 2013; Jas, Koepke, & Larson, 2013; Jasper, Le, & Bartram, 2012; Ramphal, Suzuki, McCracken & Addai, 2014) studied the use of Nightingale's points of light, air, cleanliness, and water in health care. While these research studies have contributed to an understanding of CHN and CHN education, there is limited research and knowledge of the use of theory, and no apparent use of Nightingale's theory in CHN education.

Students' Preparation for CHN. Studies (Diem & Moyer, 2010; Marshall & Shelton, 2012; Mtshali, 2009) looking at nursing students' preparation for CHN found that they were lacking adequate preparation to practice nursing in the community. There was tension between communities and academic institutions: students were unhappy with the length of their CHN courses, and they felt insecure in their clinical placements.

Mtshali (2009) found a major challenge to be partnerships between communities and academic institutions. Learning was the priority for the academic institution, but service provision emerged as a priority for the communities, creating tension between communities and academic institutions. Mtshali's study revealed that engaging all the stakeholders was crucial in sustaining CHN education programs. The findings also revealed that students' learning was more meaningful when they were actively involved in their learning and learning is taking place in setting resembling the workplace. It emerged that learning in such settings facilitated the

development of analytical, decision-making, problem solving, communication and self-directed learning skills.

Experiential learning was perceived as being more meaningful when students were actively involved in their experience (Mtshali, 2009). However, Diem and Moyer's study (2010) revealed several issues related to their experience working without a nurse present. Nursing students carried out community coursework in teams with a weekly visit from the instructor. An issue was difficulty with the teamwork that CHN education required. Student dissatisfaction arose from the perception of unequal student workloads and different requirements of various community organizations. Student nurses also reported struggling to find nursing working in situations without a practicing nurse. There was also evidence that students were unhappy with the length of CHN courses (Diem & Moyer, 2010). These findings reflected Mtshali's (2009) assertions that students' learning was enhanced when they are actively engaged in a situation that resembles the workplace, where a nurse would be present.

Several studies (Albutt, 2013; Hjälmhult, 2009) revealed students' feelings while in their CHN course clinical placements, and measures which contributed to their development as community health nurses. Hjälmhult (2009) researched student nurses' feelings about CHN through interviews and students' weekly reports. This study revealed that nursing students in CHN courses reported experiencing chaos and insecurity during their CHN clinical placements. These feelings came from loss of confidence for students as they negotiated a new type of clinical experience. They felt overwhelmed when meeting children and adolescents, often the target group with needs. Complicated family situations led to students' feelings of helplessness and confusion. Albutt (2013) identified another issue leading to feelings of insecurity in CHN students. This study found that compared to acute care, students had insufficient experience in

primary care. In addition, the duration of their clinical placements was insufficient, and students were concerned regarding the lack of enough qualified nurses available to serve as preceptors in CHN placements. Albutt's study also found students felt nursing curriculum was focused on acute care and did not provide them with adequate knowledge of primary or community health care. While the previous studies identified concerns about students' CHN education, Marshall and Shelton (2012) found positive aspects of some CHN courses. Changes to curricula to provide extensive community placements enhanced the confidence of students. The variety of community placements contributed to their development of knowledge and skills. Students reported that the nature of CHN practice and the time spent traveling with their mentor between visits allowed for discussion and reflection of their experience.

Uses of Theory in CHN. Two qualitative studies revealed the importance of theory in CHN, one studying students' perspectives and one studying educators' perspectives. Benner's model (as cited in Chalmers, Bramadat, & Andrusyszyn, 1998) has been used to guide studies in CHN education. Benner's model emphasizes the influence of the learning environment and the importance of creating environments that are mutually beneficial for students and communities. Chalmers, Bramadat, and Andrusyszyn's study (1998) of perceptions of the changing environment of community health practice and education utilized Benner's model of novice to expert. Chalmers et al. used focus group interviews and self-administered questionnaires to collect demographic and practice-related data from community health nurses and administrators. Their findings described the context in which nursing students learn about CHN, noting the change in today's community practice. Themes that emerged were: change in client profiles, change in community support, change from the expert to facilitator approach to clients, broader roles and new skills of the community health nurse, the need for research and evaluation of the

effectiveness of nursing interventions, changes in the role of allied health workers, and the question of whether the community health nurse is a generalist or a specialist.

Mabhala used Charmaz's (as cited in Mabhala, 2013) constructivist grounded theory method of research. She studied how public health nursing educators' professional knowledge could be conceptualized and developed a theory regarding their knowledge of teaching public and community health. This qualitative study utilized in-depth semi-structured interview of 26 educators. Findings were that social justice was the underpinning principle behind educators' public health vision.

Use of Nightingale's Points in Research. Nightingale's points of light, fresh air, clean water, and cleanliness have been explored in research (Hobday & Dancer, 2013; Jas, Koepke, & Larson, 2013; McEnany & Lee, 2005; Meesters & Waslander, 2009), but these points have not been attributed to her. The importance of fresh air, water, light, and sanitation were studied, with each study result supporting Nightingale's environmental theory.

A Canadian health department's attention to air quality supports Nightingale's premise about the relationship of the environment to health. An Ontario health department needed a fresh approach to educating the public about health issues. The agency published a book to educate children about the links between air quality and human health. This was pertinent, since the Canadian Medical Association noted that as many as 21,000 Canadians died prematurely from the effects of air pollution. The study showed that 99% of the evaluators would use the book to introduce an environmental themed discussion and would give the book to a child they know. Also, there were more than 2000 visits to their web page (Jas, Koepke, & Larson, 2013).

In addition to air quality, Nightingale's point of the importance of light was affirmed by Meesters and Waslander (2009), who conducted a study on the effect of light on burnout, which

they described as “the work-related state of emotional exhaustion and being overstressed” (p. 13). Participants were screened via clinical interviews for burnout complaints and emotional exhaustion. They were given light therapy in a 22-day trial, and their energy levels were measured via self-reported questionnaires. The results showed an improvement in energy levels after the light therapy. While not crediting this study to Nightingale’s points, the researchers validated Nightingale’s assertions that without light, sickness will occur. In addition to the previous study of light’s effect on burnout, McEnany and Lee (2005) studied the effects of light therapy on sleep, mood, and energy in a sample of women diagnosed with major depressive disorder. In this randomized clinical trial, the intervention was light therapy or placebo intervention. The light therapy was administered via a light visor and the placebo intervention was the use of “circadian adaptation glasses,” (p. 785) which actually filtered out light. Scores on the Beck Depression Inventory, which measured the severity of depressed mood scale and on the SCL-90R subscale, which measured distress related to depressed mood scale improved significantly in the intervention group, but not in the placebo group (McEnany & Lee, 2005). Again, Nightingale’s point of light’s necessity for health was supported. Just as McEnany and Lee (2005) and Meesters and Waslander (2009) and affirmed the importance of light in their studies, Hobday and Dancer (2013) supported Nightingale’s point that light is important to health. They also added the importance fresh air to maintain health. They conducted a comprehensive literature search on the role of sunlight and natural ventilation for controlling infection within healthcare environments. The researchers noted that before antibiotics, sunlight and ventilation were considered safeguards against infections. This review found that direct sunlight might enhance resistance to infection to those who receive it, even from behind glass. The researchers also stated that the current reduced emphasis on fresh air in buildings justified

this review, which concluded that designing buildings to allow increased exposure to sunlight and fresh air might discourage the spread of infectious agents. This study supported Nightingale's point that light is important to maintain health.

Without crediting Nightingale, these studies (Hobday & Dancer, 2013; Jas, Koepke, & Larson, 2013; McEnany & Lee, 2005; & Meesters & Waslander, 2009) corroborate her premise that light is important to healing and health. Improved access to light can decrease burnout, improve depression, and decrease infection rates in healthcare environments.

In addition to light and fresh air, Nightingale's emphasis on fresh water was confirmed when Jasper, Le, and Bartram (2012) studied the effect of inadequate water on school children's health and school attendance. Their systematic review of literature concluded, "studies documented higher rates of infectious, gastrointestinal, neuro-cognitive and psychological illness where children were exposed to inadequate water and sanitation facilities" (p. 2783). They also found that the lack of sanitation facilities was associated with greater risk of gastrointestinal and communicable infections. The importance of clean water, as noted by Nightingale over a hundred years earlier, was verified by this study.

Cleanliness, another of Nightingale's five points was supported when Ramphal, Suzuki, McCracken and Addai (2014) studied cleaning behavior in healthcare facilities. This study was in response to the \$28.4-\$45 billion cost of hospital-acquired infections (HAI) in 2002. The US Department of Health and Human Services identified HAIs as a top priority for cost reduction. After patients were discharged from their rooms, a public health student swabbed high touch objects (HTO) with clear Glo Germ gel before the rooms were cleaned. The procedure was completed before and after the intervention of nurses' training on infection control principles, HTOs, and methods for cleaning. Data collected before and after the intervention revealed the

proportion of surfaces cleaned increased after the intervention. Rampahl et al.'s study supported Nightingale's focus on cleanliness as a determinant of health. Rampahl et al. along with Jasper, Le, and Bartram (2012) concurred relating the importance of cleanliness and sanitation in relation to health, both emphasized in Nightingale's theory.

Conclusion

Florence Nightingale's Environmental Adaptation Theory of Nursing Practice is as relevant to current nursing as it was in 1860, when she wrote *Notes on Nursing: What it is, What it is Not*. Today, Nightingale is credited with improving health care, developing nursing schools, and improving sanitary conditions in hospitals and homes (Tourville & Ingalls, 2003). Nightingale also recognized the importance of the environment, as it was commonly understood to exist.

Regarding nursing students' preparation for providing CHN, a review of the literature found several themes. Partnerships between academic institutions and clinical field placements in CHN were strained and had issues finding the "nursing" in the placements (Diem & Moyer, 2010; Mtshali, 2009). Nursing students reported feelings of chaos and insecurity during their CHN clinical placements, brief CHN clinical experience, lack of preceptors to guide them, and students felt the curriculum was focused on acute care rather than community health care (Albutt 2013; Hjälmhult, 2009).

Only two studies have been found that focused on the use of theory in CHN education. Chalmers, Bramadat, and Andrusyszyn's study (1998) used Benner's teaching and learning theories. Themes that emerged were: change in community support, broader roles and new skills of the community health nurse, the need for research and evaluation of the effectiveness of nursing interventions, and the question of whether the community health nurse is a generalist or a

specialist. Using Charmaz's grounded theory, Mabhala's (2013) found that social justice was the underpinning principle behind educators' public health vision.

The literature review found no examples citing Nightingale's essential points regarding CHN. However, the review of the literature did find examples of the influence of light, water, and cleanliness on patients' health. Light was found to decrease burnout, decrease the severity of depressed mood, and to enhance resistance to infection (Hobday & Dancer, 2013; McEnany & Lee, 2005; Meester & Waslander, 2009). In an effort to reduce hospital-acquired infections, a study Ramphal et al. (2014) found cleaning behavior improved after the intervention of nurses' training on infection control principles, and cleaning methods. Jasper, Le, and Bartram (2012) found lack of fresh water or sanitation facilities was associated with greater risk of gastrointestinal and communicable infections. The importance of clean water, as noted by Nightingale over a hundred years earlier, was verified by this study. While not attributing these constructs of light, water, and cleanliness to Nightingale, they validate her belief that the environment has an important effect on health.

Given the gap in knowledge and the lack of research focused on Nightingale's theory in CHN, the need for Scholarly Practice Project is supported. The objective of this Scholarly Practice Project is to develop, implement, and evaluate a baccalaureate level CHN course grounded in The Nightingale Environmental Adaptation Theory of Nursing Practice. The focus is to integrate Nightingale's theory into a CHN course and to gain a better understanding of baccalaureate-nursing students' perceptions of their preparation to work in CHN after successfully completing course grounded in Nightingale's theory.

Chapter III: Methodology

Introduction

The purpose of this scholarly practice project was to develop, implement, and evaluate a CHN education course based on the Nightingale Environmental Adaptation Theory of Nursing Practice (NEATNP). The course included didactic and clinical education utilizing the Rosswurm-Larrabee model. This addressed the third and fourth steps of this model (1999), designing the practice change and implementation and evaluation.

This chapter will describe the methodology of this scholarly practice project (SPP). A qualitative research design utilizing focus groups was used to gather nursing students' perceptions of using the NEATNP in their Community Health Nursing (CHN) course. The students, setting, informed consent, focus group questions and plans for collection and analysis of the data will be included. The *Rosswurm and Larrabee Model of Evidence Based Practice* that guided this study will also be described.

Model Chosen

The model for the project was the Rosswurm-Larrabee Model, an evidence- based model “derived from theoretical and research literature related to evidence-based practice, research utilization, and change theory” (Rosswurm & Larrabee, 1999, p. 318). The steps of the Rosswurm-Larrabee model are: 1.) Assess the need for change; 2.) Link the problem with intervention and outcomes; 3.) Synthesize the best evidence; 4.) Design the practice change; 5.) Implementation and evaluation; and 6.) Integrate and maintain.

Step one: Assess the need for change. The researcher collected and reviewed information regarding the use of theory in CHN education by reviewing CHN textbooks to ascertain use of theory and conceptual framework and queried local CHN professors regarding

their use of a theorist to guide their teaching. Additionally, the researcher has performed a literature review using terms “nursing education,” “community health nursing,” “use of theory,” “baccalaureate nursing students,” “practicums,” “preceptors,” and “Nightingale’s [1865] theory’s five essential points of light, fresh air, water, cleanliness and drainage. The findings from the review were that there was little use of theory in CHN education, and none in the projected college.

Other than the College of the Ozarks, the researcher has not found a CHN program that uses Nightingale to frame their CHN course, and Dr. Selanders, a Nightingale historian, (personal communication, February 10, 2015) was also not aware of any. The researcher reviewed curricula of similar baccalaureate nursing education programs, looking for evidence of theory guiding CHN, and the only program found using Nightingale’s theory was College of the Ozarks.

The researcher identified the stakeholders: Dean of the School of Nursing, classroom faculty, curriculum committee, advisory board members, nursing students, clinical faculty and community health nursing administrators at community health nursing field placements. The CHN faculty member and the Dean of the School of Nursing at the projected college provided “buy-in” and supported the project. The researcher met with both of these professors, and they saw the need for theory in nursing education. They welcomed the opportunity to cooperate with this project.

Step two: Link the problem with intervention and outcomes. The problem was the lack of theory in CHN education. The researcher integrated the Nightingale Environmental Adaptation Theory of Nursing Practice into a CHN course. The outcome, results of the integration, was assessed by students’ perceptions of using Nightingale’s theory in their didactic

and clinical settings. This was explored in a qualitative research study utilizing focus groups, where participants responded to open-ended questions related to the research question.

Step three: Synthesize the best evidence. The literature review found graduating students felt unprepared for practicing CHN and felt their nursing program prepared them for acute care, not CHN. Nightingale's theory could help prepare students for CHN, with its emphasis on environmental influences on health. Only one known college, the College of the Ozarks, uses Nightingale in its CHN course. Without crediting Nightingale, her points of fresh water, fresh air, cleanliness, sanitation and light were recognized as important factors to maintain health.

Additionally, there was no theory utilized in the CHN course in the school of nursing. With the exception of the previously discussed College of the Ozarks, the researcher did not find a CHN program that used Nightingale to frame their CHN course, and Dr. Selanders (personal communication, February 10, 2015) was also not aware of any.

As previously noted, the College of the Ozarks School of Nursing's curriculum is Nightingale based. Their program utilizes Nightingale throughout their curriculum (College of the Ozarks, 2015), and Professor Smith, the CHN professor, presents Nightingale's role in the Crimean War and her work in India. Professor Smith also explains Nightingale's five points when teaching population health and family health and home nursing, which substitutes for CHN.

The researcher identified the stakeholders: Dean of the School of Nursing, classroom faculty, curriculum committee, advisory board members, nursing students, clinical faculty and community health nursing administrators at community health nursing field placements.

Step four: Design the practice change. The change was to develop and integrate a Baccalaureate level CHN course grounded in *Nightingale's Environmental Adaptation Theory of Nursing Practice*. The rationale for this practice change project was that evidence shows that theory is intricately intertwined with scholarship, and nursing theory that evolves from practice and is used in education is an indicator of scholarliness in nursing (Meleis, 2007). This has importance to nursing education and practice because while studies regarding CHN and theory have been conducted, an evidence-based practice project regarding the use of Nightingale's theory in CHN education has not been conducted. Today, there is a greater demand for health care provided in the community (Luthy, Backstrand, & Callister, 2012). As CHN practice and education continue to evolve, it is important that theory guides them. Nightingale's environmental theory is an excellent one to frame nursing education in CHN. This study is aimed to augment the body of knowledge regarding CHN education.

The change was implemented via developing a pilot study integrating Nightingale's theory into the didactic and clinical portion of CHN education for senior nursing students in their 15 week CHN course. The researcher is a nursing faculty member with knowledge of Nightingale's theory and commitment to the use of theory in nursing education. The syllabus included the course description, student learning objectives, required texts, assignments, and evaluation methods. The assignments were readings, a windshield survey, reflective journals, and midterm and final exams. The assignments were graded according to the syllabus. See syllabus and weekly outline (Appendix E).

Nightingale's theory was utilized to meet course goals and objectives, which were identified in the syllabus (Appendix F), along with assignments and tests related to course objectives. The researcher utilized a student competency list grounded in clinical objectives of

the school that was investigated (Appendix G). There were 9 two-hour lectures and 7 clinical field placement days for each student. The lecture series addressed:

- Biographical information of Nightingale, emphasizing her contributions to modern nursing.
- Her *Environmental Adaptation Theory of Nursing Practice* and its influence on health of the patient and the community.
- Nightingale's five points of the influence of water, fresh air, cleanliness, sanitation, and light were explored and the students were instructed to observe for these points in their clinical field placement.
- The students used reflective journals to answer open-ended questions posted by the researcher after each clinical experience.
- Additionally, the course included Nightingale's contribution to nursing advocacy and evidence-based practice.

Study Design. The study was a qualitative design utilizing focus groups of senior level nursing students, where they shared their perceptions of using the NEATNP in their CHN course. The study was carried out after Regis College's IRB approval, and after receiving IRB approval from the college under study. The CHN course was in the spring of their senior year of college. There were 48 students in the course. The groups of senior level nursing students who had just successfully completed their CHN course were convened after the spring semester ended, their final exams had been completed, and all grades had been posted. They met in the physical therapy conference room for the sessions. Focus groups consisted of the students at the college, who were traditional students; most entered the program directly from high school.

Research Question. What are nursing students' perceptions of using the *Nightingale Environmental Adaptation Theory of Nursing Practice* in their community health nursing education experience?

Sample Recruitment. Purposive and naturalistic sampling was used and inclusion criteria were nursing students in their CHN practicum in the spring semester of their senior year of the college under study whose grades in the course have been submitted. The goal was to study students with no previous experience in the community health setting, as this could have influenced their responses. Therefore, exclusion criteria were student nurses who have transferred to the college and had previous experience in a CHN practicum and students who have prior community-based experience in a paid or work setting outside the college. No students were excluded based on their race, ethnicity, or religion.

Since the purpose of the study was to gain understanding of students' experiences, more in-depth insights were wanted. This was best accomplished with smaller focus groups, which were also preferable when the participants have a great deal to share about the topic. Also, smaller focus groups of 4 to 6 participants were advisable because generally, they are more comfortable for the participants (Krueger & Casey, 2015). One focus groups in this study consisted of 10 students and 1 consisted of 4 students.

Setting. The setting for this study was the nursing program in a Northeastern United States College offering a Bachelor of Science in Nursing. Focus group interviews were held on the school premises in a conference room that provided adequate comfortable space, assuring privacy and a quiet environment.

Informed Consent. Upon approval of the SPP by the researcher's team, the Regis College IRB application was completed and submitted for expedited IRB review. The informed

consent form (Appendix D) contained an introduction, purpose of the study, procedures, potential benefits and risks, payment information, right to refuse or withdraw, and assurance of privacy and confidentiality. The Regis College's IRB reviewed and approved the application. Upon approval from Regis College's IRB, the IRB application including informed consent requirements of the proposed college was submitted, and expedited review was approved.

Upon IRB approval first from Regis College and the college under study, data collection took place. Flyers were posted in the nursing school student lounge. The flyers described the study and were used to recruit participants (Appendix B). The flyer stated that the study would occur after all course grades have been submitted to the registrar. They were posted on the announcement board for three weeks prior to the study and were left up until the day before the study began. The recruitment flyer had an envelope with cards containing the researcher's email address and phone number on it, with instructions to contact the researcher if they wished to participate in the study. Their confidentiality was maintained by their ability to contact the researcher privately. Also, three weeks before the study began, an email was sent inviting students to participate. The researcher used her Regis College email to send this message. Students were instructed to use "reply" instead of "reply all" to preserve anonymity when responding to express interest in learning more about how to participate (Appendix C). The researcher did not look at the respondents' emails until after the grades had been submitted. Both the flyer (Appendix B) and the email (Appendix C) reassured students that if they did not agree to participate in the study, it did not affect their course grade or academic standing. The study began with giving the participants the Consent to Participate in a Research Study form (Appendix D). The data collections took place via focus groups, following the completion of the course and after grades were submitted. The study materials included digital recordings. An

observer/recorder was present, and she signed the confidentiality agreement (Appendix E). An individual number referred to each student, and their names were not identified in the notes. Privacy and confidentiality of all information was assured; all study materials were kept in two separate locked file cabinets, one with signed consent forms and one with descriptions, in the researcher's locked office. The researcher's computer was password protected, and no one but the researcher had access to the password.

A description of the study and a consent form, including the time requirements of the study, notice of anonymity, and the ability to refuse to participate and to withdraw at any time was shared with potential participants (Appendix D). It also included that there would be no adverse effects on academic standing in the CHN course, nursing program, and the college if the students chose not to participate. Next, the focus group approach was explained to participants. The participants were referred to by preassigned numbers.

Step five: Implementation and evaluation. The change was the implementation of the CHN course grounded in Nightingale's theory, and the evaluation of the change was the research study, examining students' perceptions of using the NEATNP in their CHN course. This was a descriptive, qualitative study design using focus groups for data collection. Evaluation of the changes and dissemination of the findings will be presented to the proposed school. Since positive outcomes occurred, the researcher will recommend inclusion of the changes to the course.

This descriptive study utilized focus groups in order to describe and explore the perceptions of nursing students using Nightingale's Environmental Adaptation Theory of Nursing Practice in their CHN education experience. The questions were:

1. Please describe your response to the experience of using Nightingale's theory in your CHN practicum.
2. What did you like most, and what did you like least about the experience?
3. What do you think should be changed?
4. Do you have any other thoughts about this approach?
5. Would you like to add anything else?

Probing questions included: Can you tell me more about this experience? Would you say more about that?

Desired outcomes of this study were: Students would share positive perceptions of using NEATNP when providing care in the community, nursing students would benefit from a theoretical approach to their CHN experience, and graduates would have a stronger preparation for CHN. Students would also share what was not effective in the course and give their recommendations for change.

Plan for Data Collection

Focus group plan. The data collection was conducted until data saturation occurred, which took two separate groups. Focus groups were conducted during non-class schedule times. These focus group meetings occurred at the end of the course, after grades had been submitted.

Audiotape and transcription plan. Two battery operated digital recorders were used for each focus group. They were tested prior to each group by the researcher saying, "Testing, one two three," and extra batteries were available.

Day of the focus group. Each focus group was recorded. The researcher went over the informed consent form and answered any question. After each participant reviewed and signed the written consent form, the focus group meeting began. The researcher ensured that all

participants were seated comfortably at the table and that the lighting was adequate. Fresh drinking water and cups were provided for the comfort of the students. The researcher worked from a script (Appendix H) to ensure that same directions and procedures were used for each group. The researcher welcomed everyone to the focus group and reviewed the ground rules such as respectful language and no cell phone use. All participants were asked to put their cell phones away. The researcher told the participants that the session was being recorded and reminded them that the study is confidential. With tape recorder running, participants were reminded of the purpose of the study. The researcher discussed that the purpose of the study was to learn the students' perceptions of utilizing *Nightingale's Environmental Adaptation Theory of Nursing Practice* in their CHN course. The research questions were written on a flip chart for all participants to see. The researcher was prepared with probing questions that offer a re-phrasing of the original question:

1. Please describe your response to the experience of using Nightingale's theory in your CHN practicum.
2. What did you like most, and what did you like least about the experience?
3. What do you think should be changed?
4. Do you have any other thoughts about this course?
5. Would you like to add anything else?

Probing questions included: Can you tell me more about this experience? Would you say more about that? The use of a short pause after a participant spoke was used to elicit additional points of views (Krueger & Casey, 2015). Care was given to give adequate time for silence before moving on to the next question. When the researcher thought that saturation had occurred, a summary of the session was shared with the participants, ensuring that they said

everything they wanted to say in the session. Each group session lasted one hour. Data collection continued until data saturation was achieved. The researcher wrote down field notes immediately after each focus group in her password-protected computer. Following the focus group sessions, the participants were thanked, and any questions were clarified. As a thank-you, each participant was given a \$10.00 gift card to Dunkin Donuts.

Focus group field notes. The observer/recorder took field notes and documented observed non-verbal behaviors and reactions, to capture information that was missed, and to assist with identifying speakers. The observer/recorder took two types of reflective notes. The first ones were methodological, which are reflections about the methods used in the observation. Logistics of the session were included, recording how many participants were there and notes about their demeanor. Analytical notes were taken to aid in understanding the discussions. Lastly, the researcher took personal notes about her feelings and reflections related to ethical dilemmas (Polit & Beck, 2012).

Care of transcriptions. The audiotape recording of the focus group discussions were transcribed after each session so that analysis of data from the study could be completed. The participants were identified through code numbers. The observer/recorder signed a confidentiality agreement (Appendix E). The digital file was sent electronically to the transcription service and the transcribed records were returned via secure email. All study materials will be kept in two locked files in the researcher's locked office for seven years following the study.

Plan for Data Analysis

This section describes the researcher's data analysis. Data were analyzed utilizing the Classic Analysis Strategy (Krueger & Casey, 2015). The researcher wrote descriptive

summaries of each response and looked for themes. In terms of rigor, the researcher addressed credibility, transferability, dependability, and confirmability to establish trustworthiness.

Bracketing refers to “the researcher’s identification of vested interests, personal experience, cultural factors, assumptions, and hunches that could influence how he or she views the study’s data” (Fischer, 2009, p. 583). While bracketing can never be completely achieved, the researcher strove to eliminate any assumptions in order to address the data in pure form (Polit & Beck, 2012). The researcher used bracketing in personal notes and by keeping a journal. The researcher’s team member Dr. Shellman, an expert in qualitative research and focus groups, reviewed the data to assist in the objectivity of the analysis.

The researcher looked for both the individual and the group voice. While it was anticipated that the research subjects had their own opinions and reactions to the course, it was also anticipated that a group voice would emerge, with consensus among the subjects. The team member who is an expert in qualitative research recommended this approach, used in countless focus group studies. It broke the process down into manageable parts and helped make analysis a visual and concrete process (Krueger & Casey, 2015). This strategy was appropriate since this researcher is a visual learner. Also, the Classic Analysis Strategy was described as an appropriate analysis method for a novice researcher (Krueger & Casey, 2015).

First, the researcher did a quick reading of all transcripts to be reminded of the whole scope and refreshed on what was said in the groups. Next, the researcher cut the transcripts apart, making sure that the lines were numbered for accurate identification. Starting with the first question to be analyzed, the researcher read each quote and answered the following questions:

1. Did the participant answer the question that was asked? If yes, the researcher will go to #3. If no, go to #2. If don't know, set it aside and review it later.
2. Does the comment answer a different question in the focus group? If yes, move it to that question. If no, put it in the discard pile.
3. Does the comment say something of importance about the topic? If yes, put it with the appropriate question. If no, put in discard pile.
4. Is it like something that has been said earlier? If yes, start grouping like quotes together. If no, start a separate pile (Krueger & Casey, 2015)

After categorizing the quotes from the first question, the researcher moved to the rest of the questions. After all were categorized, the researcher wrote a description of what was said in response to each question and decided how much weight or emphasis to give comments or themes. Several factors that helped determine the weight given will be frequency, specificity, emotion, and extensiveness. When the researcher finished writing the descriptive summary for each question, she looked through the questions to see what themes cut across the questions.

Rigor: Establish Trustworthiness

Credibility. Techniques that made it more likely that credible findings and interpretations will be produced were: prolonged engagement of the researcher, supported by many years of CHN experience providing scope (Lincoln & Guba, 1985). The researcher's team member, Dr. Juliette Shellman, has extensive experience in qualitative research and focus groups. The team chairperson, Dr. Margherite Matteis, also has experience in research. Persistent observation provides depth by identifying characteristics most relevant to the problem. Peer debriefing with Dr. Matteis helped the researcher become aware of her posture and process. Dr. Shellman reviewed all transcripts.

Transferability. Transferability is one of the several models of generalizability, “the extent to which qualitative findings can be transferred to other settings or groups” (Polit & Beck, 2012, p. 745). Thick description was developed from the information gathered in the focus group interviews. This descriptive information allowed for the findings to be transferred to the CHN course in the future.

Dependability. Dependability refers to “the stability of data over time and over conditions” (Polit & Beck, 2012, p. 725). The researcher’s bracketing and keeping a reflective journal after each session helped attain freedom from bias.

Confirmability. Confirmability is “the objectivity or neutrality of the data and interpretations” (Polit & Beck, 2012, p.723). An outside audit trail was maintained by having Dr. Shellman review the transcripts.

Limitations

Limitations of the study include a small sample size, a small geographic region; the study was conducted at only one institution, and the researcher was a faculty member at the college where the study took place. The results depicted only the perceptions of the sample population as they existed at the specific time of inquiry. Therefore, the results of this research could be transferable, but not necessarily generalizable to other settings.

Focus groups may have basic limitations such as the potential for group culture dynamics that may interfere with individual articulation. The views of the dominant members of the group may suppress the conflicting views of the less vocal members. The researcher must be skillful in reminding the participants of the value of different points of view, asking if anyone sees it differently, or has another point of view (Krueger & Casey, 2015). This strategy and documenting each individual voice addressed this potential limitation.

Chapter IV: Results

Introduction

The second part of the *Rosswurm-Larrabee* model step five, Implementation and Evaluation, and step six, Integrate and Maintain (1999), will be discussed in this chapter that outlines the results of the focus group study. The purpose of this scholarly practice project was to develop, implement and evaluate a Community Health Nursing (CHN) course based on the Nightingale Environmental Adaptation Theory of Nursing Practice (NEATNP). Data were collected through two focus groups and analyzed utilizing the Classic Analysis Strategy (Krueger & Casey, 2015). A semi-structured interview format was used to guide the focus group discussions. Since the purpose of the study was to gain understanding of students' experiences, more in-depth insights were wanted. This permitted a deeper insight and understanding of the research question: What are nursing students' perceptions of using the *Nightingale Environmental Adaptation Theory of Nursing Practice* in their community health nursing education experience?

Participant Characteristics

Demographic information was observational. The participants were traditional undergraduate female students with the exception of one male. All were in their senior year of college and had been enrolled in the Community Health Nursing course this semester.

Analysis

This research study sought to describe the perceptions of senior nursing students regarding the use of Nightingale's Environmental Adaptation Theory of Nursing Practice in their Community Health Nursing course. The students responded eagerly and avidly about their

experience. The *Classic Analysis Strategy*, as described by Krueger and Casey (2015), was used for data analysis.

The researcher wrote descriptive summaries of each response and looked for themes. The researcher looked for both the individual and the group voice. While it was anticipated that the research subjects had their own opinions and reactions to the course, it was also anticipated that a group voice would emerge, with consensus among the subjects.

The data analysis procedure resulted in four categories:

1. Nightingale was an appropriate theorist to guide a Community Health Nursing course;
2. Nightingale’s points are relevant today, over 150 years after she wrote *Notes on Nursing*;
3. It would have been more beneficial to have Nightingale’s theory in detail during their Nursing Fundamentals course; and
4. Suggestions for the future.

These categories, along with associated subcategories are provided in Table 1.

Table 1. Categories with associated subcategories.

Main Categories	Associate Subcategories
<p>Category 1. Nightingale--an appropriate theorist to guide Community Health Nursing</p>	<ul style="list-style-type: none"> • Good reminder of Nightingale • Used her theory in clinical rotation • More holistic approach
<p>Category 2. Nightingale’s points are relevant today, over 150 years after her <i>Notes on Nursing</i></p>	<ul style="list-style-type: none"> • Nightingale’s points were new in her time, but they are relevant now • Enjoyed seeing where nursing came from and how it adapted throughout time • Today, we have modern advances but we need to get back to changing patients’ environments • Good to draw on current events, such as the Flint Michigan water crisis. • The iPad and iPhone app was good • Impressed that Johns Hopkins Hospital was built based on Nightingale’s points.

<p>Category 3. Would have been beneficial to have Nightingale’s theory in detail during their Nursing Fundamentals course</p>	<ul style="list-style-type: none"> • Introduction to Nightingale in first nursing course was limited • Thought back to earlier clinical experiences, felt that utilizing Nightingale’s theory would have been helpful • Nightingale’s theory should have been studied before senior year
<p>Category 4. Suggestions for the future</p>	<ul style="list-style-type: none"> • Could have a packet of Nightingale information to utilize during the course • Other media relating to modern day environmental problems • Share news reports about environmental issues that affect health • Use other mediums of Nightingale, not just her writing • Introduce games or interactive activities

Category 1. Nightingale--an appropriate theorist to guide Community Health Nursing

Participants were vocal in their support of Nightingale’s theory in their course.

Participants identified examples of where utilizing Nightingale’s theory was important in their patient care. Some described settings where her theory was appropriate in their clinical rotations and in their work as nurse’s aides. Three subcategories became evident from this main category: good reminder of Nightingale; used her theory in clinical rotation; and more holistic approach.

Supportive excerpts from the transcripts follow:

Good reminder of Nightingale. Some participants noted that it was good to be reminded of Nightingale’s theory and her contributions to nursing:

...I think it was really interesting to learn about this. You hear about Florence Nightingale in the beginning of your schooling, but it’s never something you kind of—or at least most other students aren’t learning about in depth...

...It was kind of just cool to see where nursing came from and how it adapted throughout time...

Used her theory in clinical rotation. Many participants reported using her theoretical points when approaching patient care, not only in their Community Health Nursing clinical rotation, but also in their internships and work as nursing aids:

...I guess I would say that it made me pay attention more. In a normal setting, I probably wouldn't be paying attention to, "Oh there's enough lighting in this room, oh, there's enough ventilation." So I think it just made me focus my attention a little bit more on specific things on the setting....

...I work as a nurse's aide and it made me think even at work, when I'm going in, to go in and tidy up the room maybe after I go and bathe them and to open up the shades and just try to use those in practice even before becoming a nurse...

...In my clinical rotation, I also had a patient who refused to open the windows. She had incontinent pads everywhere and it was just like everything in Nightingale's theory, it was just wrong. So it was kind of interesting to see.

...It kind of made me evaluate kind of in my head my clinical sites I had been on, I noticed some of them didn't have good ventilation, that there was literally no lighting and stuff like that. So I thought it was kind of cool, how it made you think back...

...I liked the discussions because we could reflect back on our clinical, so I thought that was really interesting because it made me actually think about Nightingale's theory in terms of my clinical...

More holistic approach. Several participants commented that using Nightingale's theory was a more holistic approach to nursing:

...Yeah, I think it kind of reminded me of a holistic approach to nursing, just how she talks about the natural air and cool air and light and all that stuff. That's things that when you go into a patient's room, you might not always think about, so it kind of helped bring that back...

...It was also like a holistic view.

Category 2. Nightingale's points are relevant today

Participants often commented on the relevance of Nightingale's theory to modern nursing. They shared that they tended to focus on the more technical aspects of nursing and overlooked the basics. Students felt that this Nightingale information was a good review of the

basics that are still important today. They appreciated the basics while noting their current nursing care is often more technical. Several students were impressed by current technology such as iPad apps and hospital designs based on Nightingale's theory. Six subcategories emerged from this category: Nightingale's points were new in her time, but they are relevant now; they enjoyed seeing where nursing came from and how it adapted throughout time; today we have modern advances but we need to get back to changing patients' environments; it was good to draw on current events such as the Flint Michigan water crisis; the iPad and iPhone app was good; and they were impressed that Johns Hopkins Hospital was built based on Nightingale's points.

Supportive excerpts for each subcategory follow:

Nightingale's points were new in her time, but they are relevant now. Often the participants noted the relevance of Nightingale's theory in modern times:

...Yeah, and it was good that you drew on outside things like the clean water or you talked about different things going on like in today's day that we could look for in relation to Nightingale, which I thought was interesting...

...What I liked about it is that you kind of—when we're getting to be nurses, we're focusing on all these crazy diseases and stuff and you kind of have to set yourself back to the basics and that was what I liked about it because I mean, a clean room and sunlight, it can do so much for a person, but you don't really—we're kind of all obsessed with the medications and all these different things. It kind of just goes back...

Enjoyed seeing where nursing came from, and how it adapted throughout time.

Participants appreciated learning about the origin of the nursing profession and how it impacts their care today:

...I enjoyed the class because it kind of gave me a better idea of where nursing originated from and how it started, so it kind of gave me kind of like a background to why I'm doing what I'm and how it's impacting the patients that we care for...

...I think it was good that it kind of brought us back to the basics of nursing, like things that you overlook. It just felt light and cleaner, just all the stuff that you don't even think

of so much when you are going into a patient's room. You're more focused on their chart and everything else you learned about them...

Today we have modern advances but we need to get back to changing patients'

environments.

Participants noted that while current advances and medications are helpful, Nightingale's basic points should be utilized:

...What I liked about it is that you kind of—when we're getting to be nurses, we're focusing on all these crazy diseases and stuff and you kind of have to set yourself back to the basics and that was what I liked about it because I mean, a clean room and sunlight, it can do so much for a person, but you don't really—we're kind of all obsessed with the medications and all these different things. It kind of just goes back...

Good to draw on current events, such as the Flint, Michigan water crisis. Several participants brought up the Flint water crisis as a good current example of environmental impact on health:

...just like Flint, Michigan, having a news report or something, like a short videos about what's going on there so that it kind of relates to modern day issues...

...Yeah, and it was good that you drew on outside things like the clean water or you talked about different things going on like in today's day that we could look for in relation to Nightingale, which I thought was interesting...

...I remember one week when we were talking about clamminess and water, I think you brought up a current event, like what happened in Flint, Michigan, or something like that. I think if you try to incorporate more current events into lectures, that might help information stick with students because it can actually relate to what's going on nowadays because a lot of information we were taught, it was like things that Florence did way back when and a lot of it was kind of hard to translate into today's day and age and like what we see today...

The app for the iPhone and the iPad was good. Participants found modern technology to be interesting and useful:

...And how they are using iPads. There was an app...

...Yeah, it was an app for her. I thought that was cool, too...

Impressed that Johns Hopkins Hospital was built based on Nightingale's points.

Again, participants were impressed that modern day facilities are based on Nightingale's theory and ideas:

...Or how Johns Hopkins was built based on her. I thought that was cool...

Category 3. Would have been beneficial to have Nightingale's theory in detail during their Nursing Fundamentals course

Most participants shared that they wished they had had this information in their first nursing course. While they felt it was relevant to Community Health Nursing, they felt that it would have been beneficial to have the information earlier. Some gave examples of how they would have applied Nightingale's theory to their care in previous clinical situations, and some had suggestion for how to utilize Nightingale throughout the curriculum. Three subcategories emerged from this category: introduction to Nightingale in first nursing course was limited; thought back to earlier clinical experiences, felt that utilizing Nightingale's theory would have been helpful; and could have a packet of Nightingale information to utilize each course and clinical rotation. Supporting statements for each subcategory follow:

Introduction to Nightingale in first nursing course was limited. Participants shared that Nightingale's theory was only briefly covered in their Fundamentals of Nursing course:

...I think it might a been more beneficial to have the class for younger students, not as a senior. It was obviously beneficial, I enjoyed it and stuff. It wasn't anything stressful and it was good to know, but I think it would have been more—'cause we were introduced who Nightingale was when we started nursing classes, but we didn't know anything in depth like this until--...

...My only suggestion I think would be that it might have been beneficial in more, I don't know, maybe like a freshman or sophomore year when you're first learning about nursing theories. I think it's obviously relevant with our Community Health, because you're tying it in that way, but I also think it might be important to bring forth in a younger setting...

Thought back to earlier clinical experiences, felt that utilizing Nightingale's theory would have been helpful. Participants shared that they wished they had been looking for Nightingale's points in their previous courses, that it would have been good to utilize from the beginning:

...Yeah, I think kind of to what Mel was saying about it being a more relevant class to the freshmen or sophomores because I mean, a lot of us had mentioned that we thought back to our past clinicals, and it's been nice to have that to begin with and already be thinking about it throughout your years, and then once we get into Community Health, really focusing on that in those settings would be good...

...I also think too that as we're more comfortable with nursing too, into our fourth year compared to freshman and sophomore year, it's kind of like the things that you said are so obvious are kind of things that we've kind of put back in our mind and didn't really go into a patient's room like, "Oh, their window's down." We would kind of be like, "Oh, priority is their care," so it was good to go back to the fundamentals and see that again...

Nightingale's theory should have been studied before senior year. Participants reported the Fundamentals of Nursing course would be a good place to start integrating Nightingale's theory into the curriculum:

...I think it might have been a good idea to have with Fundamentals also is 'cause we bring up the different topics kind of in Fundamentals, that you could almost tie each different Florence topic into a class...

...I can't think of anything bad. The only thing, with what Kelsey said, is it might have been good to have a Nightingale course introduced before the end of senior year, but that's probably it...

...Yeah, maybe just introducing the—we get introduced to Nightingale in Fundamentals, but this could even probably be an adjunct to Fundamentals rather than Community because it goes along with Fundamentals probably even more than it does Community...

...I think just the information that we got out of the course, like a basis of Fundamentals and clinicals, we don't really know what to expect going into the clinicals. You talk about, I don't know, how Florence started everything and how the history of nursing kind of and I just think—I don't know. But I don't necessarily think it's bad that we had this class as seniors. It's not like we didn't get anything out of it...

Category 4. Suggestions for the future

Participants were forthcoming with many suggestions for the future. They were enthusiastic when discussing their various suggestions. Several ideas were to create a packet of Nightingale information that could be used throughout the curriculum, use different media, current events and case studies. Five subcategories emerged from this category: could have a packet of Nightingale information to utilize during the course; more videos relating to modern day environmental issues that affect health; use other mediums of Nightingale, not just her writing; and introduce games or interactive activities. Supporting statements for each subcategory follow:

Could have a packet of Nightingale information that could be used throughout the course. Participants suggested creating a packet of information, since there was no textbook about Nightingale to refer in the course:

...I mean you could even make, I don't know if it's necessary, but to go along with your PowerPoints, I don't think we need a textbook or anything, but maybe just a packet to have on all the Flo information would have been nice to have it to flip through 'cause sometimes some things were posted. I know that it's confusing with Gullnet and Canvas and everything, but to have one packet of all the information would have been nice, almost like a booklet of all the, even just the PowerPoints put together or something. And it was like, "This week we're on these pages" and "This week" that would have been a good easy thing to have...

Other media relating to modern day environmental problems. Participants mentioned that videos, pictures, and case studies would be helpful:

...maybe the use of more pictures too because I know when you showed the pictures of the water bottles with the...

...that would really be good, maybe just to break up the all the wording with some pictures or something...

...You could even put a picture on a quiz or something of a patient's room and be like, "What is wrong?"... "What needs to be changed?"...

...maybe some videos that relate to modern day problems that relate back...

...or pictures comparing a room, a hospital room, that's disorganized and dark and then put what it should look like and how that creates a different vibe for someone...

...Like case studies would cool to do...

...I think case studies would be a good idea. You could set the scenario and then how would you implement Florence's beliefs? What would you change in this situation?...

Share news reports about environmental issues that affect health. Participants mentioned that news relating to the environment helped them to learn about the affect of environmental issues:

...like with Flint, Michigan, having a news report or something, like a short video about what's going on there so that it kind of relates to modern day issues...

Use other mediums of Nightingale, not just her writing. There were thoughts about using more than just Nightingale's books to share information regarding her:

...like a cool video to show—I know we learned about it previous years, go back to who she is, where she came from, all that in maybe the beginning PowerPoint where we kind of learned what she was and all of that...

...I would say like Jill...mentioned about the pictures, other mediums of Florence, not just words...

Introduce games or interactive exercises. The participants became more animated when discussing the possibility of games and interactive exercises. They referred to a game, "Kahoots" that we played in class:

...Yeah, something interactive. I know we all joked but we loved the Kahoots that Professor Courcy did, something like that really quickly gets you engaged...

...having that interaction I think would engage the class more and kind of start out as more of like kind of an exciting thing...

...I think that interacting would help us remember more too—except from trying to remember it more from a quote or something, we could understand the concept more, remember the concept, playing jeopardy or any interactive...

...I don't know, this is just something added to it, but if you did a jeopardy on Florence Nightingale, I feel like people would participate or something like if you had an extra class or the last class or something instead of a quiz or something and just do it on participation, who participates in it, I think that it would be fun...

Summary

The participants in the focus groups provided candid and insightful information of nursing students' perceptions of using the Nightingale Environmental Adaptation Theory of Nursing Practice in their Community Health Nursing education experience. The conversations within the focus groups revealed their generally positive reactions to the course. They concurred that Nightingale is an appropriate theorist to guide a Community Health Nursing course, sharing that it was a good reminder of her theory and was a more holistic approach. The consensus was that Nightingale's points are relevant today, over 150 years after her *Notes on Nursing* was published, and the course provided knowledge of where nursing came from and how it has adapted throughout time. However, many of the groups felt that Nightingale's theory should have been explored in much more detail in their Fundamentals of Nursing course. They stated that this would have enabled them to utilize her theory in each of their subsequent courses, both didactic and clinical. The last theme that emerged was their suggestions for the future. They were enthusiastic when sharing their ideas of having videos, photos, case studies, and interactive games to aid in learning about Nightingale. Another suggestion for the future was to share news reports about current environmental issues that affect health.

By following the Classic Analysis Method the researcher was able to identify themes and categorize results. The process was systematic and made the analysis a visual and concrete process. The data analysis was continuous. It began with the focus groups and field notes taken immediately after each session and continued with the data analysis and its written summary. Having one of the researcher's team members use the audit trail and achieving the same

conclusions corroborated the data. This independent review by the researcher's team member provided a measure of verifiability.

Chapter V: Conclusions and Discussion

Introduction

This chapter presents the conclusion and discussion of this qualitative research study. It addresses the sixth step of the Rosswurm-Larrabee Model, Integrate and Maintain (1999). The purpose of the study was to explore the perceptions of senior nursing students regarding the use of Nightingale's Environmental Action Theory of Nursing Practice (NEATNP) in their Community Health Nursing (CHN) course. The study findings are discussed by categories and associated sub-categories in relation to the existing literature. The discussion of the findings is followed by the limitations and implications for nursing research and nursing education.

The Classic Analysis Strategy was used to analyze the data. The researcher identified initial categories and then, extracted subcategories from the interview excerpts. These excerpts provided support for the researcher's interpretation of the data. These findings offered insight into the perceptions of baccalaureate nursing students regarding using the NEATNP in their CHN course. There were four main categories identified in the data analysis:

- Nightingale is an appropriate theorist to guide CHN
- Nightingale's points are relevant today
- It would have been beneficial to have learned Nightingale's theory in detail during their Nursing Fundamentals course
- Suggestions were made for the future of this course

Each main category consists of subcategories that explore described nursing students' perceptions of using the NEATNP in their CHN course.

Category 1: Nightingale is an appropriate theorist to guide Community Health Nursing

Participants were vocal in their support of the use of the NEATNP in this course. Some participants noted that it was good to be reminded of Nightingale's theory and her contributions to nursing, while several participants commented that using Nightingale's theory was a more holistic approach to nursing. They described settings where her theory was appropriate in their clinical rotations and in their work as nurse's aides, identifying examples of situations where Nightingale's theory was important in their patient care. The findings in this category support the premise that theory is necessary to guide practice, confirming Meleis' (2007) research that finds that theory is intricately intertwined with scholarship, and nursing theory that evolves from practice and is used in education is an indicator of scholarliness in nursing. These participants' comments also supported the premise that Nightingale advanced the art and science of nursing by establishing a clear educational foundation required for practicing the profession (Savage & Kub, 2009).

In their dialogue for *Nursing Science Quarterly*, Koffi and Fawcett (2016) discussed how Nightingale used statistical research to document her focus on safe and sanitary environments. This statistical research laid the groundwork for nursing research-based practice. Koffi and Fawcett's dialogue further supports the students' ascertainments that Nightingale is an appropriate theorist to frame CHN education. Furthermore, John McKinnon (2009), a Senior Lecturer and Admissions Tutor and the Adult Nursing Programme at University of Lincoln in England advocates that nurses should ideally learn theory and practice together. The findings described in this category that participants used Nightingale's theory in their clinical rotations support his point.

The participants' responses that Nightingale is an appropriate theorist to guide CHN education further validate Mary Spinks, the Director of the Florence Nightingale Foundation, who advocates for more evidence-based practice in nursing education and practice (2007). In her essay, she notes that the roles of community nurses have changed as services are moving toward clinic and home care. Spinks expresses the concern that as nurses educate themselves and become academics, they must also use their learned knowledge to improve practice. She posits that research must lead to theory development, quoting Nightingale:

In dwelling upon the vital importance of sound observations, it must never be lost sight of what observation is for. It is not for the sake of piling up useless information or curious facts but for the saving life and increasing health and comfort (Nightingale, as cited in Spinks, 2007, p. 75).

This quote of Nightingale's supports the participants who stated that they felt that Nightingale is a good theorist to guide CHN education.

Category 2: Nightingale's points are relevant today

Participants often commented on the relevance of Nightingale's theory to modern nursing. They shared that they tended to focus on the more technical aspects of nursing and overlooked the basics. Students thought that this Nightingale information was a good review of the basics that are still important today, acknowledging that Nightingale's points were new in her time, but they are relevant now. The participants also shared that they enjoyed seeing where nursing came from and how it adapted throughout time, and today, we have modern advances, but we need to get back to changing patients' environments. There was consensus that it was good to draw on current events, such as the Flint Michigan water crisis.

The perceptions of the participants that Nightingale's points are valid today are supported by Lim (2010), who surmises that Nightingale's advice that nurses should be careful to wash their hands frequently is an example of her relevance today. These results are also confirmed by Spinks, who states that Nightingale's advice on public health has been implemented today. Spinks expresses concern that nursing has deviated from Nightingale's guidance on patient care, but notes that we are now returning to Nightingale's teachings. Additionally, Jones, a district nursing student in South Wales, states that Nightingale's *Notes on Nursing* should be read more widely, since many elements still ring true. Jones also notes that is concerning that some areas of concern that Nightingale highlighted continue to be problems today (Jones, Spinks, Birrell, & Young, 2008).

These participants' perceptions that Nightingale is relevant today further support Zborowsky's (2014) study, where descriptive statistics revealed that nurses are aware of the role the designed environment plays in patient outcomes. These findings are aligned with Nightingale's environmental theory attributes. Zborowsky notes:

Similar to Nightingale, nurses today see the influence of the surrounding environment on the patient's ability to heal. This makes nurses uniquely able to apply their observation skills to understanding the role of the designed environment to enable healing in their patients. (p. 21)

In a position similar to Zborowsky, Lee, Clark, and Thompson (2013) postulate that Nightingale is "never more relevant than today" (p. 245). Several of the important concepts these authors note are:

- There is an increase in TB partly due to poor ventilation;
- Access to safe drinking water is one of today's Millennium Development Goals;

- Improved sanitation is still a health issue in large proportions of people;
- Lack of hand washing is primarily responsible for hospital acquired infections; and
- Poor light is a contributing factor in road and traffic accidents.

They state that there is no doubt that the points Nightingale valued are re-emerging as important priorities. The Nightingale Initiative for Global Health strives to rekindle awareness of Nightingale's work (Lee, Clark & Thompson, 2013). Again, the students' perception that Nightingale's points are relevant today validates this editorial.

Category 3: It would have been beneficial to have Nightingale's theory in detail during their Nursing Fundamentals course

Some participants shared suggestion for ways to utilize Nightingale throughout the curriculum. Most participants shared that they wished they had had this information in their first nursing course, even though it was relevant to CHN. Some gave examples of how they would have applied Nightingale's theory to their care in previous clinical situations. They stated that introduction to Nightingale in first nursing course was limited and thought back to earlier clinical experiences where utilizing Nightingale's theory would have been helpful.

The students' perception that they should have had this information earlier confirms the premise of Gerber and McGuire. In their report (2000) they assert that while traditionally, environmental health content was located in CHN courses, it should be incorporated into all levels of nursing education. They cite the Institute of Medicine's (IOM) 1995 report that states environmental health competencies should include basic knowledge and concepts. Information found in nursing texts, newspapers and on the Internet could easily be incorporated in course content. With the increasing knowledge about the environment's influence on health, the environment needs to be taught as a core nursing concept.

The IOM's 1995 report, *Nursing, Health, and the Environment: Strengthening the Relationship to Improve the Public's Health* (Pope, Snyder, & Mood, 1995), aligns with the participants' perceptions that this information should have been introduced earlier in their nursing education. The report states that nurses at all levels of preparation should be educated to identify environmental risks and means of prevention. Leffers, McDermott-Levy, Smith, and Sattler (2014) state that early nursing education is the groundwork for nurses to address environmental health risks for patients and to promote environmental health nursing research. This connects directly with the participants' statements that they should have studied Nightingale's theory earlier in their nursing education.

In addition to Leffers et al.'s and Gerber and McGuire's assertions, McKinnon (2009) notes that early environmental health education will provide the change from disease-focused to health-focused approach to care, which is required in today's nursing workforce. The participants' perception that environmental health issues should be introduced earlier in the nursing curriculum supports this approach.

Category 4: Suggestions for the future of this course

Participants were forthcoming with many suggestions for the future. Some of their suggestions were to create a packet of Nightingale information that could be used throughout the curriculum, use different media, current events and case studies. Other suggestions were to use more videos relating to modern day environmental issues that affect health and to use other mediums of Nightingale, not just her writing. Also, several students advocated for the use of games or interactive activities.

Many of the participants' suggestions are consistent with research regarding effective nursing education. When Pagnuci et al. (2015) studied pedagogical strategies in nursing

education, their results indicated the students' preferred method was often role-playing, case studies, and brainstorming. Furthermore, a study by Haraldseid, Friberg, and Aase (2016) concurred that students preferred video films and on-line discussions as test preparations methods. They concluded that students' repetitive involvement in the process of developing strategies enhanced their identification of their learning needs.

When Maskell, Somerville, and Mathews (2015) developed an e-learning resource, they consulted with community health nurses who suggested that the resources be fun to use and interactive. Additionally, students in a study to improve learning outcomes also responded well to interactive scenario-based skills training (Uysal, 2016). These resources all corroborated the participants' suggestions of more interactive learning.

All of these results support the researcher's assumptions that pertain to the connection between theory and CHN, the importance of CHN education, and NEATNP:

1. Community health nursing is an emerging and valid specialty, requiring a unique and specialized skill set.
2. Theory based education produces competence and confidence in students.
3. Nursing is both an art and science, dependent on compassion and common logic, and the utilizations of research (Selanders, 2005).
4. Community health nursing education is optimized when based on research and grounded in a theoretical framework.
5. Nightingale's theory with its emphasis on the environment is well connected to CHN, where the goal of the nurse is to create an environment where a person can heal.
6. Understanding its historical antecedents, which include Nightingale and her theory, enhances current nursing education.

7. Nightingale's essential concepts are salient, and CHN education programs would benefit from applying Nightingale's theory to their clinical praxis.

Desired outcomes of this study were: Students would share positive perceptions of using NEATNP when providing care in the community, nursing students would benefit from a theoretical approach to their CHN experience, and graduates would have a stronger preparation for CHN. Students would also share what was not effective in the course and give their recommendations for change. These outcomes were achieved, as evidenced by the data obtained from the participants.

Nightingale's theory guided this research study. The results of the study validate Nightingale's points and their significance to CHN. There were no unexpected results from the study and the participants' responses supported the researcher's assumptions.

Limitations

Since qualitative research is a process requiring considerable skill, a limitation of this study was that the researcher was a relative novice to conducting research having never completed a prior qualitative study. Experienced researchers on the SPP team were consulted regularly to mitigate the effects of this limitation. Next, while data collection was continued to the point of saturation, the small sample size must still be acknowledged as a limitation. Additionally, the sample was small with only 2 focus groups, with participants from only 1 baccalaureate-nursing program, which limits transferability of study findings.

Another limitation may be that the participants in the study enjoyed a friendly and collegial relationship with the researcher. This may have produced some bias, since the participants may have been eager to please the researcher. The researcher assuring the

participants that there was no right or wrong answer and encouraging them to be open and honest mitigated this potential bias.

Implications for Evidence Based Practice and Education

This SPP provides several implications for evidence based practice and research. Participants' negative and positive perceptions of the use of the NEATNP in their CHN course supports the need for more theory-based nursing education and more awareness of the environment's impact on health. Scholars in CHN criticize the lack of conceptual framework guiding their practice (Falk-Rafael, 2000). Nurse educators recognize the importance of teaching students about the environmental influences on health and illness (Gerber & McGuire, 1999). This Scholarly Practice Project (SPP) adds to the body of knowledge acknowledging both of these needs. Nightingale is an important historical icon in nursing, and her NEATNP is relevant today.

Another implication of the results of this SPP relates to the relevance of the NEATNP in today's nursing environment. The participants' responses regarding prevalent environmental health issues show a need for applying the NEATNP in today's health care environment. This was supported by their comments stating they would like to have current news events discussed in class, so that they could see what's going that relates to modern day issues. The example they shared was the water crisis in Flint, Michigan. Furthermore, this SPP has provided evidence that there is a need for learning about the NEATNP earlier in the nursing curriculum.

Implications for research. This study provides a starting point for future research. Repeating this study in other schools of nursing is warranted to provide more generalizability. These studies should be conducted at a variety of baccalaureate level schools of nursing, which would also increase generalizability. For example, it could be repeated at a school of nursing

located in a city, or one located in other part of the country. A future study relating to the use of the NEATNP in a Fundamentals of Nursing course would provide greater insight into the use of theory in nursing education. This could take place at the same school of nursing as this study to provide data to compare with these results. It also should be conducted at other schools in cities or other parts of the country to increase generalizability.

Dissemination of Findings

The researcher evaluated participants' perceptions of the CHN course grounded in Nightingale's theory. The CHN education change could be maintained since results showed that utilizing Nightingale's framework positively influenced participants' preparation to provide care in CHN. Also, the researcher reviewed students' negative perceptions and will work to resolve the issues and reevaluate it in the future. The results of this research were shared in the researcher's defense of the project. The dissemination of findings, including recommended changes, will be accomplished by sharing the pilot study results with the CHN education faculty at the proposed college. The program will also be shared with the proposed college's curriculum committee and the nursing school's dean and faculty via an in-service program at a faculty meeting. Upon the dean's approval, the decision to adopt this educational program change could be made by the CHN faculty, who will share their recommendations with the curriculum committee. The proposed change could be integrated into the course syllabus, both the didactic and clinical portion.

An abstract of this study will be submitted for presentation at a nurse educators' conference. The researcher will also request that it be presented to the nurse educators at College of the Ozarks. Additionally, the researcher will request to present the results at King's College of Nursing in London which evolved from St. Thomas Hospital School of Nursing,

founded by Nightingale in 1860 (King's College of London, 2015). The researcher will also submit a manuscript for possible publication in a scholarly journal.

Conclusion

The findings of this SPP contribute to the body of research regarding utilizing theory in a baccalaureate-nursing course. This study was a first time pilot study exploring the results of students' perceptions regarding the development of a CHN course grounded in the NEATNP. This study revealed that the baccalaureate students had positive perceptions of this CHN course, with some suggestions for the course in the future. Their positive perceptions and the enthusiasm demonstrated in the focus groups confirmed the researcher's belief that there is a need for theory, specifically the NEATNP, in a baccalaureate CHN course. These results will be shared with the school of nursing utilized in this study, and the suggestion for the NEATNP to be studied earlier in their curriculum will be presented at the school where the study was conducted.

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Appendix A

[Permission to reproduce Nightingale's Model](#)[Received March 20, 2015](#)

Louise Selanders <Louise.Selanders@hc.msu.edu>

To: Susan Calhoun <susancalhoun5@gmail.com>

HI Susan. I should be done today reading the paper. It looks good.

I will send under a separate email the diagram.

I have permission from the publisher to let it be republished as the original copyright was sometime ago. This is to formally inform you that you do have permission to reprint this as part of your academic work.

Louise.

Louise C. Selanders, EdD, RN, FAAN
Professor Emerita, College of Nursing
Michigan State University
[\(517\) 339-9479](tel:5173399479)

Appendix B: Recruitment Flyer

SENIOR NURSING STUDENTS A Chance to Participate in Nursing Research.

**SUSAN CALHOUN, DNP(C), RN WILL BE
CONDUCTING A STUDY
ON MAY XX REGARDING YOUR
COMMUNITY HEALTH NURSING COURSE.**



Florence Nightingale and her students

PARTICIPATION IS OPTIONAL*, CONSISTING OF A ONE HOUR DISCUSSION GROUP. AFTER THE DISCUSSION GROUP, YOU WILL BE GIVEN A \$10 GIFT CARD TO DUNKIN' DONUTS AS A THANK YOU.

Research will take place after the course ends and all grades have been submitted.

***Participation/nonparticipation will not affect your status in the course.
Contact me @ 203-206-4890**

Appendix C
Recruiting Electronic Mail

Dear Students,

You are invited to participate in a research study entitled, “Students’ Perceptions of a Community Health Nursing Course Grounded in Nightingale’s Framework.” It will consist of you participating in a sixty to ninety minute focus group session discussing your perceptions of using the *Nightingale Adaptation Theory of Nursing Practice* in your class and clinical work during your Community Health Nursing course this semester. Participation is optional. The focus groups will take place after the course is completed and after your grades have been submitted. Participation or non-participation will not affect your status in the course or in the school in any way. As a thank you, those who participate will be given a \$10 gift card to Dunkin Donuts.

If you are interested in participating in this study, please contact me at 203-206-4890, or email me at scalhoun@endicott.edu. Please do not use the “reply all” to respond to this email as that would breach your confidentiality.

Thank you,

Susan Calhoun, DNPc

Appendix D
Consent to Participate in a Research Study From



Informed Consent

Title of Project: Development of a Baccalaureate Community Health Nursing Course Grounded in Nightingale's Framework

Principle Investigator (PI): Susan Calhoun, DNPc, RN

PI Phone Number: 203-206-4890

PI Email: susancalhoun5@gmail.com

Date Submitted:

Introduction

Please read this carefully. This form tells you about a research study in which your participation is requested.

You are being asked to be in a research study of students' perceptions of using Nightingale's Environmental Adaptation Nursing Theory in their Community Health Nursing Course.

You are selected eligible to participate in this study if you have completed Community Health Nursing (CHN) during the Spring 2016 semester.

You are not eligible to participate if you have taken a CHN course before the spring of 2016, or have had community health based experience in an outside job.

Purpose

The purpose of the study is to learn students' perceptions of utilizing Nightingale's Environmental Adaptation Theory of Nursing Practice in their CHN course.

Procedures

You will be asked to participate in a 1 to 1½ hour focus group discussion regarding your perception of utilizing Nightingale's Environmental Adaptation Theory of Nursing Practice in your CHN course. You will be asked your perceptions, what you liked and what you did not like about the experience, and what could be changed to this approach. This will take place following the completion of your CHN course. The focus group will take place in your school of nursing in a private quiet room.

Potential Benefits

Anticipated benefits will be to gain a better understanding of the perceptions of baccalaureate nursing students' perceptions of using Nightingale in their CHN course, and what could be changed to enhance this experience.

Potential Risks

There are no foreseen risks or discomforts to participating in the research.

Payment to subjects (if applicable)

You will receive the following payment for being in the study: a \$10 gift card to Dunkin' Donuts. This will be distributed to you immediately following the focus group discussion.

Cost

There is no cost to you for being in this research study.

Right to Refusal or Withdrawal of Participation

You may decline to answer questions and may withdraw from the study without penalty at any time. Participating or not participating in the study will have no impact on your academic status.

Assurance of Privacy and Confidentiality

All information will be analyzed as a group and will remain confidential. The list of participants will be linked to numbers to protect the participants' identity. This list will be kept separately from the data analysis. Data will be kept for seven years in a locked file in the researcher's locked office. Data may be used for publication or presentations but all identifying information will remain anonymous.

Additional Information

The researcher will be available to answer any questions about the study. You may call (203-206-4890) or email (susancalhoun5@gmail.com) the researcher if you have any questions. Concerns may be directed to Dr. Margaret Oot-Hays, Chairperson of the Regis College Institutional Review Board. The researcher will provide a copy of this document for you to keep and keep a signed copy for herself.

Contact information

**PI : Susan Calhoun, DNPc, RN
203-206-4890**

Regis Institutional Review Board

Chairs:

Dr. Margaret Oot-Hayes PhD, RN; 781-768-7163,

margaret.oot-hayes@regiscollege.edu

Sister Carmela Abbruzzese, DEd, 781-768-7422,

carmela.abbruzzese@regiscollege.edu

Research Participant

By signing below, you are agreeing that you have read the above document, been given the opportunity to ask questions, understand the risks and discomforts associated with the above study, and understand that you may withdraw participation at any time without penalty.

Printed Name: _____

Participant Signature

Date

Person Conducting Research Signatures

**I have explained the research to study subjects.
I have answered all of the questions to the best of my ability.**

Signature

Date

IRB Approval

This form has been approved by the Regis College IRB.

Authorized IRB Approval Signature: _____

Date:

Appendix E
Confidentiality Agreement
Transcriptionist, Observer/recorder

I, _____, observer/recorder, individually do hereby agree to maintain full confidentiality in regards to any and all audiotapes, videotapes, and oral or written documentation received from Susan Calhoun, DNPc, related to her research study titled *Development of a Community Health Nursing Course Grounded in Nightingale’s Framework* and any backup devices.

Please provide the following contact information for the researcher and the transcriber and/or translator:

For Transcriber or Observer/recorder:

For Researcher:

Address: _____ Address: _____

Telephone: _____ Telephone: _____

I am aware that I can be held legally liable for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information contained in the audiotapes, videotapes and/or paper files to which I will have access. I am further aware that if any breach of confidentiality occurs, I will be fully subject to the laws of the State of Massachusetts.

Observer/recorder’s name _____

Observer/recorder’s signature _____

Observer/recorder’s Name of Business and Title (if applicable) _____

Date _____

PLEASE SUBMIT THE FOLLOWING:
ONE COPY TO IRB
RETAIN THE ORIGINAL FOR YOUR RECORDS

Appendix F
Course Syllabus
XXXX College
Department of Nursing
Course Syllabus

Course No:	NU411
Course Title:	Community Health Nursing
Course Credit:	4 (3 cr. Class lecture, 1 cr. Clinical) Class: Thursday ---8:00AM to 10:50AM Clinical: one day/week, as assigned
Pre-requisites:	NU410: Acute Care Nursing
Semester & year:	Spring, 2016
Faculty:	Susan Calhoun, RN, DNPc
Telephone:	203-206-4890 (cell)
Email:	scalhoun@endicott.edu
Office hours:	by appointment

Course Description:

This course focuses on fostering health in the community. Cultural, socioeconomic, and epidemiological factors are considered as community specific health problems are identified. Empowering individuals, families and groups to restore and maintain health as well as prevent illness and injury is an integral component of this course. Clinical learning experiences are provided in a variety of community and public health settings. Nightingale's Environmental Adaptation Nursing Theory will frame this course.

Student Learning Outcomes

At the conclusion of this course, the student will be able to:

1. Relate contemporary issues to clinical practice of Community and Public Health Nursing.
2. Analyze data collected regarding the environment in relation to the health status of the individual, family and community. Utilize the *Nightingale Environmental Adaptation Theory of Nursing Practice* (NEATNP) for analysis.

3. Implement Nightingale's Environmental Adaptation Nursing Practice Theory in developing critical thinking skills in system-based nursing practice to achieve therapeutic nursing interventions for individuals, families and communities.
4. Develop a plan that specifies nursing actions that focus adapting the environment to attain health unique to the client's needs, utilizing the NEATNP.
5. Intervene to promote health through community based health education and screening programs, utilizing NEATNP throughout.
6. Evaluate responses of the individual family and community to interventions related to the environment to determine progress toward goal achievement and to revise the database and plan.
7. Collaborate with other disciplines to provide improve the environment affecting the health of individuals, families and communities.
8. Contribute to change in health care systems to improve the professional role of nursing and the delivery of quality health care.
9. Interface nursing science and knowledge from physical, behavioral, social science and humanities into practice sustained with evidence to safe, quality care to patients, families, and communities.
10. Validate one's identity as a nurse through actions that reflect integrity, evidence based practice, caring, advocacy, communication, collaboration and leadership to provide safe and quality care for diverse patients, families, and communities.
11. Interpret *Nightingale's Environmental Adaptation Nursing Theory of Nursing Practice* as it contributes to the science of nursing practice and assess evidence-based solutions to clinical practice problems.

Teaching Strategies:

Lecture, discussion, clinical experience, case studies, guest speakers,

Required:

[Maurer, F. & Smith, C. \(2009\). *Community/public health nursing practice*. St. Louis, MO: Saunders.](#)

Dossey, B., Selanders, L., Beck, D., & Attewell, A. (2005). *Florence Nightingale today: Healing, leadership, global action*. Silver Springs, MD: American Nurses Association.

Medical Milestones presents: Navigating Nightingale. (Smartphone app, free to users.)

Readings: as assigned**Evaluation Method—Clinical**

Clinical days are varied according to the site. Students will be assigned to a wide variety of community health nursing experiences on the North Shore, including Visiting Nurse Associations, Community Health Centers, primary care physician offices, schools, adult day health or assisted living facility for a six day (one day/week) clinical experience. Students are expected to participate in post conference, which will consist of a weekly question to be answered in a reflective journal. These questions will reflect the student learning objectives regarding community health practice and relating Nightingale's Environmental Adaptation Theory's point to the clinical site. Students will be also evaluated by meeting the Clinical Assessment Tool.

Students are required to attend all clinical days and complete the required hours as assigned. If for any reason a student needs to leave a clinical site early, he/she must notify the clinical instructor by phone prior to leaving the site. If for any reason a student cannot attend clinical, the clinical instructor must be notified by phone, and in addition, it is the student's responsibility to notify the clinical site within 15 minutes of the assigned start time and arrange for a makeup day with the clinical site. Any student who does not comply will be placed on clinical warning.

Evaluation Method—Class and Clinical

Midterm	20%
Final	20%
Windshield Survey	10%
Quizzes (7)	35%
Reflective Journals, relating clinical experience to NEATNP	15%

(See Appendix G: Windshield Survey and Appendix H: Guidelines for Reflective Journals)

Homework and Classwork will be assigned throughout the course, and may consist of additional readings, papers, essays and other evaluated assignments. The mid-term and final exams will include content regarding Nightingale and her theory.

ADA Policy: If you as a student qualify as a person with a disability as defined in Chapter 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, the Americans with Disabilities Act Amendments Act of 2008 (ADAAA), you are strongly encouraged to register with the Center for Teaching and Learning. The Center for Teaching and Learning is located on campus. As a student registered with the Center for Teaching and Learning, it is your responsibility to present your accommodation letter to your instructor at the beginning of each semester.

Academic Integrity Policy: Students are required to abide by the Academic Integrity Policy of Endicott

Attendance Policy:

Class: Students are expected to attend all classes prepared, on time and participate in class discussion. Tests and exams are to be taken at scheduled times except in extenuating circumstances that will be discussed with the faculty member. Regardless of reason for absence, make up exams and quizzes will consist of essay questions, multiple-choice questions, or a combination of both and will be scheduled at the faculty members' convenience. All assignments are to be handed in on time or the student will receive 10 points less for every day late unless extenuating circumstances exist and have been discussed with the instructor prior to the due date. Excess absences from class may result in failure or withdrawal from the course. In order to be giving credit for an excused absence, students must provide documentation of reason, i.e. illness or bereavement.

Topical Outline

- I. **Role and Context of Community/Public Health Nursing Practice/
The Nightingale Environmental Adaptation Nursing Practice
Theory**
- II. **Core concepts for the Practice of Community/Public Health
Nursing**
- III. **Family as Client/ Role of Fresh Air in Attaining and Maintaining
Health**
- IV. **Community as Client/ Role of Light in Attaining and Maintaining
Health**
- V. **Tools for Practice/ Role of Cleanliness in Attaining and
Maintaining Health**
- VI. **Contemporary Problems in Community/Public Health Nursing/
Role of Fresh Water in Attaining and Maintaining Health**
- VII. **Support for Special Populations/ Role of Sanitation in Attaining
and Maintaining Health**
- VIII. **Settings for Community/Public Health Nursing Practice**

Weekly Outline: Subject to change

Date	Agenda	Readings
Week 1	Syllabus Review Role of the Community Health Nurse Nightingale's Biography and Legacy	TBA
Week 2	U.S. Health Care Community Assessment-Windshield Survey <i>The Nightingale Environmental Adaptation Nursing Practice Theory</i> Quiz #1	
Week 3	Home Visiting Cultural Issues in Community Health Role of fresh air in attaining and maintaining health Quiz #2	
Week 4	The Family Role of light in attaining and maintaining health Quiz #3	
Week 5	International Health Role of cleanliness in attaining and maintaining health Quiz #4	
Week 6	Epidemiology	

	Communicable Disease Role of fresh water in attaining and maintaining health Quiz #5	
Week 7	Midterm Exam	
Week 8	No class, spring break	
Week 9	Health Promotion and Risk Reduction Health Teaching & School Health Role of sanitation in attaining & maintaining health.	
Week 10	Dept. of Public Health Speaker Application of Nightingale's theory in Environmental Health, Emergency Preparedness, Smallpox Vaccination Training (certificate awarded!) Disaster Nursing Environmental Health Quiz #6	
Week 11	Nightingale's theory relating to Vulnerable Populations Violence and Substance Abuse in the Community Quiz #7	
Week 12	FINAL EXAM	

Appendix G
Windshield Survey
Community Windshield Assessment

Name _____

Community _____

I. Community Core Data – Observations

You may use photographs or video to supplement your observations. Be sure to make observations at different times of the day and both by car and on foot.

Community Core	Observations on foot or in car	Inferences	Validation
<p>1. <u>History of the Community</u></p> <p>What can you glean by observing the community (e.g. old, established neighborhoods, buildings; new neighborhoods or buildings?)</p>			
<p>2. <u>Demographics</u></p> <p>Who do you see on the streets? Do you see anyone you would not expect at that particular time of the day? Is the population homogeneous? Is the area integrated?</p>			

<p>3. <u>Ethnicity</u></p> <p>Do you note indicators of different ethnic groups? Food stores, churches, etc.</p>			
<p>4. <u>Values and Beliefs</u></p> <p>Are there churches, mosques, or temples? Do you note any historical markers? Is the neighborhood cared for? Are the lawns cared for? With flowers? Gardens? Signs of art? Heritage?</p>			

II. Subsystems

Subsystems	Observations on foot or in car	Inferences	Validation
1. <u>Physical</u>			

<p><u>environment</u></p> <p>How does the community look? What do you note about air quality; flora, housing and zoning? (Are all the houses in the neighborhood similar in age and architecture?) Are there signs of decay? Is the neighborhood improving or declining? Do you note natural boundaries? Signs of where the neighborhood begins and ends?</p>			
<p>Subsystems</p>	<p>Observations on foot or in car</p>	<p>Inferences</p>	<p>Validation</p>
<p>2. <u>Health and social services</u></p> <p>Health and social services—evidence of acute or chronic conditions? Shelters? Alternative therapists/healers? Are there clinics, hospitals, practitioners’ offices, public health services, home health agencies, emergency centers, nursing homes, social service facilities, mental health services? Do the services appear</p>			

<p>to be in use?</p>			
<p>3. <u>Economy</u> Is it a “thriving” community or does it feel “seedy?” Are there industries, stores, places for employment? Where do people shop? Are there signs that food stamps are used/accepted?</p>			
<p>Subsystems</p>	<p>Observations on foot or in car</p>	<p>Inferences</p>	<p>Subsystems</p>
<p>4. <u>Transportation and safety</u> How do people get around or in and out of their neighborhood? What type of private and public transportation is available? Do you see buses, bicycles, taxis? Are there</p>			

<p>sidewalks, bike trails? Is getting around in the community possible for people with disabilities? Do you see evidence of different types of protective service (e.g., fire, police, sanitation)?</p>			
<p><u>5. Politics and government</u></p> <p>Are there signs of political activity (e.g., posters, meetings)? What party affiliation predominates?</p>			
<p>Subsystems</p>	<p>Observations on foot or in car</p>	<p>Inferences</p>	<p>Subsystems</p>
<p><u>6. Communication</u></p> <p>Are there “common areas” where people</p>			

<p>gather? Do you get a sense of territoriality or is it open to strangers? What newspapers do you see in the stands? Do people have TVs, radios, satellite dishes?</p>			
<p><u>7. Education</u> Are there schools in the area? How do they look? Are there libraries?</p>			
<p><u>8. Recreation</u> Where do children play? What are the major forms of recreation? Who participates? What facilities for recreation do you see?</p>			

Revised “Windshield Survey.” Anderson, E. T. & McFarlane, J. M. (1988). Community as client: Application of the nursing process (pp.178–179). Philadelphia: Lippincott, which also incorporates all aspects of the assessment wheel from Anderson, E. T. & McFarlane, J. M. (1995). Community as partner: Theory and practice in nursing.(2nd ed., p. 178), Philadelphia: Lippincott.

Appendix H
Guidelines for Reflective Journals

The journal is NOT a log of what you did during the day, but rather a documentation of your thoughts about providing care in the community. Your reflections should contain your observations, how the current week's readings apply to your observations, and how you used the NEATNP in your setting that week.

Your journal is a place to develop:

- Self-awareness. Think of how you interacted in any particular situation, and how the situation affected with you.
- Critical thinking: Reflect on your experience within the framework of your current knowledge while challenging your existing assumptions.
- Integration: Of current knowledge and new knowledge.
- Evaluation: How do you think your experience went? Were you able to see opportunities for applying the NEATNP in your setting today? How did that work out? How could you improve the experience?

Appendix I

This is the proposed college's guide, required for the course.
(See components of syllabus in Appendix F.)

XXXX COLLEGE
DEPARTMENT OF NURSING
GUIDE TO ACCOMPANY THE CLINICAL ACHIEVEMENT TOOL

<p>NU 411 Community Health Nursing</p>

Student Nurse will:

1. Notify the both the clinical faculty and course faculty of an absence.
2. Adhere to agency and school of nursing policies including:
 - a. personal identification, parking and dress.
 - b. complete of orientation as required
 - c. maintain confidentiality of written and verbal client information
 - d. meet health screening and immunization requirements.
 - e. provide documentation of CPR training
 - f. adhere to dress code for clinical setting (see Student Handbook)

**ANA Standards (2010) Professional Nursing Standards of Practice &
Performance**

Standard 1 Assessment:

The student nurse collects comprehensive data pertinent to individual or community

1. Collects data about the individual or community from multiple sources (client, family, hospital records, formal/informal leaders, staff, state/federal databases).
 - a. Reviews medical records when appropriate
 - b. Seeks information from nurses and/or staff
 - c. Asks appropriate questions
 - d. Utilizes electronic resources to obtain community information when relevant
 - e. Interviews community partners, including key informants
2. Interpret the data differentiating between relevant and irrelevant information

Standard 2: Diagnosis

The student nurse analyzes the assessment data in determining diagnoses or issues.

1. Identify indicators of actual and/or potential individual or community nursing diagnoses.
2. Differentiates between alternative diagnoses based on clinical or community indicators
3. Support nursing diagnoses on basis of the unique characteristics of the client/community
4. Interpret client/community behaviors within the context of cultural issues

Standard 3: Outcomes Identification

The student nurse identifies expected outcomes for a plan to individualize to the healthcare consumer or community

1. Identify outcome priorities in cooperation with the individual or aggregates.
2. Identify expected outcomes related to nursing diagnoses in partnership with the individual or community, collaborating with patients, families, or aggregates.

Standard 4: Planning

The student nurse develops a plan that prescribes strategies and alternatives to attain expected outcomes.

1. Plan nursing interventions that are derived from the nursing diagnosis and directed toward achieving the expected outcome.
2. Identify Therapeutic Nursing Interventions which have a sound scientific basis and reflect the protocols of the clinical agency.

Standard 5: Implementation

The student nurse implements the identified nursing care plan.

1. Demonstrates therapeutic nursing interventions with the individual or community in the clinical setting.
2. Demonstrates knowledge, skill and caring in carrying out procedures
3. Demonstrates an awareness of safety and privacy in providing nursing care.

Standard 5A: Coordination of Care

Student nurse coordinates care delivery.

1. Demonstrates an awareness of the coordination of care for the individual within the community.
2. Participates in care coordination plan related to the nursing plan of care.
3. Communicates the plan of care to the individual and/or other caregivers.

Standard 5B: Health Teaching and Promotion

The student nurse employs strategies to promote health and educate.

1. Demonstrates Teaching/ Learning principles when appropriate
2. Provides nursing care to promote health cognizant of client's physical, developmental and psychological needs.

Standard 6: Evaluation

The student nurse evaluates the plan of care and attainment of the outcomes.

1. Measures the individual's/communities progress toward achieving expected outcomes.
2. Communicates and records the individual's/communities progress toward the outcomes.
3. Adjusts and develops alternative strategies to assist the individual/community to meet the goal when indicated.

Standard 7: Ethics

The student nurse practices ethically.

1. Demonstrates nursing practice that is consistent with the code of ethics.
2. Use appropriate legal safeguards in nursing practice.
 - a. Maintains client confidentiality at all times in all settings
 - b. Utilizes facility specific communication policies to ensure confidentiality

Standard 8: Education

The student nurse attains knowledge and competence that reflects current nursing practice.

1. Attains and applies current nursing knowledge in care plan and providing care for clients in clinical setting.
2. Demonstrates competency in the performance of nursing skills while providing care for clients.
3. Demonstrates confidence while performing health assessment, skills and treatments in the clinical setting.
4. Performs documentation and treatments according to the protocol identified by the agency.

Standard 9: Evidence –Based Practice and Research

The student nurse integrates current research into practice.

1. Develops nursing care plans or papers that reflect current nursing research.
2. Shares current research with peers.

Standard 10: Quality of Practice

The student nurse contributes to quality nursing practice.

-Demonstrates “best practice” when providing nursing care.

Standard 11: The student nurse communicates effectively in all areas of practice.

1. Demonstrates collaboration with the healthcare team to identify resources for the individual or community
2. Shares nursing care plan with peers, faculty and nursing staff.
3. Demonstrates effective interpersonal communication in all interactions.
4. Documents client assessment and nursing care according to agency protocol.

Standard 12: Leadership

The student nurse demonstrates leadership in the professional practice setting and the profession.

1. Professionally shares knowledge readily with others.
2. Acts as a client advocate.
3. Assumes personal accountability for own actions and accepts resulting consequences.

Standard 13: Collaboration

The student nurse collaborates with the individual and with community resources in conduct of nursing practice.

1. Accepts client’s report from nursing staff when appropriate, asking questions when indicated.
2. Demonstrates collaboration with other Health Care Providers and/or community partners.
3. Participates in team meetings.

Standard 14: Professional Practice

The student nurse evaluates her or his own nursing practice.

1. Identifies self-learning needs for own professional growth appropriately.
 - Informs faculty/agency partner of learning needs in a timely manner
2. Develops a plan of action with the faculty/agency partner to increase knowledge and practice skills.
 - Utilizes college nursing laboratory for practice or to increase confidence in nursing care

3. Participates in clinical post-conferences by sharing experiences with faculty/staff via online discussion forum.

Standard 15: Resource Utilization

The student nurse utilizes appropriate resources to plan and provide nursing services that are safe, effective and financially responsible

1. Demonstrate an awareness of various resources that will enhance client care.
2. Practice in a financial sound manner.

Standard 16: Environmental Health

The student nurse practices in an environmentally safe and healthy manner.

1. Assesses the client and environment to identify possible safety risk factors.
2. Reports change in client status promptly.

Appendix J

Script of Focus Groups Session

- Welcome and thank you for participating.
- Review informed consent from and obtain signatures.
- Answer any questions about consent.
- Review of ground rules: respectful language and allow others to speak.
- Put cell phones on vibrate and put away and do not reach for them until session is over.
- Reminder that session is being recorded.
- Reminder that study is confidential.
- Turn on tape recorders.
- Remind group of the purpose of study: to learn their perceptions of utilizing Nightingale's Environmental Adaptation Theory of Nursing Practice in their CHN course. (Put question on flip chart).
- With probing questions, offer a re-phrasing of the original question:
 1. Please describe your response to the experience of using Nightingale's theory in your CHN practicum.
 2. What did you like most, and what did you like least about the experience?
 3. What do you think should be changed?
 4. Do you have any other thoughts about this course?
 5. Would you like to add anything else?
- Possible probing questions will include: Can you tell me more about this experience? Would you say more about that?