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Uncertainty in Nursing: The Impact on Practice and Leadership

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requirement for the degree of

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Abstract

Nurses experience uncertainty in practice due to the fast paced, complex nature of the healthcare system. Uncertainty in nursing practice has a direct influence on patient care, as well as personal well-being of the nurse, and his or her engagement and retention in the workplace. This paper describes a project intended to help nurses identify and cope with uncertainty in practice on an adult medical inpatient unit at a major Midwestern healthcare facility. The project is illustrated through a conceptual model of coping with uncertainty as guided by Margaret Newman's Theory of Health as Expanding Consciousness (HEC). The model identifies tools for coping with uncertainty through connecting with the environment, oneself and others. A quilting metaphor is introduced to help nurses visualize patterns of uncertainty in practice and use the coping tools to move toward confidence and competence in practice. The role of nursing leadership is identified as integral to the success of the project. Additional development of the project and research is suggested for further understanding of uncertainty experienced specifically in nursing practice and to document the impact that HEC theory guided coping tools have on decreasing uncertainty in nursing practice.

Keywords: coping, health as expanding consciousness, uncertainty

Uncertainty in Nursing: The Impact on Practice and Leadership

Chapter One: Introduction

The world today is filled with uncertainty and uncertainty in healthcare is no exception. People encountering today's healthcare environment, including patients, nurses, and administrators, all experience an environment that is "not definite or fixed" ("Uncertain", 2015). Patients experience uncertainty throughout their encounter of navigating the healthcare system, in undergoing tests and procedures, and while awaiting a diagnosis. Nurses experience uncertainty in their practice due to the fast paced and complex nature of the healthcare system. A nurse may experience uncertainty when giving a patient a medication that is unfamiliar, struggling to meet multiple workload demands concurrently, or adjusting workflow to incorporate changes in documentation requirements. How a nurse responds to and copes with uncertainty in practice varies from seeking assistance from other co-workers, obtaining additional information through various resources to trusting knowledge and theory to guide practice.

Nursing theory, now and in the past, has served as a foundation and guide to enhance nursing knowledge, understanding, and practice. Margaret Newman (2008) first presented her Theory of Health as Expanding Consciousness (HEC) in the 1970s at a time when nursing was beginning to change from focusing on disease and interventions to emphasizing treating the person as a whole. The introduction of Newman's theory correlated with a shift in viewing healthcare practice as linear and mechanistic to viewing healthcare practice as complex and holistic. Part of the nursing process in Newman's Theory of HEC (2008) is to relinquish control and the desire to fix things quickly.

Instead, nurses turn attention to developing a relationship with the patient to uncover pattern recognition and expand consciousness to incorporate disease into a person's view of the whole. Because HEC theory recognizes the complexity and holism inherent in systems and relationships, it is a useful framework for guiding practice in the context of uncertainty.

The research literature has explored uncertainty from a patient's perspective related to specific disease processes such as cancer, cystic fibrosis, and chronic illness as well as how nursing practice influences a patient's experience of uncertainty (Neville, 2003). Literature supports that nursing has a role throughout the course of a patient's illness to promote a positive outcome for the patient, from the assessment of the patient's uncertainty to providing education, resources and individualized coping interventions for the patient (Mishel, 2011). Minimal research has explored uncertainty from the perspective of a nurse and how this feeling influences a nurses' practice and patient care.

Purpose of the Project

The purpose of this project is to describe uncertainty for nurses providing direct patient care on an adult medical inpatient unit (AMIU) at a major Midwestern healthcare facility (MMHF) and develop tools to help nurses cope with these feelings of uncertainty. Furthermore, this project will explore the role of a nursing leader in supporting and encouraging nurses with their ability to cope with feelings of uncertainty in practice. The project is guided by Newman's Theory of HEC (2008). A quilting metaphor will provide visualization of the experience of uncertainty in nursing practice and the process of moving toward expanding consciousness to incorporate uncertainty into practice.

Background

The uncertainty associated with the rapidly changing healthcare system today directly influences nursing practice on a daily basis. Healthcare is too complex to maintain a practice in a linear, mechanistic format, and the change in practice has led to uncertain times in healthcare. Uncertainty comes from many aspects of nursing practice: linear thinking, expectations from institutional leadership, and complexity in the healthcare system. Today's healthcare system is ever changing, from medical advancements in treatment, to changes in reimbursement for health services. Nurses are challenged to stay abreast of changes in healthcare for their professional development and to positively impact patient care.

Historically, healthcare has been a practice based on science with a mechanistic view (Wheatley, 2007). In this view, organizations and human beings are seen as machines, relying on old linear methods to produce a quick fix. Throughout nursing school and practical experience, nurses learn that care is a linear process from an initial patient assessment to diagnosis and intervention, and nurses who are providing care in this linear manner often rely on standardized, disease-specific, or hospital specific protocols to guide practice (Stilos, Moura, & Flint, 2007). Nurses working with a linear viewpoint are focused on, and often get overwhelmed with completing required technical tasks and documentation. This leaves little room for personalized, holistic patient care or time for reflection on the situation. In linear healthcare organizations, nurses look up to their leaders for direction and are expected to do what they are told (Wheatly, 2007). In a linear organization, which is often a hierarchical structure, a common value is maintaining control. Nurses are often compliant with a leader's direction, partly because

this is the expectation and partly out of fear and the belief that disorder will ensue if control is not maintained.

Leadership at the MMHF that is the context for this project has historically emphasized a linear style while holding staff to the behavioral and institutional expectations. Direct care nurses had little input into new initiatives or changes; instead, nurses were expected to blindly comply and adapt routines to integrate leadership driven initiatives into practice. On the one hand, the AMIU is known by nursing leadership at the MMHF for being early adopters of new processes and technology. On the other hand, most of the initiatives or changes are leadership driven and not staff driven, to the point that the unit had over five new initiatives being implemented simultaneously. Nurses expressed at the time that the sheer amount of new knowledge and processes were difficult to integrate into practice while maintaining unchanged workloads. This time of implementing simultaneous, multiple initiatives led to a period of uncertainty and confusion on the AMIU where nurses were unsure of how to prioritize initiatives and they were not clear about the overall direction of the unit.

One of the behavioral expectations of a nurse at the MMHF is that the nurse embraces change and works successfully through any uncertainty. If this behavioral expectation is not achieved or successful, this can significantly influence nursing care, patients' experiences, and nurses' well-being. As set by leadership, the behavioral expectation that nurses must embrace change and work successfully through uncertainty is consistent with viewing the healthcare system as a complex whole. According to Crowell (2011), anticipating and working through change in the environment is a value and expectation in a complex system. The goal is not to practice in uncontrolled chaos,

but to self-organize and creatively work through change to establish a new normal. In a complex system, the emphasis is placed on developing relationships and a practice of reflection, not on building power or focusing on tasks (Crowell, 2011).

People encountering today's healthcare environment, including patients, nurses, and administrators, all experience a complex system. On the AMIU, nurses experience changing conditions constantly as patient admissions are not pre-planned, patients' conditions frequently change throughout a shift, and nurses strive to meet several patients' needs at once. It is an observation from a nurse's perspective, that on this AMIU a good day means that work goes smoothly with no surprises. For example, a hope is that patient admissions will come in an orderly manner and not all at once. If a patient or a situation turns unstable, a nurse's first thought is to move the patient to a higher level of care. There is an underlying belief that chaos and instability belong elsewhere in the hospital. Nurses do not lack the knowledge or resources to handle the instability, but with the other demands of the nurse's role, instability results in an unbalanced workload. An unstable patient requires more nursing assessment and intervention, leaving the other patients assigned to the nurse not receiving the nurse's full attention. The other nurses on the unit during this time have an opportunity to self-organize and come together to provide quality care for all patients on the unit. This value of teamwork and self-organization is a strength on this AMIU. The nursing staff does not hold to the old adage "that's not my patient," but instead upholds the principle that all patients on the unit are to receive care, and any staff member can assist with that care as able. A nurse may express frustration that for a time, all attention has to be directed towards one patient and that the nurse was not able to provide quality care to other patients during that time.

However, after the initial crisis is stabilized, a nurse is able to complete tasks and refocus to provide quality care for patients by the end of the shift.

The AMIU that is the setting for this project at this particular MMHF serves a diverse patient population. Patient admissions to the AMIU typically arrive through the hospital emergency room, where a patient initially presents with symptoms and awaits further diagnosis, testing, and treatment. Alternatively, patient admissions can also arrive from an outside facility, seeking specialty care for a complex medical issue that this MMHF is equipped to manage. The patients admitted to this unit range from young adults from age 18 to older adults who may be 100 years old, with medical diagnoses as varied as pneumonia, pancreatitis, diabetes, or end-stage liver disease. Nursing care includes providing palliative care, end-of-life care, and care for patients with chronic pain and illness. The World Health Organization (2016) defines palliative care as providing physical, psychosocial, and spiritual care with the intent to improve quality of life and eliminate distressing symptoms while a patient is experiencing a life-altering illness. Providing palliative care may be an uncertain time in nursing practice, where the focus changes from gathering data and providing interventions based on cure to gathering data to provide comfort and reassurance for the patient and family.

On this AMIU, there is diversity in the nursing staff with nurses identifying with many cultures and ethnicities. Nurses come with diversity in their nursing experience and longevity on the unit as well. One-third of the nursing staff have worked more than 25 years at the MMHF and about two-thirds of the nurses have worked fewer than 10 years at the MMHF. It is a general observation, from the perspective of a charge nurse, that nurses with more practical experience have increased anxiety or uncertainty related to

practice, and these nurses express more ambiguity when faced with integrating new knowledge or technology into practice. Additionally, one can also observe that nurses on this unit respond in different ways when faced with challenges or changing patient situations. For example, nurses respond differently when assigned an admission or encountering the task of giving a patient an unfamiliar medication. It is a general observation on the AMIU that the nurses with less practical experience are more adaptable to change and willing to embrace a challenging or changing healthcare situation.

Additional uncertainty exists regarding job security in the nursing profession. An expectation presented by the Institute of Medicine (2010) stated that 80% of nurses should receive or obtain a baccalaureate degree by the year 2020. Some nurses on the AMIU feel that this is a linear top-down management mandate and do not see the perceived value in higher education over experience. A few nurses express a fear of the future that if this expectation of obtaining a baccalaureate degree is not achieved, they will no longer hold a position at this healthcare institution. Nevertheless, nurses on the AMIU value lifelong learning as it relates to increasing knowledge that impacts their daily practice and making workflow smoother, such as an in-service about chest tubes, but not on a formal level such as taking academic courses or utilizing research articles to guide practice.

Significance of the Project

The feeling of uncertainty in a nurse's practice has a direct influence on patient care, a nurse's personal well-being, a nurse's engagement in the workplace, and on a nurse's decision to remain working on a particular unit or in the field of nursing. Nursing

leadership in a healthcare institution can positively impact effects of uncertainty.

Healthcare institutions need to recognize the value of relationships amongst nurses on the unit and build in time for collective reflection on practice. The healthcare system has the opportunity to reorganize from a linear practice model to that of a complex adaptive system (Rowe & Hogarth, 2005). Nursing has the opportunity to work towards successfully embracing change and coping with uncertainty in practice as well.

Nurses may not be able to identify that what they are experiencing and feeling is uncertainty. Without this proper identification, other feelings and actions may result. Other feelings attributed to uncertainty are anxiety, ambiguity, discomfort, and stress (Cranley, Doran, Tourangeau, Kushniruk, & Nagle, 2012). During heightened times of change, either institutional or in practice, there is a sense of uncertainty and a rise of anxiety for nurses. Nurses' response to stress and uncertainty can directly impact patients' care. Depending on the reflective practice of a nurse, the feeling of uncertainty results in either a positive or negative outcome. A reflective practice of a nurse includes time to reflect on the patient situation, explore decision-making processes, and recognize feelings associated with the situation. According to Cranley, Doran, Tourangeau, Kushniruk, and Nagle (2012), some nurses found more clarity during times of uncertainty while other nurses reported negative emotional and physiologic responses when faced with unresolved uncertainty. A positive response to a feeling of uncertainty may lead a nurse to seek trusted resources to work through the issue causing the uncertainty. Additionally, patients benefit when a nurse positively manages stress and uncertainty by the nurse finding more clarity or focus in patient care. Conversely, continuous practice in uncertain situations can negatively influence nurses' confidence, increase doubts, and

negatively impact satisfaction in practice (Stilos et al., 2007). Furthermore, this negative effect on nurses' confidence has an impact on the patients' experience. Building a trusting relationship with a patient is important for a patient experience to be successful. A nurse who exudes confidence builds trust quickly (Dinc & Gastmans, 2012). A nurse with unresolved uncertainty may not exude confidence and therefore, will not easily establish a trusting relationship with the patients. If a nurse has a negative response to uncertainty, this potentially leads to poor patient outcomes.

There is an opportunity for nurses on this AMIU at the MMHF to identify the feeling of uncertainty and to detect specific sources of uncertainty in practice. This project will seek to increase nurses' awareness of feelings and identify the feeling of uncertainty as it relates to nursing practice on this AMIU. This project will also identify coping tools to positively impact nurses' practice and patient care. Additionally, this project will explore leadership's role in supporting nurses who are identifying the feeling of uncertainty in practice and encouraging the use of coping tools to positively impact practice and instill a healthy view of uncertainty in practice.

The role of the nurse leader is critical in supporting nurses to practice confidently and competently. To be a successful leader in a complex adaptive system, the leader must be flexible. Leaders in nursing concern themselves with meeting institutional compliance standards, improving patient experience on the unit, and with supporting staff in work satisfaction. An increase in nurse stress and burnout that leads to decreased staff satisfaction and job retention may be a result of unresolved uncertainty in practice (Cranley et al., 2012). Nurse retention may decrease if a nursing unit and individual nurses are unable to cope with uncertainty in nursing practice. Leadership can support

nurses as they adapt to managing uncertainty in their daily work. Integrating the practice of reflection into practice is a tool for a nurse to embrace in order to recognize the relationship between a nurse's beliefs, response, and actions (Stilos et al., 2007). The reflective process of examining one's response to an uncertain encounter in practice requires commitment and dedicated time to gain personal insight. Adopting a reflective process into practice requires expanding care beyond technical tasks, integrating new knowledge into practice, and finding confidence in establishing meaningful relationships.

Nursing Theoretical Foundation

Newman's (2008) theory consists of three major interrelated concepts: health, pattern, and consciousness. Health is defined ultimately as expanding consciousness, through viewing life as a whole and coming to terms that disease is a part of the life pattern (Brown, 2006). The definition of the concept of pattern is the individual recognition of events that create the whole (Newman, 2008). Through developing a relationship with the patient, nursing is a key player in guiding the patient to recognize his or her unique pattern. The concept of consciousness in Newman's theory is defined as a person's ability and capacity to relate to the ever changing environment and move into a higher level of consciousness. Nurses encountering uncertainty in practice have the opportunity to guide each other with the goal of expanding their consciousness. In today's healthcare system, it is a basic necessity to embrace the uncertainty that comes with the ever changing environment. Nurses are in a unique position that they possess the knowledge and resources from practice to serve as a guide to looking at the whole.

The concepts of health, pattern, and consciousness will serve as a guide to the development of this project. One goal of this project is to describe the feeling of

uncertainty in practice. These concepts will provide a framework for nurses to develop caring relationships with each other to uncover patterns of uncertainty in practice. Nurses on this AMIU will need to develop relationships with each other to recognize the feeling of uncertainty and how this feeling impacts a nurse's practice and patient care. Nurses and leadership at this MMHF will need to assess their ability to cope with the feeling of uncertainty in practice. The concept of consciousness will guide implementation of coping tools and reflective practice for a nurse to cope with the feeling of uncertainty. Furthermore, nurses and nursing leadership will need to integrate tools for coping with the feeling of uncertainty in practice with the purpose of positively impacting nursing practice and patient care.

According to Chinn and Kramer (2015), all theory contains assumptions, accepted as truths that are fundamental to understanding the theory and may be explicitly stated or implicit in nature. The fundamental assumption in Newman's theory as cited in Brown (2006), is that "'Health is the expansion of consciousness' (p. 58)" (p. 504). An explicit assumption stated in Newman's theory is that the "removal of the pathology in itself will not change the pattern of the individual..." (Brown, 2006, p. 504). Part of the process of applying Newman's (2008) theory is to relinquish control and the desire to fix things quickly. Instead, nurses turn attention to developing a relationship with others and guide others to see that the pattern of disease in their lives are part of the whole. An implicit assumption in the theory, as cited in Brown (2006), includes "being an open system, being in continuous interconnectedness with the open system of the universe, and being continuously engaged in an evolving pattern of the whole (M. Newman, telephone interview, 2000)" (p. 504). An additional implicit assumption in the theory is that

everyone is open to and willing to work through pattern recognition and that expansion of consciousness will evolve regardless of nursing intervention (Brown, 2006).

The focus of Newman's theory is on the relationship between nurse and patient, but her theory could be adapted to build a relationship between an interactive guide and a nurse. According to Newman, the nurse's or interactive guide's role is not to direct care but instead to develop a fluid, interactive relationship with the purpose of guiding the patient to pattern recognition (Brown, 2006). Once the patient recognizes a pattern, this leads to a potential action for change, therefore expanding a patient's consciousness.

Research developed from Newman's (2008) HEC Theory has provided a description of the experience of nurses in various settings utilizing this theory in practice. Nurses have expressed a deeper understanding and a renewed sense of purpose when engaging in a relationship rather than focusing on required tasks. However, nurses additionally conveyed the experience of uncertainty as they integrated a new practice of relationship building with patients and questioned relationship boundaries. With reflection and seeing positive changes in patient care when new pattern or meaning is recognized, nurses have expressed a positive response in practice when utilizing HEC (Newman, 2008). Nurses, in general, are eager to share stories and knowledge with each other related to practice with the intent of helping and learning from each other. As one example, Newman (2008) spoke of a nurse educator in need reaching out to a friend, who was also a nurse, in a time of a personal and medical crisis. This friend utilized concepts of HEC to engage in dialogue with the nurse educator to not only seek the needed medical attention but also to guide the nurse educator to recognize pattern and

consequently take action to transform the nurse educator's life or expand the nurse educator's consciousness.

The heart of nursing is caring for another individual, and for most nurses, the intent is to do this well by caring for an individual as a whole person. On this AMIU, with the many demands of the healthcare environment, nurses struggle to balance completing the required tasks along with developing caring relationships with patients. Nurses on this unit may not be certain in how to navigate in practice with the multiple demands placed upon them. An experience or feeling of uncertainty may hinder a nurse in practice and be a barrier to developing a caring relationship with patients. Newman's (2008) theory continues to guide nursing practice through the concepts of health, pattern, and consciousness.

Uncertainty exists in the world today, and nurses experience uncertainty in their personal and professional life. Nurses on this AMIU experience uncertainty in practice from the complex variety of patients, the various illness related treatments, and simultaneously striving to meet institutional and behavioral expectations. Nursing practice as a whole has begun the transformation of moving from a linear, science-based practice into embracing the complexity of the ever-changing and diverse healthcare environment. The individual nurses on this AMIU need to embrace this transformation to complexity thinking or negative implications will occur such as poor patient outcomes, decreased nurse engagement, and a decline in nurses' well-being. Newman's Theory of HEC (2008) will be a foundation for guiding nursing practice into embracing this change and coping with uncertainty in practice. Chapter Two will explore and explain the

literature regarding the concepts of uncertainty, health, and pattern and expanding consciousness.

Chapter Two: Literature Support

The concept of uncertainty in life is a universal experience and has been studied across multiple disciplines. A literature search uncovered what is known regarding the feeling of uncertainty in the practice of nursing. This chapter will describe the pertinent literature related to the concepts of uncertainty, health, and pattern and expanding consciousness as they relate to nursing practice.

Uncertainty

Uncertainty is a universal experience. Uncertainty has been described as an expected, inevitable feeling resulting from being in an ambiguous situation, and is a behavior or feeling that can be modified (Stilos et al., 2007; White & Shullman, 2010). Penrod (2001) proposed a broad multidisciplinary definition of uncertainty:

Uncertainty is a dynamic state in which there is a perception of being unable to assign probabilities for outcomes that prompts a discomfoting, uneasy sensation that may be affected (reduced or escalated) through cognitive, emotive, or behavioural reactions...and changes in the perception of circumstances. The experience of uncertainty ... is mediated by feelings of confidence and control. (p. 241)

This definition is useful in a multidisciplinary setting and in nursing practice. The literature will be explored to determine what is known about uncertainty in nursing practice. The following will describe the literature as it relates to effects of and sources of uncertainty, information seeking, action as a result of uncertainty, and leadership role in uncertainty (Cranley et al., 2009).

Effects of Uncertainty

Little literature was found related to the effects of uncertainty as it relates to nurses in practice. Uncertainty in practice is inherent and a feeling that begins with nursing students working toward a degree and practicing nursing in clinical settings (Vaid, Ewashen, & Green, 2013). Effects of uncertainty, from a patient perspective as it relates to illness are well documented. Mishel's (2011) work and Theory of Uncertainty in Illness explained that during an acute illness, the experience of uncertainty has a negative impact on a patient's quality of life and is associated with symptoms of depression and anxiety. The effects of uncertainty on a nurse in practice have not been studied widely, but what little has been studied focuses on identifying sources of uncertainty in practice and action nurses take to decrease uncertainty in practice.

Nurses may not be able to identify that what they are feeling is uncertainty. In one study, nurses identified other feelings related to uncertainty such as frustration, anger, agitation, and fear (Vaismoradi, Salsali, & Ahmadi, 2011). If uncertainty is not coped with, over time, negative repercussions will occur such as burnout and job dissatisfaction from experiencing a prolonged sense of fear, lack of self-esteem, unclear expectations, and overreliance on others for decision-making and direction (Vaid et al., 2013).

Sources of Uncertainty

Uncertainty is an individual experience that varies in different settings (Cranley, Doran, Tourangeau, Kushniruk, & Nagle, 2009). Decision-making and confidence in making decisions have been identified as a source of uncertainty. Practitioners rely on both intuitional and rational thinking to come to decisions regarding clinical situations (Thompson & Dowding, 2001). Unique to hospital nursing is that decision-making about

interventions and patient care was identified as leading to uncertainty (Cranley et al., 2009).

The literature search uncovered two articles specific to uncertainty in nursing practice. Cranley et al. (2012) utilized grounded theory research to examine the feeling of uncertainty in staff nurses at a medical-surgical intensive care unit. Cranley et al. identified three situations causing uncertainty in nursing practice categorized as: “1) feeling caught off-guard, 2) encountering unfamiliar or unique orders, and 3) navigating the ethical gray areas of practice” (p. 152). The second research study examined uncertainty in nursing practice at a medical-surgical unit in Iran (Vaismoradi et al., 2011). Nurses in this study identified that unclear expectations of their role caused uncertainty. Nurses further identified uncertainty in unexpected patient situations. In addition, these Iranian nurses identified uncertainty in situations where the nurse could identify action to reduce uncertainty but did not take action out of fear of negative consequences.

Additional sources of uncertainty in nursing practice were uncovered on a pediatric critical care unit. Scott, Estabrooks, Allen, and Pollock (2008) set out to identify how environment and context impact nursing use of research in practice. During this process, a theme of uncertainty in practice was uncovered as a primary deterrent to the use of research in nursing practice. Scott et al. (2008) identified four areas of uncertainty in practice in the setting of a pediatric critical care unit as “precarious condition of patients, inconsistency in management, inherent unpredictability of nurses’ work, and complexity of working with other disciplines” (p. 350). They found that the uncertainty experienced by nurses stifled independent practice, leading to an over-reliance on

direction from physicians and management. Nurses on this pediatric critical care unit had little confidence in their ability to make decisions.

Information Seeking

French (2006) examined the relationship between uncertainty and the action of information seeking. Uncertainty and information seeking by nurses were higher in situations where nurses identified practice variation, such as the variation in the nursing task of intravenous administration. Nursing specialists participating in the study were able to express uncertainty related to managing intermittent intravenous medications. The nursing specialist group identified variation in equipment, lack of understanding of infection control related to changing out intravenous lines, and variation in nursing interpretation of best practice all led to uncertainty and variation in practice. Additionally, uncertainty arose when a nurse encountered a discrepancy between experience in practice and with the evidence presented for best practice.

A nurse's perception of the need for and availability of information varied based on time constraints and reflection in practice. French (2006) found that daily nursing practice is embedded with opportunities for questioning and trialing of ideas. However, without reflection and collaboration, nurses are not able to articulate specific areas of uncertainty. French (2006) stated that the key to "uncovering and articulating information need was retrospective analysis of the experience of practice" (p. 251). Nurses in practice utilize clinical knowledge, experience, intuition, and feelings to guide practice and decision-making (Newman, 2008). In order to expand knowledge of the whole, a reflective process is imperative. Nurses perceived that research-based information was not readily available or sufficient for use in daily practice (French, 2006). Nurses

expressed that simply being presented with research did not increase confidence in practice. With time constraints and emphasis on tasks, often nurses in practice seek information to rectify the immediate need rather than seek information to reflect best practice.

Nurses during times of uncertainty seek out information in various forms and for various reasons. Much attention has been placed on the role of uncertainty in decision-making in clinical situations and how this impacts nursing's use of information seeking. Uncertainty in practice presents an opportunity for professional development by questioning situations and being open to other alternatives (Vaid et al., 2013). Vaid et al. (2013) found that health care providers naturally seek information through collaboration with others. Physicians may seek this collaboration through formal consults whereas nurses seek collaboration informally through discussion with peers and other members of the health care team. Nurses often rely on colleagues' expertise and personal experience as a guide when encountering an unfamiliar situation or a time of uncertainty (Cranley et al., 2009; Vaismoradi et al., 2011). Cranley et al. (2012) identified further steps for nursing to manage uncertainty through support from colleagues and increased use of evidence-based information. Increased knowledge and experience may decrease uncertainty in practice, but even with policies and resources in place, uncertainty will still occur (Hood, 2014).

Nurses in practice pursue information to validate decisions and decrease uncertainty in patient care (Cranley et al., 2012). Typically, nurses seek easily accessible and concrete information, either from electronic sources, co-workers, or protocols. Often in practice, validation for nursing action is gained through a group consensus. A nurse

seeking information in an uncertain situation either seeks information to decrease the feeling of uncertainty or to enhance understanding of the situation. If a nurse is experiencing high uncertainty, the nurse may be seeking information out of fear that if the right thing is not done, negative repercussions for the nurse or patient will occur (Cranley et al., 2012). Gaining information via consensus is often driven by nurses not wanting to get in trouble; consensus allows nurses to change their feelings of uncertainty to feeling that they are doing the right thing and are supported by their peers. However, when nurses are more open to managing their feeling of uncertainty, they seek information for the purpose of personal growth or increasing knowledge to improve patient care. Overall, nurses who manage uncertainty in a positive manner are more engaged, consider the larger context of the situation, and seek to improve not only themselves but the unit and patient care as a whole (Cranley et al., 2012). Increased engagement in nursing practice leads to embracing uncertainty as a learning opportunity.

Action as a Result of Uncertainty

Uncertainty cannot be completely removed from practice and nurses have been able to identify strategies to adjust to uncertainty in practice (Vaismoradi et al., 2011). According to Vaismoradi et al. (2011), nurses stated that improving skills, increasing knowledge, and having more practical experience led to increased self-confidence and being less vulnerable to the negative effects of uncertainty. Unique to Vaismoradi et al. (2011), Iranian nurses experienced uncertainty caused by unclear expectations of their nursing role. These Iranian nurses adjusted their practice after examining the expectations other members of the health care team placed on them.

Maintaining an attitude of uncertainty may benefit nurses in practice. Nurses often take comfort in being an expert and having certainty in their practice and knowledge (Flanagan, 2005). Uncertainty may be experienced when nurses intentionally put aside their role of being the expert with all the knowledge and answers to a patient problem. Putting aside preconceived answers or knowledge may benefit a nurse in developing a relationship with patients by allowing for openness in the relationship and patient expression (Chan, 2004). Similar to the experience of chronic pain in patients, the goal is not to eliminate the feeling of uncertainty but to incorporate the use of coping tools to turn the feeling of uncertainty into positive action.

Depending on the healthcare situation, information is one tool that may influence, but not eliminate uncertainty. Information and processes may be useful and more effective in areas identified as low-level uncertainty (Leykum et al., 2014). A low-level of uncertainty, such as task uncertainty, may be most effectively resolved from a process perspective (Leykum et al., 2014). Processes such as standardization and quality improvement projects are most effective when a low-level uncertainty presents itself. For example, a situation of low-level uncertainty may include assessing a patient for appropriateness of receiving a recommended vaccine, such as the influenza vaccine, during a hospital admission. Recommendations for vaccines are standardized with processes in place for assessment and interventions apply to all patients. Uncertainty is low, or decreased, in this situation by the standardized process of assessment through the electronic health record.

Leykum et al. (2014) proposed that interventions to reduce uncertainty need to encompass elements of available resources, processes in place for standardized care, and

relationships within the system. Customized knowledge and concrete solutions, such as decision-making trees, have been proposed as a way to decrease uncertainty in specific practice situations where adequate evidence-based data is available (Cranley et al., 2009; Thompson & Dowding, 2001). Scott et al. (2008) suggested implementing unit specific practices to increase the use of research in practice. The goal of implementing unit specific practices is to expand a nurse's confidence in practice and ultimately turn uncertainty and fear into a desire for an increased use of research utilization in practice (Scott et al., 2008). This project will identify specific coping tools for nurses to utilize in coping with feelings of uncertainty.

When a system is facing high levels of uncertainty, relationships are more effective for sustained change (Leykum et al., 2014). High levels of uncertainty may be observed in an acute care setting due to the number of providers and transitions a patient experiences throughout the hospital stay and can cause communication breakdowns, leading to uncertainty with a plan of care. For a patient experiencing uncertainty related to illness and hospitalization, a communication breakdown between the healthcare team can add to a patient's experience of uncertainty. In addition, because a nurse is often the point of contact regarding the plan of care, this communication breakdown is a source of uncertainty in a nurse's role. A relationship within the healthcare team that is respectful and collaborative is crucial for effective communication between a patient and the healthcare team.

Leadership Role in Uncertainty

White and Shullman (2010) argued that ambiguity is a certainty in organizations due to the complexity and fast-paced nature of the work. White and Shullman stated that

uncertainty is the resulting feeling of experiencing ambiguity. Ambiguity is a desirable trait in organizations as this often leads to innovation and collaborative solutions. It is essential to have a leader with a balanced behavior of dealing with ambiguity and feelings of uncertainty. White and Shullman's study described ambiguity and coping with uncertainty as a behavior, rather than a trait. They defined ambiguity as a behavior that is modifiable, a behavior that one can adjust with the right feedback and tools. A leader who does not cope with uncertainty may stifle progress and change. Conversely, a leader who effectively copes with the feelings of uncertainty is an effective leader. White and Shullman recommended initiating a plan first to assess the leader's ability to face ambiguity and then strengthen or develop this behavior in leaders. Secondly, leaders will then "instill an aptitude for ambiguity in peers" (White & Shullman, 2010, p. 97).

Coakley and Coakley (2005) stated that theory can be a valuable resource for administrators in creating models for professional practice and sustaining change. In a study focused on nursing leadership, Coakley and Coakley reported on a medical center's approach to examine how Margaret Newman's Theory of HEC guided and impacted nursing practice at a leadership and clinical level. Coakley and Coakley stated that leaders in nursing were torn between improving healthcare and nursing practice from a business and efficiency model to improving the profession of nursing from a theory-based and caring model. This tension between meeting institutional demands and a desire to elevate nursing practice through increased use of knowledge and theory may be a source of uncertainty in a nursing leaders' practice. Nurses at this medical center expressed understanding the value of theory-based care but found it challenging to

incorporate principles of theory into actual practice due to time constraints and the focus on task-oriented practice.

Nursing administration at this study's medical center utilized Newman's HEC Theory as a guide to incorporate theory-based care into nursing practice (Coakley & Coakley, 2005). A group, consisting of nursing leaders, was formed with the purpose to advance nursing theory into practice. Utilizing concepts of Newman's HEC Theory, the nursing leadership group set out to articulate a direct link between nursing interaction and relationship with patients and patient experience. In addition to integrating meaningful dialogue with nurses and patients into practice, the leadership group met regularly to provide time and space for reflection and group discussion. As a result of this leadership group, many hospital administrators began to integrate personal reflection into their daily practice. Nursing administrators recognized that taking the time to reflect may not be an organizational priority or value but is an important practice for an administrator to maintain focus and build relationships through engaging dialogue. Many members of this leadership group acknowledged difficulty integrating purposeful dialogue with staff and patients into daily practice, but found much value when able to be fully present when engaging in dialogue. Members of the leadership group found that regularly meeting to share their experiences of integrating theory into practice allowed for expanded consciousness, both personally and professionally, related to health, environment, and nursing.

Health

In today's society, health is something to continually strive for or work toward. Health may be returning to a previous state of function or a desire to look or feel a certain

way. There are many ways to achieve one's personal view of health such as working out at the gym, choosing to eat certain foods, electing for health procedures, or obtaining emotional support. Change and new insight are most likely to occur when one is experiencing something life altering or realizing that the old ways no longer work (Picard & Jones, 2005). When the old ways are no longer adequate, one starts to explore new ways and seek assistance from others. The focus of achieving health may change from doing or seeking an intervention to a focus on reflection, reprioritizing, and a change in perspective of life. To achieve this change in focus and ultimately health, one must have an openness to trying new ways, allowing for creativity and a new pattern to emerge.

Margaret Newman's Theory of HEC (2008) guides nursing to embrace a holistic view of health. Newman argued that health is not something to be achieved or a state of being disease free; instead, health is a life-long process of finding connectedness with the environment, oneself, and with others. Newman's HEC theory views disease within the larger concept of health where health encompasses illness. Newman stated that since the beginning stages of nursing as a profession, there has been a shift in viewing health as the absence of disease to viewing health as a pattern. Newman gave the example of this shift "from viewing pain and disease as wholly negative to viewing them [pain and disease] as information about the pattern of the whole" (p. 11). As an example of this shift, pain management in the past focused on intervention to alleviate the pain a patient experienced. In healthcare practice today, pain management focuses on the relationship between pain and a person's ability to complete his or her tasks of daily living, such as walking, bathing, or running errands. Patients living with persistent pain are now encouraged first to acknowledge this relationship and recognize pattern between the

experience of pain and living daily life. Once the patient identifies this pattern, intervention can be individually tailored to accept living daily life while managing pain.

Newman's Theory of HEC (2008) can guide nurses in practice to develop relationships with patients with the intent to guide a patient to acknowledge a new view of health through pattern recognition and expanding consciousness. Just as patients need to realize that old ways no longer work, nurses must also recognize in their own nursing practice that the old ways no longer work and that focusing on disease, cure, or problem solving is no longer a valid solution. Furthermore, Newman's theory defines a new way of thinking as a focus on the relationship between the interactive guide and the participant to reveal the pattern and to embrace the unpredictability that encompasses this process of revealing a participant's pattern. This new process of developing relationships does embrace simple rules; one rule is to practice with unconditional love, not in a romantic sense, but with the understanding that the highest form of being known is through love (Newman, 2008; Picard & Jones, 2005). Unconditional love in nursing practice involves creativity, being aware of self, and the ability to be present with others (Newman, 2008). One goal of the nurse utilizing HEC is for the nurse to recognize that a nurse's presence is key to health and healing, not focusing on action or intervention to result in a cure or absence of disease (Capasso, 2005).

Developing relationships with oneself and with others is essential for health (Newman, 2008). It is difficult to reach pattern recognition and expanded consciousness without the assistance of relationship with others. Developing relationship and trust with patients is central to a successful nursing practice (Dinc & Gastmans, 2012). For a nurse to be a centering presence in the environment and to build a relationship with a patient, a

nurse needs to recognize his or her own pattern and hold the belief that he or she directly impacts the caring environment and relationship (Capasso, 2005). The relationship involves interaction between two people, often a patient-nurse interaction. An initial patient-nurse interaction typically occurs during a time of medical crisis when a patient needs a medical intervention. A nursing intervention can only occur after a patient's pattern is recognized (Newman, 2008). Pattern is revealed through mutual patient-nurse dialogue and reflection in response to a patient's complex problem or crisis. The resulting nurse intervention and patient action is often simple.

Newman (2005) argued that what makes nursing unique is the integration of a relationship of caring and health. Newman (2008) recognized that the process of caring through relationship is difficult. It is crucial that nursing view health from a nursing perspective of integrating caring relationships and not a medical perspective of focusing on cure and problems to be solved. Instead, a nurse integrates medical knowledge into this process of developing caring relationships and into this new view of health. If a nurse leans too heavily on viewing health with a medical perspective, this may obscure the revealing of the patient's pattern and hinder development of the caring relationship.

Uncertainty is inherent in this mutual participatory process of developing relationships between an interactive guide and a participant for the purpose of expanding consciousness and achieving health (Newman, 2008). Often, a nurse may shut down the feeling of uncertainty to avoid facing the unknown, but when a nurse copes with uncertainty, creativity and movement towards higher levels of consciousness can occur. Identifying uncertainty is a process of assessing, reflecting, and recognizing that there will be situations where an outcome is not predictable (Cranley et al., 2012). The process

of reflecting includes nurses questioning their nursing actions, assessing their decision-making process, and building confidence in their skills and knowledge.

Pattern and Expanding Consciousness

Experienced nurses utilize pattern recognition and skills for making clinical decisions (Cranley et al., 2009). Newman (2008) argued that pattern recognition in nursing practice is more than assessment and intervention for symptom management. Pattern recognition begins with an interactive patient-nurse relationship. The dialogue between the patient and nurse is a transformative process used to uncover what is meaningful to the patient. A time for reflection is needed for a patient to express meaning in life and find insight into his or her pattern. Nurses are a participant with the patient in this mutual process, not to place emphasis on facts or diagnosis for nursing interpretation, but to focus on meaning and for the patient to find insight.

Once a pattern is recognized, then action or intervention can take place and a new perspective of life is perceived by the patient. Newman (2005) defined consciousness as “the pattern of the whole that identifies each person” (p. 5). Expanding consciousness is a progressive process throughout one’s life. Often the process of expanding consciousness is unpredictable and includes “disruption and disharmony as well as calm and harmony” (Newman, 2005, p. 7). Action and change can only take place once a pattern is recognized. When one comes to a point of decision, after accepting that the old ways no longer work, this is a point of movement or action (Newman, 2005; Picard & Jones, 2005). Ideally, this movement is towards bettering oneself through reflection and relationship. Resulting expressions of expanded consciousness include the participants

feeling a greater sense of freedom, a deeper connection with themselves and others, and an increase in meaningful relationships (Newman, 2008).

Complexity science holds the view that systems working “on the edge of chaos” are often an advantageous time to develop new patterns of behavior (Rowe & Hogarth, 2005). Newman’s HEC Theory states that “pattern recognition and times of turbulence are opportunities for growth, healing, and transformation” (Picard & Jones, 2005, p. 22). Rowe and Hogarth (2005) implemented a model of a complex adaptive system to initiate behavioral change in the practice of public health nurses in the United Kingdom. This change process produced uncertainty as nurses were asked not to focus on an end result but envision a future. Early in the process, the researchers introduced the expectation of change throughout the process to “encourage individual learning, reflective, and creative process” (Rowe & Hogarth, 2005, p. 400). The results of moving from a linear model to moving toward a model that incorporated unpredictability was successful as evidenced by nurses incorporating a freedom of creativity and development of self-organizing patterns in the system. Further action and evaluation were implemented to sustain the new pattern, so as not to return to old ways of practicing. Rowe and Hogarth integrated a focus on simple rules to guide practice and encourage flexibility and creativity, rather than a focus on protocols and organizational rules that stifle creativity.

Looking at the healthcare system as a complex system can allow for renewed clarity in pattern and relationship. Leykum et al. (2014) indicated that any change in the system results in uncertainty, and because healthcare is a complex system, the focus needs to be on relationships between individuals and how they interact or communicate. Providers experienced uncertainty dependent upon the setting, tasks, or disease being

treated. Leykum et al. focused their study on provider interactions and relationships, leaving room in the literature to understand nursing uncertainty from a system

perspective. Leykum et al. explored interactive relationships in the system and gained an understanding of how people working in the system learn and improvise to improve the health care environment.

Chapter Two has explored the literature related to the concepts of uncertainty, health, and pattern and expanding consciousness as they relate to nursing practice. The literature has identified sources of uncertainty in nursing practice. Information seeking was identified as a common practice in nursing and utilized as a tool to reduce uncertainty or validate a decision in practice. The topic of uncertainty in leadership was found in the literature as it relates to organizations and complex adaptive systems. Chapter Two has also identified the gaps in the literature regarding the concept of uncertainty as it relates to nursing practice and the effects of this feeling on nursing practice. The experience of uncertainty in nursing leadership is an additional gap in the literature. Chapter Three will explain how nursing practice, theory, and knowledge guided development and planning of this project and will describe uncertainty in nursing practice on an AMIU. Furthermore, Chapter Three will identify a theory-based coping tool for nurses to utilize in practice and explain leadership's role in supporting the use of the coping tools.

Chapter Three: Development of the Practice Project

Chapter Three will explain the process used to develop the project addressing uncertainty in nursing practice as guided by Newman's Theory of HEC (2008) and the concepts of health, pattern, and expanding consciousness. The ultimate goal of this project is to guide nurses to practice with freedom, creativity and an increased awareness of self and pattern, and an ability to be present in practice (Newman, 2008). By gaining an awareness of patterns of uncertainty experienced in practice, nurses will then be less affected by the fear and negative implications associated with uncertainty. Moreover, this awareness should positively influence a nurses' well-being, job satisfaction, and confidence in nursing practice. The new awareness in practice will also decrease nursing turnover and improve patient care outcomes. Furthermore, Chapter Three will provide visualization and description of the experience of uncertainty in nursing practice through a quilting metaphor.

Description of the Project

It is an observation on the AMIU, the context for this project, that each nurse comes into practice with unique perspectives and responds in varying ways when faced with change and uncertain situations. Nevertheless, on the AMIU it is a behavioral expectation that nurses cope effectively through change and uncertainty. Indeed, nurses on this unit are excellent at identifying areas of uncertainty related to task-oriented practices, which are considered areas of low-level uncertainty. However, nurses on this AMIU also express interest in increasing their understanding of uncertainty at a high-level, or from the vantage point of the complex interpersonal relationships in the

environment. This project will address both task-oriented (low-level) uncertainty and interpersonal relationship (high-level) uncertainty.

Project Assumptions

The first assumption in the project is that all nurses experience the feeling of uncertainty in practice and this feeling of uncertainty is not desirable. The second assumption is that uncertainty generates feelings or behaviors that can be modified; it is not an inherent character trait. The third assumption is that the experience or the feeling of uncertainty is not something to eliminate, but to incorporate into the whole of one's practice. The fourth assumption is that nurses are open to change and willing to implement action to reduce negative effects of uncertainty, expand their consciousness, and ultimately achieve a healthy life-work experience.

Process of Creating the Project

The implementation of the project will consist of two phases and this section will describe the process of implementation thus far and the proposed implementation for each phase. The first phase will be to obtain involvement and approval from nursing leadership. Additionally, the first phase will also introduce the project on the AMIU and gain interest from individual nurses willing to participate in semi-structured conversations. Phase Two will describe the creation of the conceptual conversation guide and development of the conceptual model. Phase Two will additionally describe the proposed implementation of the project.

Phase One- Nursing Leadership Support and Staff Nurse Involvement

For successful development of the project, involvement and support from nursing leadership, both on the AMIU and in the MMHF is essential. Without the support of leadership, changes or improvement in practice are not effective or long-lasting (Flanagan, 2005). Local nursing leadership team members, including the AMIU manager and the clinical nurse specialist, were involved with the initial phase of this project to receive permission for continued development of the project. The nurse manager was informed of the intended project and gave approval to create an opportunity to have preliminary conversations with nurses on the AMIU. The nurse manager suggested conversations take place before the start of a shift, during a shift, or at a meeting outside of the work setting. Therefore, a first step in this process was completed by sending out an e-mail to the nurses on the AMIU to inform the staff nurses of the intended project and to identify nurses willing to participate in intentional semi-structured conversations. The purpose of these initial conversations was to gain insight into the experience and feeling of uncertainty in nursing practice on the unit and receive information to assist in development of the conceptual conversation guide. Because these conversations were considered part of a quality improvement process, they did not require Institutional Review Board (IRB) approval.

The next step was to initiate intentional conversations with the nurses who agreed to participate. Five nurses agreed to participate in the initial conversations and the intentional, semi-structured conversations took place over a time of two weeks. One conversation, which took place outside of the work setting, transpired in 45 minutes. All

other conversations transpired over 20 minutes and took place informally but intentionally on the AMIU either during or before a work shift.

The initial semi-structured conversations began by discussing the feelings or behaviors nurses associated with uncertainty. The beginning of the conversation was open-ended to allow for the topic of the conversation to progress naturally (Burrows & Kendall, 1997; Newman, 2008). Nurses had the opportunity to share his or her thoughts about uncertainty and what it feels like to be in an uncertain situation. Clarifying questions were asked by the nurses when asked about feelings related to uncertainty. Examples of low-level uncertainty, such as medication administration, and high-level uncertainty, such as collaborating with the physicians, were given to provide clarity for the discussion.

Discussions also revolved around nurses sharing an experience or situation in which they identified feeling uncertain. It is an observation that this topic of sharing an experience was easy for the nurses and the nurses were eager to share. Nurses were encouraged to identify specific areas of practice in which they experienced uncertainty. Nurses shared that they experience low-level uncertainty in task-oriented nursing skills, such as medication administration. One nurse stated that even with a prescribed algorithm for the administration of an intravenous insulin drip, this nurse still encountered uncertainty in the process as each patient responds differently to the treatment and the nurse was unsure of the consequence of moving through the algorithm (personal communication, April 27, 2016). Three nurses acknowledged uncertainty related to palliative care. Nurses acknowledged uncertainty as to whom to trust and to ask for opinions or help when encountering an uncertain situation. Nurses stated that when

trusted co-workers are working the same shift that this decreases uncertainty in general (personal communication, April 22, 2016).

Next, discussions revolved around nurses identifying experiences where they felt confident or where uncertainty had a positive outcome. Nurses were encouraged to reflect upon and share current practices of coping with uncertainty. Nurses explained that seeking opinions of others or seeking information via an Internet or policy search was helpful in decision-making and navigating through an uncertain encounter (personal communication, April 22, 2016). All nurses stated that utilizing resources available on the unit, such as an online drug resource and the decentralized pharmacist, was helpful to decrease uncertainty related to medication administration. Nurses used these resources to aid in decision-making regarding administration of intravenous medications, to check potential drug reactions, and to clarify confusing orders. Nurses stated that having more experience, especially related to palliative care, having the same patient assignment repeatedly, and working on the same unit consistently, not floating to other units, led to increased confidence in practice.

Finally, nurses were encouraged to reflect upon how leadership has impacted their experience of uncertainty. Nurses expressed that feeling supported from other staff, including charge nurses, the resource float nurse, and nursing manager or supervisor was essential for confidence in practice. One nurse stated the value of having a balance of positive and negative feedback from nursing leadership (personal communication, April 27, 2016). Another nurse stated that a balanced leader is best to guide an individual's practice (personal communication, April 22, 2016). For example, if a leader is too strict, or linear, uncertainty exists if the nurse tries to change something or practices

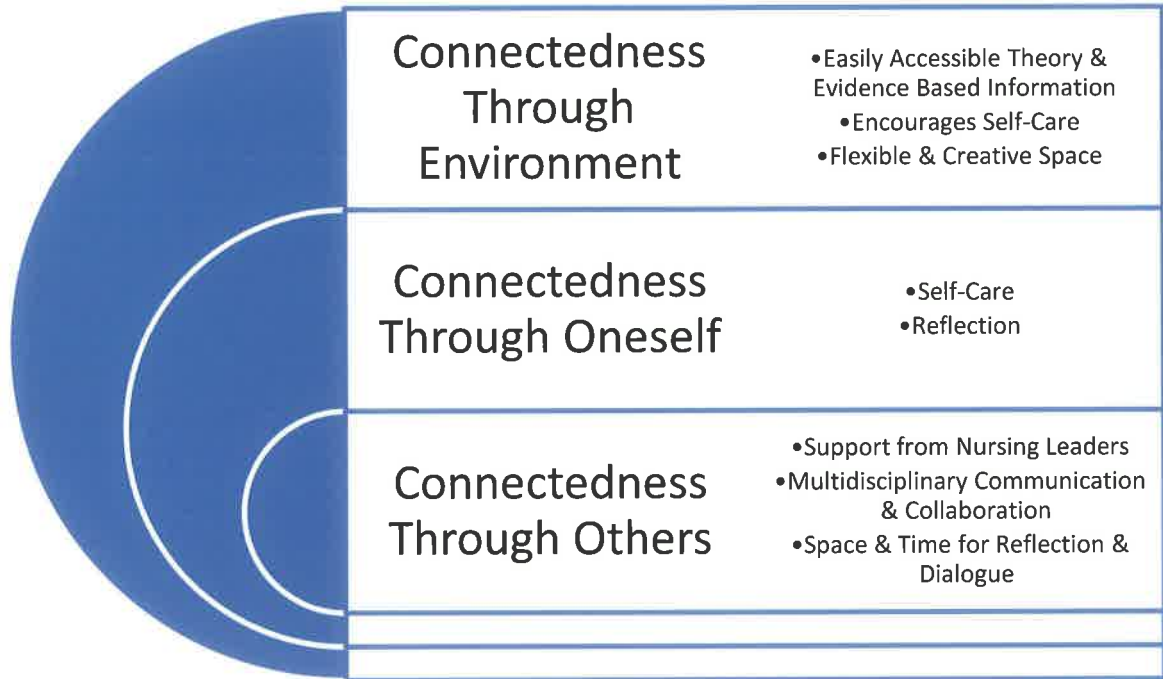
autonomously within a nurse's scope of practice. A seasoned nurse spoke of a previous experience of floating to an unfamiliar unit, where this nurse felt upset and unsupported from leadership (personal communication April 27, 2016). This experience produced uncertainty as the nurse was unfamiliar with the unit, patient population, and computer system. Based on the nurses' personal experience, this nurse seeks to create an open, welcoming team-based environment so others will be less uncertain when working on the AMIU. A newer nurse to the unit spoke of an experience where she was unsure of an outcome and felt overwhelmed due to a multiple patient assignment, and expressed that she was going from one critical situation to another (personal communication, April 26, 2016). However, during this overwhelming time, this nurse felt support from other nurses on the unit. This nurse stated receiving support through task-oriented assistance, humor, and being able to step away for a much-needed break to release emotion and refocus (personal communication, April 26, 2016).

Phase Two- Development of Conversation Guide and Conceptual Model

The purpose of gaining feedback from the nurses on the AMIU was to assist in the creation of the conversation guide in Appendix A and a nurse-specific, theory-based conceptual model that provides tools for coping with feelings of uncertainty in practice as depicted in Figure 3.1. Based on the initial intentional, semi-structured conversations, a conceptual conversation guide to further engage conversation and pattern recognition was created (see Appendix A). A nurse, acting as the interactive guide, will facilitate discussion by asking the questions. The questions on the conversation guide begin as open-ended to allow for the participant to guide the conversation (Newman, 1990, 1994). Questions are focused on the topic of uncertainty and meaningful events related to

uncertainty in nursing practice. The interactive guide may prompt the participant in conversation if the participant is in need of direction. The interactive guide may ask clarifying questions or share insights of the unfolding pattern for further reflection with the participant. The purpose of the conversations is to uncover meaning and pattern with the participant coming to expanded consciousness as it relates to uncertainty in nursing practice. Transformation and action occur when meaning in the new pattern is found (Newman, 1990).

The nurse-specific, theory-based conceptual model (see Figure 3.1) is intended to promote a practice environment on the AMIU that fosters collaboration by encouraging nurses to engage in activities that connect them to the work environment, themselves, and to each other. By engaging in these activities, it is anticipated that the fear and negative experience of uncertainty in practice will be shifted to a practice that fosters high-level coping of uncertainty through reflection and relationship. Newman's Theory of HEC (2008) and the literature guided the development of the model. According to Newman (2008) in order to achieve health, recognize pattern, and expand consciousness, one must seek connectedness to the environment, oneself, and others. The model (See Figure 3.1) consists of three interconnected circles all converging to meet in the middle. Where the three circles interconnect, health and coping with uncertainty is achieved. Coping mechanisms have been identified in the three circles or categories of environment, self, and others.

Figure 3.1: Conceptual Model for Coping with Uncertainty in Practice

The first circle depicted in Figure 3.1 is identifying coping tools to create connectedness through the environment. Creating and supporting an environment that provides time for reflection, self-care, and creativity is essential for coping with uncertainty in practice. Implementing a practice that utilizes simple rules and theory to guide practice will allow for an environment that encourages flexibility and creativity (Coakley & Coakley, 2005; Flanagan, 2005; Rowe & Hogarth, 2005). The environment must encourage time for reflection and questioning, both in practice for patient-nurse interaction and personally for an individual nurse. Nursing leaders on the unit will need to support nurses seeking theory and evidenced-based information to guide decision-making and increase knowledge in practice. Information should be easily accessible as

nurses often experience time constraints in daily practice (Cranley et al., 2012; French, 2006).

The second circle in the conceptual model is creating connectedness with self (see Figure 3.1). Coping tools for creating a connection with oneself include prioritizing self-care, both personally and professionally. An additional finding from Flanagan's (2005) study was having support from a team leader for nurses to take time during the work day for self-care. Self-care could include time, either individually or in a group, for reflection, therapeutic touch or other stress-reducing techniques. A team leader on the unit will be identified for this project. This team leader will commit to supporting nurses experiencing uncertainty during a work shift to implement coping tools. A custom of reflection, through journaling, meditation, or other means, should be incorporated into a nurse's practice (Flanagan, 2005). Ongoing evaluation and repatterning is part of the life-long process of coping and expanding consciousness (Newman, 2008). A nurse should reflect on why they seek information in uncertain situations. Is this coming from a place of fear or desire to improve care and increase knowledge and understanding (Cranley et al., 2012)?

Creating connectedness with others is the third and final circle of the conceptual model (See Figure 3.1). Relationship is essential for health and sustaining changes in one's life (Newman, 2008). A supportive relationship with nursing leadership is essential for success with working through change and uncertainty. A unit that is strong in team mentality and multidisciplinary collaboration is essential for support and reassurance when one is facing an uncertain situation. Continued work with bedside rounding to improve communication between members of the healthcare team (physicians, nurse,

consultants, therapy) and the patient is important to reduce uncertainty with communication regarding the plan of care (Leykum et al., 2014). An opportunity to engage in dialogue to express meaning is essential to building connections and coming to learn one's pattern (Coakley & Coakley, 2005).

In future development of the project, an overview of the theoretical concepts and the conceptual model, will be presented at a staff meeting. All nurses attending the staff meeting will be given a questionnaire to be completed by the end of the staff meeting (see Appendix B). The questionnaire will provide a baseline understanding of how uncertainty is felt and experienced on the unit. The questionnaire will also assist in identifying nurses interested in participating in the project, which corresponds with Newman's (1990) first step towards understanding pattern of expanding consciousness which is "establishing the mutuality of the process of inquiry" (Newman, 1990, p. 40).

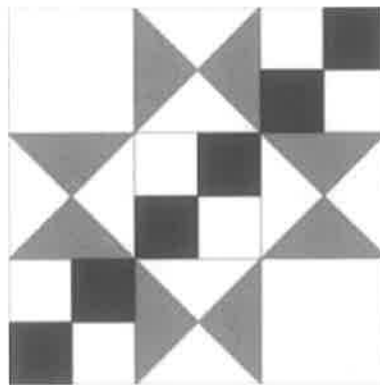
Continued discussion of the project with nursing leadership will occur and will include a review of the background literature supporting the project, significance to nursing practice, and proposed plans for implementation. Approval from leadership will continue to be sought, as well as IRB approval, if needed. Primarily, it will be imperative to secure approval for the allocation of dedicated time for the project leader to fully implement the project on the AMIU.

Metaphor

A metaphor can be a powerful and creative approach to express meaning, through visualization and description that is grounded in reality (Froggatt, 1998; & Sharoff, 2013). Hardy (2012) suggested that active listening and the use of metaphor may be a way for healthcare workers and patients to share in the experience of uncertainty. A

metaphor is often useful as a way to gain insight and in this project, a metaphor will be used to gain insight into a nurse's experience of uncertainty in practice (Froggatt, 1998; Hayles, 1999). The metaphor for this project is entitled "Creating Pattern Amidst Complexity and Uncertainty" and will provide a visualization and description of the complex nature of uncertainty in nursing practice. Four images have been chosen to reflect this metaphor. These images demonstrate the experience of nursing practice from a linear perspective, practicing in chaos, coping with uncertainty and creating one's own pattern, and finally, coping and achieving health through relationship.

Figure 3.2: Traditional Quilting: Linear Perspective



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Traditionally, quilting was and is an exact science and craft (Figure 3.2). Each seam in a quilt block must be precise with the seams not even off 1/8 of an inch (Gordon & Hanson, 2009). Quilters were expected to follow a pattern created by someone else. Quilters repeatedly made the same block, repeating the same pattern over and over until enough blocks were made to achieve the desired size of the quilt. Creativity came from an individual's choice in fabric, but the quilter followed the prescribed instructions for completing the pattern, from cutting, sewing, and piecing together the block. Quilts were

made to serve a purpose, whether to provide warmth and comfort on a bed or to provide decoration in a parlor.

A traditional quilting craft, represented in Figure 3.2, represents nursing practice from a linear perspective where creativity is stifled or compartmentalized, and the overall goal is to follow strict rules that adhere to a predisposed pattern. In this linear perspective, nursing is not viewed as a complex practice, but is viewed as task-focused and rule oriented where nurses have set rules and policies to follow for practicing and providing care for patients.

Figure 3.3: Chaos in quilting: Experiencing Uncertainty

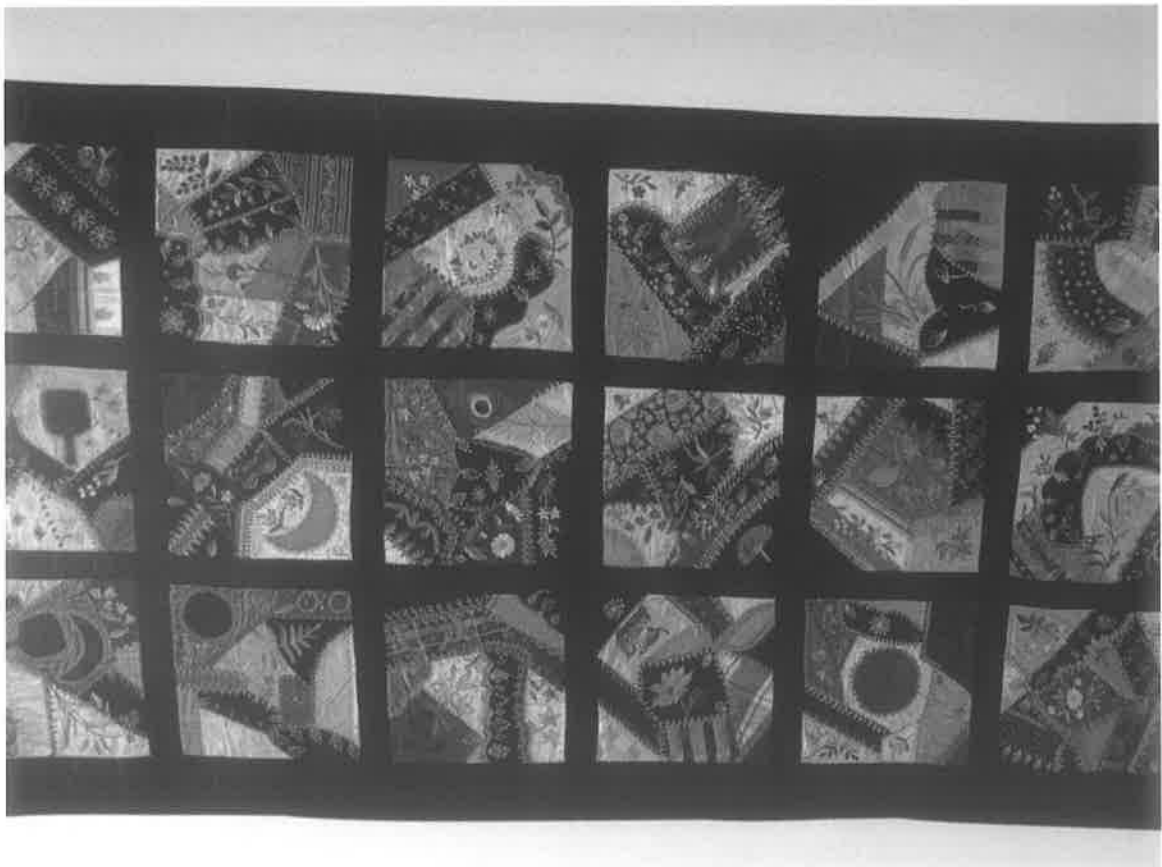


http://1.bp.blogspot.com/--m8t5YX4wg/VmcU21jZ_AI/AAAAAAAAAIo/m_X2S3MHAY/s1600/table--disorganized.jpg

An image of a nurse experiencing uncertainty in practice may look like a quilter surrounded by scraps of fabric of all different shapes, sizes, and design, unsure of how to proceed. Moreover, the nurse may feel unsure of how to proceed in the midst of chaos. This feeling of uncertainty is represented in Figure 3.3 by an image of a crafting table covered with items needed for a quilting project. Items for the quilting project include piles of fabric, rulers, books, and scissors as seen in Figure 3.3. A nurse carries the essential tools for nursing practice consisting of past experience and knowledge, but may

not know how to proceed in the midst of uncertainty and chaos of being pulled in multiple directions to coordinate and meet multiple patient needs. A quilter will rely on past sewing experience and will seek information for basic knowledge to begin forming a quilt block. A nurse will need to rely on experience, knowledge, and utilize coping tools to turn the period of uncertainty from a fearful experience into a creative experience for meeting patient needs.

Figure 3.4: Crazy quilt: Pattern in Chaos (Brick, 2008, p. 50)



Crazy quilts are composed of fabrics of all different styles, textures, and sizes which are then pieced, appliqued, or embroidered together to form a block (Brick, 2008). At first glance, the crazy quilt (Figure 3.4) may just seem like random pieces of fabric put together to form a block and may be described as busy or chaotic (Gordon & Hanson,

2009). A crazy quilt as depicted in Figure 3.4, provides a picture for creating a pattern while practicing in the complex healthcare system. Nursing practice, like “quilt style has not been static but has been richly dynamic as various influences were encountered, interpreted, and incorporated” (Gordon & Hanson, 2009, p. 175). In a complex view of healthcare, the whole is valued more than the parts and only a few rules exist to guide for completion of the work and creating of the organization, allowing room for creativity and individuality (Rowe & Hogarth, 2005). A nurse practicing on a busy patient care unit may first view nursing care as moving from one task to another, attempting to meet multiple patient needs all at once and coordinating multiple pieces of information simultaneously. One must study the quilt and the intricate pattern to make sense of its components and to understand the whole. Once a nurse has taken the time to develop relationships through reflection and dialogue, a pattern emerges to make sense of all the pieces and a new view is achieved, to incorporate the individual pattern into the whole.

Similar to a crazy quilt, “chaos describes ‘a reality that is variable and irregular, exhibiting patterns that never repeat them-selves yet stay within bounded parameters’ (Vicenzi, 1994)” (Barker, 1996, p. 238). Figure 3.4 provides a depiction for practicing in chaos. Figure 3 shows a crazy quilt top consisting of multiple blocks that have set parameters but within each block the pattern formed is unique and irregular, with no two blocks alike. This creative process may bring feelings of uncertainty as one embarks to creating something new with only simple rules to guide the process (Murphy, 1998). Nurses and quilters must be able to envision the outcome and not get inundated with details, but instead through relationship, commitment, and investment in the process, creatively find their way to completing the final product and one’s own pattern.

There is order in a crazy quilt as blocks are lined up to form the quilt as depicted in Figure 3.4. The quilter takes the time to arrange each piece individually to create the pattern, which results in each block being individual and unique (Breneman, 2001). The quilter takes the time to step back and evaluate the creation and pattern and modifies the pattern as necessary until the quilter comes to a point where the quilter is happy with the result and ready to move on to the next step.

According to Newman (2008), to recognize an individual's pattern, one must begin by reflecting on and articulating meaning in one's life. A quilter brings personal meaning into the creation of a crazy quilt. A quilter takes the time to explore the many choices from selecting the fabric, cutting the fabric, and laying out the pieces to form a pattern. This is representative of the nursing process of assessment and decision-making where a nurse explores and assesses the options for treatment and upon reflection and dialogue with the care team, including the physician and patient, makes a mutual decision for intervention. The fabric pieces may represent meaningful moments of the past or in one's life. The fabric pieces may come from a relative or represent a moment in life such as a baptism, early childhood, or a wedding (Gordon & Hanson, 2009). The fabric pieces in the block may also bring explicit meaning from fussy cut fabric, fabric that is cut to display and depict meaningful pictures, or a saying embroidered onto the fabric (Figure 3.4). A nurse, to expand consciousness, starts the process of pattern recognition by reflecting on what is meaningful in his or her practice (Newman, 2008). Reflection and dialogue may include pieces and stories from the past that have shaped a nurse's experience.

Figure 3.5: Quilting Circles: Relationship and Expanded Consciousness

http://4.bp.blogspot.com/R62WlJWXRE4/UWLvhfQ8lJl/AAAAAAAAAFN4/DKNGmhWf_DY/s1600/quilting_bee+vintage.jpg

Historically, the process of completing a quilt was not done by one person alone. Often, almost exclusively, women would gather at different stages of the quilting process to guide and assist each other. Women would seek the advice of others from the beginning stages of pattern and fabric selection to the final stages of hand quilting the layers of the quilt together. Quilting circles, as depicted in Figure 3.5, was often a time for women to share their lives, experiences, and knowledge of quilting. Quilters hold to basic principles of sewing or pattern making to complete a quilt while allowing for ample space for new pattern and creativity to emerge.

To create individual patterns, nurses must have a supportive and caring network (Murphy, 1998). A nurse cannot cope with uncertainty or create meaning in his or her pattern without the assistance or guidance of others (see Figure 3.5). Guidance in nursing occurs throughout a nurse's career. Guidance in hospital nursing practice begins with new

graduate nurses mentored by experienced nurses during orientation. Nurses assist each other in practice throughout their careers by asking questions to seek information.

In the creation of a quilt, one may bring in the fabric of the past, use what they have on hand, or purchase new fabric to complete the blocks for the quilt. Nursing practice has similarities to this process. Nurses bring experiences from the past to guide decisions in current practice. Nurses are inherently creative and resourceful, using what they have on hand to provide care for patients. Nurses also seek out new information to make informed decisions related to care and health.

Just as a quilt top, batting, and the backing are held together with thread to achieve the final product, health, ultimately expanded consciousness, is achieved through connectedness with the environment, oneself, and others (Newman, 2008). Murphy (1998) stated that the fabric of nursing is held together through the heart and mind. Once a nurse recognizes and articulates his or her pattern, then a nurse can join with other nurses to create a caring and supportive environment. The creation of a crazy quilt is an achievement to be proud of as the creator has put much thought and effort into completing. In nursing practice, the development of one's individual pattern is through the hard work of integrating knowledge, reflection, and relationship and results in achieving a new view of health, in which a nurse may practice with creativity and freedom in caring, not fear and uncertainty. In nursing practice, and with a quilt, the sum is greater than its parts (Murphy, 1998; Newman, 2008).

Chapter Three has described the process and development of the project. The feeling of uncertainty as described by nurses on the AMIU has been explored and a conceptual conversation guide (see Appendix A) was created for further use in semi-

structured conversations. The conceptual conversation guide was created as a tool to assist in exploring meaning and pattern as it relates to how a nurse experiences uncertainty in practice. A conceptual model (see Figure 3.1) for nurses and nurse leaders has been created that is intended to guide future implementation of the project. Chapter Three has additionally presented a quilting metaphor, “Creating Pattern Amidst Complexity and Uncertainty” to aid in gaining insight into a nurses’ experience of uncertainty in practice. The metaphor explored and depicted the experience of nursing practice from a linear perspective, practicing in chaos, coping with uncertainty, and creating one’s individual pattern, and finally, achieving confidence and competence through connectedness, pattern recognition, and expanded consciousness. Chapter Four will describe a method of evaluating the project and reflect on the process of the development of the project.

Chapter Four: Evaluation and Reflection

Evaluation of the project and personal reflection about the process of developing the project are essential for growth and advancement of nursing practice. Chapter Four will describe a method of evaluating the project and reflect on the process of developing the project from a personal perspective.

Evaluation of the Project

Evaluation of the project is essential for the success and sustainment of the project. Evaluation will occur in written form via questionnaires and verbally through discussions occurring in focus groups. A questionnaire will be administered before implementation of the project to nurses on the AMIU (See Appendix B). Responses to the questionnaire will establish a baseline of information about the uncertainty experienced by the nurses in practice and determine the nurses' understanding of Newman's Theory of HEC (2008). An additional questionnaire will be administered three months, six months, and one year after project implementation (see Appendix C). Responses to these questionnaires will aid in determining the usefulness of the conceptual conversational guide and the nurses' understanding of theoretical concepts linked to the project.

The use of focus groups has gained in popularity since the 1980's (Happell, 2007). Focus groups can be beneficial by gathering several people at once to discuss a topic and provide an opportunity for relationship amongst members of the group. Flanagan (2005) found that individual support was essential for sustained change in practice and personal reflection. Focus groups provide an opportunity for participants to share experiences (Morrison-Beedy, Cote-Arsenault, & Feinstein, 2001). Nurses are

natural facilitators of focus groups as nurses already possess skills in therapeutic communication, and nurses are accustomed to gathering data in his or her nursing practice.

For this project, focus groups, or facilitated time with a nurse or a group of nurses, will meet on a monthly basis to discuss uncertainty in practice. The formation of the focus groups is guided by Newman's Theory of HEC (2008) as dialogue is the main tool or process that leads to pattern recognition and expanded consciousness. The facilitator will foster this process and assist nurses in recognizing uncertainty experienced in practice and identify patterns that foster coping to increase confidence in practice. The facilitator will utilize the conceptual conversation guide (Appendix A) to guide discussions. The purpose of the conversations is to uncover meaning and pattern with the participant coming to expanded consciousness as it relates to uncertainty in nursing practice (Newman, 1994, 2008). Discussions will focus on identifying areas leading to uncertainty in a nurses' practice, reflecting on how these experiences made the nurses feel and exploring ways to change the nurses' pattern from a fear of uncertainty to a pattern of coping with uncertainty in nursing practice.

Evaluation of the success of the interventions will occur six months and one year into the project. Nurses, on the AMIU, participating in the project will give feedback via questionnaire or verbally through discussions in the focus group. Success will be identified when the nurse is able to recognize the feeling of uncertainty in his or her individual practice. Success will be achieved when a nurse is able to incorporate coping tools to positively impact uncertainty in practice and verbalize patterns of action that increase in his or her confidence when encountering an uncertain situation.

Reflection

New insights and understandings have emerged through reflecting on the background, significance, and literature related to this project. One piece of new knowledge is that uncertainty is similar to but different than many other feelings nurses experience in practice. This learning is supported in the literature by nurses describing other feelings related to an uncertain encounter such as anxiety, fear, and ambiguity (Cranley et al., 2012; Vaismoradi et al., 2011). An additional learning is that uncertainty is not an experience that can be removed from today's nursing practice, but can be adapted into practice in ways that result in positive outcomes for both nurses and patients.

Margaret Newman's Theory of HEC (2008) has guided this project and study of the theory has resulted in inspiration and new insights. Inspiration throughout the development of this project came from previous work that successfully integrated Newman's theory into practice (Flanagan, 2005). Inspiration additionally came from learning from others who found satisfaction and renewed inspiration in practice when implementing concepts of Newman's Theory of HEC into nursing practice (Coakley & Coakley, 2005; Newman, 2008). An insight of Newman's Theory of HEC (2008) is that health and nursing practice is to be viewed as holistic, where one embraces chaos and times of uncertainty into one's view or pattern of practice. An additional insight is that the process of pattern recognition and expanding consciousness is a lifelong process that one cannot achieve without the guidance and support of others. There is much value in nurses taking the role as an interactive guide (Morrison-Beedy, Cote-Arsenault, & Feinstein, 2001; Newman, 2005, 2008). The process of nurses working with an interactive guide to recognize one's pattern and eventually expand one's consciousness,

is difficult to integrate into the fast-paced complex healthcare environment, but is a valuable format for addressing uncertainty.

Additional insights include recognizing that uncertainty and practicing in a complex environment is not something to fear, but with an intentional approach, nurses can come to experience freedom from negative implications from uncertainty. The process of identifying pattern is complex, but freedom is found once negative implications no longer hinder the process and a higher level of consciousness, or health, is realized. This is not an instantaneous process, but one that is sometimes slow to develop, and which needs guidance from others to embrace the change of integrating uncertainty and complexity into practice.

Reflection also uncovered limitations in the development of the project in regards to time. The initial informal semi-structured conversations occurring during a work shift were limited in time, approximately 20 minutes in length. Unfortunately, these conversations were frequently interrupted due to the nature of the unit and nurses working during a shift. This structure and environment did not allow for follow-up or in-depth conversations. Due to the conversations occurring during a work shift, time for post-conversation reflection was delayed until after the completion of the work shift.

When this project is implemented fully, it will be important to schedule periods of uninterrupted time for the semi-structured conversations. It is recommended that focus group sessions last 1 ½ to 2 hours to allow for more in-depth conversations (Burrows & Kendall, 1997; Morrison-Beedy, Cote-Arsenault, & Feinstein, 2001). Burrows & Kendall (1997) recommended that the facilitator, or interactive guide, be prepared with open-ended questions and through active listening and summarizing keep the group focused on

the question or topic at hand. Prepared questions (see Appendix A) should move from initially seeking general information to gathering more specific in-depth information (Morrison-Beedy, Cote-Arsenault, & Feinstein, 2001).

Chapter Four has described the proposed evaluation process for the project. Evaluation will occur through pre and post questionnaires to provide a comparison of nurses' understanding and experience of uncertainty and theory at the beginning of the project and upon the completion of the project. Semi-structured conversation with an interactive guide will occur in the form of focus groups. The purpose of this time will be to uncover pattern recognition and for nurses to take action to increase confidence in practice. Success of the project will occur when a nurse can identify areas of uncertainty in practice and verbalize confidence when encountering an uncertain situation. Key insights and limitations of the project were described through reflection on the development of the project. Chapter Five will describe proposed steps for further development of the project and will explain implications of the project for advancing nursing practice.

Chapter Five: Implications and Plans for Future

A foundation for the project was established through exploration of background, significance, and literature focused on uncertainty in nursing practice. The process of creating and implementing the project was described through two phases of implementation. Chapter Five will describe proposed next steps for further development of the project. This chapter will additionally explain the potential implications of the proposed project for advancing nursing practice and nursing leadership.

Next Steps

There are many steps for future development of the project. Development of focus groups, with a theory-based emphasis, will need to occur for full implementation of the project. Expansion of the project can occur when theory based coping tools are individualized for different nursing units or the needs of individual nurses. The project will begin by implementing action to alleviate low-level uncertainty, such as making evidence-based information easily accessible for nurses. Further development will integrate action for high-level uncertainty and will begin to integrate relationships and pattern recognition to reduce or cope with uncertainty experienced in nursing practice.

There is room for future research related to this project. Research could focus on defining the feeling of uncertainty related specifically to nursing practice. There is room for further exploration of direct effects of uncertainty related to the healthcare system, patients, and interdisciplinary team. An area for a future research study could integrate complexity thinking or theory into nursing practice and study the effects of uncertainty experienced in nursing practice. Correlating emotional intelligence with recognizing and responding to uncertainty in practice is another topic for research expansion.

Implications

The implications for advancing nursing practice are substantial. The literature has revealed that uncertainty in nursing practice has many negative repercussions, such as burnout and job dissatisfaction (Vaid et al., 2013). Other negative repercussions include lack of self-esteem and overreliance on others for decision-making and direction in practice. High job dissatisfaction results in increased turnover of nursing staff, which in turn results in a huge cost to healthcare institutions. Lack of confidence in practice and decision-making may result in increased medical errors and lack of trusted relationships between nurses, patients, and providers (Dinc & Gastmans, 2012).

Conversely, when uncertainty is dealt with in a healthy manner, this positively impacts nursing practice, job retention, patient safety, and patient and nursing satisfaction (Stilos et al., 2007; Vaid et al., 2013). Nurses integrating concepts from Newman's Theory of HEC (2008) have expressed increased satisfaction and renewed inspiration in practice. When nurses recognize uncertainty and have supportive ways of coping with uncertainty, nurses find increased freedom, creativity, and confidence to allow for more opportunity for connection with others (Flanagan, 2005; Rowe & Hogarth, 2005). There is an opportunity to embed self-care and time for reflection in current nursing practice. Integrating self-care and reflective practices will advance nursing practice by allowing time to question current practices, think critically, and expand knowledge (French, 2006). The field of nursing can grow beyond task uncertainty into utilizing uncertainty to advance nursing knowledge and understanding. While there is a valid and much-needed place for unit or nursing specific policies or protocols, this may also stifle growth in the nursing field by relying too much on conformity and rules often placed by upper nursing

leadership. Through integrating Newman's (2008) view of health as expanding consciousness into practice, nursing practice will expand by not focusing on intervention to result in a cure or absence of disease, but to instead focus on relationship, including patient-nurse, nurse-nurse, and nurse-provider. Integrating this view of HEC will additionally influence practice into returning to the essence of nursing, which is caring, for self, others and the environment.

The feeling of uncertainty is universal and nurses experience this feeling in many facets of nursing practice. Uncertainty in nursing practice occurs from conflicting expectations from institutional leadership, the fast-paced, task-oriented nature of the healthcare system, and lack of confidence in decision-making (Rowe & Hogarth, 2005; Vaid et al., 2013). Response to uncertainty in nursing practice varies with the individual. Newman's Theory of HEC (2008) has guided the development of this project through the concepts of health, pattern, and expanding consciousness. The concepts of uncertainty, health, pattern, and expanding consciousness as they relate to nursing practice were explored through the literature. The literature uncovered sources of uncertainty experienced in nursing practice and revealed the gaps in literature as it pertains to understanding the feeling and effects of uncertainty experienced by nurses and nurse leaders in practice (Coakley & Coakley, 2005; Cranley et al., 2009; Cranley et al., 2012; Scott et al., 2008; Vaismoradi et al., 2011). Development of a practice project was described through two phases of implementation. Additionally, a quilting metaphor was presented to provide a descriptive visualization of nurses' experiences of uncertainty in practice and navigating in the complex healthcare environment. Additional development of the project and research is necessary for further understanding of uncertainty

experienced specifically in nursing practice and the potential positive and negative impact uncertainty has in practice. Ultimately, the success of the project for nursing practice will be when a nurse can verbalize increased satisfaction and confidence when encountering an uncertain situation. The success of the project will also include integration of Newman's Theory of HEC (2008) into nursing practice, emphasizing caring and relationships with self, others, and the environment.

In today's complex healthcare environment, one cannot remain stagnant. Nurses possess the knowledge, skills, and team mentality to practice safely. Nurses have the opportunity to advance practice through increase use of nursing theory to guide practice and increased understanding of uncertainty from a personal and professional level (Newman, 2008). Through the use of coping tools, one may reflect on uncertainty in nursing practice, identify an individual pattern, and adapt practice to promote positive outcomes through increased awareness of self, increased opportunity for relationships, and increased nursing knowledge for advancing practice.

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Appendix

Appendix A: Conceptual Conversation Guide

1. Please tell me about a significant time of uncertainty experienced in your nursing practice.
2. Prompt from Interactive Guide (if needed). Tell me about a time that you were unsure of your decision-making in practice. Tell me about a time that you felt confident in your nursing practice.
3. What feelings did you experience during this time of uncertainty?
4. What action did you take to cope with this experience of uncertainty? (Prompt (if needed)- information seeking, reflection, dialogue with others)
5. What hinders you from changing negative feelings of uncertainty in practice? (Prompts (if needed)- lack of time or interest, lack of useful information, lack of support from others)
6. What would confidence or patterning uncertainty into practice look like?

Appendix B: Pre- Project Questionnaire

(2 page)

1. Do you experience uncertainty in your nursing practice?
 - Yes
 - No

2. In what areas of practice do you experience uncertainty?
 - a. Tasks
 - b. Relationships
 - c. Critical thinking
 - d. Knowledge
 - e. Other. (Please list)

3. Can uncertainty in practice be changed or modified?
 - Yes
 - No
 - Unsure

4. Please describe a time that you felt uncertain or were questioning your decision-making. What feelings did you experience in this situation?

5. Please describe a time that you felt confident with change or an uncertain situation. How do you embrace change in practice?

6. What actions have you taken to cope with uncertainty in practice?
 - a. Asking questions or opinions of others
 - b. Seeking information (Internet Search, Research Articles)
 - c. Referring to Hospital/ Unit policies/procedures
 - d. Personal reflection
 - e. Gaining more practical experience
 - f. Other. (Please list)
7. What hinders you from taking action to cope with uncertainty?
 - a. Time
 - b. Support from leadership or others
 - c. No easy access to information
 - d. Other (Please list)
8. What do you know about Margaret Newman's nursing Theory of Health as Expanded Consciousness?

Appendix C: Post Project Questionnaire

1. Do you experience uncertainty in your nursing practice?
 Yes
 No

2. What do you know about Margaret Newman's nursing Theory of Health as Expanded Consciousness?

3. What actions have you taken to cope with uncertainty in practice?
 - a. Asking questions or opinions of others
 - b. Seeking information (Internet Search, Research Articles)
 - c. Referring to Hospital/ Unit policies/procedures
 - d. Personal reflection
 - e. Gaining more practical experience
 - f. Other. (Please list)

4. Please describe a helpful discussion or action taken as a result of the focus group.

5. How has your view of uncertainty changed throughout this process?

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