New Graduate Nurses' Experiences of Transition During Orientation into Critical Care

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NEW GRADUATE NURSES’ EXPERIENCES OF TRANSITION DURING ORIENTATION INTO CRITICAL CARE

by

Mari St Clair

A Dissertation Submitted in
Partial Fulfillment of the
Requirements for the Degree of

Doctor of Philosophy in Nursing

at
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ABSTRACT

NEW GRADUATE NURSES’ EXPERIENCES OF TRANSITION DURING ORIENTATION INTO CRITICAL CARE

by

Mari St Clair

The University of Wisconsin – Milwaukee, 2013
Under the Supervision of Professor Karen Morin

The concept of new graduate nurses working in critical care for some healthcare systems remains a fairly new concept. Often new graduate nurses begin their orientation in critical care with minimal to no critical care experience. Orientation for the new graduate nurses can be challenging as for years new graduate nurses were not allowed to work in critical care until they had a minimum of one year of nursing experience. Currently new graduate nurses beginning employment in critical care are faced with revisiting basic nursing and learning critical care nursing at the same time. In order for critical care units to provide orientation programs that are sensitive to the needs of new graduate nurses, it is important to know what they experience as they transition from student nurse to staff nurse during orientation into critical care.

Using qualitative methods, a convenience sample of 10 new graduate nurses hired to work in critical care were recruited and interviewed during the first two weeks of their orientation into critical care and again a few weeks after they started to care for critical care patients independently. Audio recordings of the interviews were transcribed and validated for accuracy. Interpretive analysis of the transcripts sought to identify major patterns and themes. Two stages with four themes emerged from the data analysis. In the first stage, titled The Beginning, new graduate nurses experienced feeling anxious and overwhelmed, became fearful of making a
mistake that could harm a patient, experienced the “light bulb went on”, followed by a time of learning and learning some more. The second stage, “Moving On”, new graduate nurses moved toward caring for critical care patients independently. Although they started feeling anxious, they acknowledged their resources should they need help, and they were confident in their ability to care for two stable critical care patients independently.

New graduate nurse experienced moving through two emergent stages as they transitioned from student nurse to staff nurse in critical care, similar to what others found. However, the emotional experiences highlighted in this study are new and add a new dimension to understanding their experiences. As sample size became an issue during the study, findings and conclusions are considered preliminary.
Dedication

I have thought about this dedication for a very long time. Attaining this degree and writing this dissertation was for reasons that will forever stay with me. Throughout this journey there are many people to thank and people to whom I dedicate this dissertation.

First I would like to thank Dr Karen Morin who agreed to be my major professor. Dr Morin has been very patient working with someone who has a different writing style. I feel very lucky to have worked with Dr Morin: when I would leave her office she always made me feel that I could accomplish anything. I will miss our conversations about nursing and healthcare. To me, Dr Morin has been my teacher, my mentor and my friend. I will never be able to thank her for everything she has taught me and has done for me.

The remaining professors on my panel Dr Jane Leske, Dr Regina Smith, Dr Julie Darmody, and Dr Jennifer Doerring, you have all contributed to my learning, my maturation as a researcher, my ability to look beyond what is in front of me and for helping me reach my aspiration. Thank you to each of you. Your suggestions and your contributions helped to make my work the best it can be.

I would like to dedicate this work to the members of my family. To my daughter Kristyn, I hope she sees that you can learn and attain your dreams no matter how old you are, and that education is priceless. Her love and support has always been there for me. I thank her for understanding why our home looked like the house of a hoarder with books, papers, folders etc on every table. I love you my baby girl!

I dedicate this to my husband Ken. This man has rarely had a home cooked meal since I started this journey. Ken has always been there when I felt like I could not rewrite a chapter one
more time. He always knows when to listen and always knows what to say. His encouragement kept me going. He attended many a social gathering without me as my time went to work and school. No matter what, his support never wavered. Ken is a wonderful husband, father and friend. I envy the person he is. I love you Ken!

Finally, I dedicate this dissertation to my sister Kris. She inspired me to go back to school for advanced practice nursing. She would always listen when I felt overwhelmed. She is a nurse I can only hope to emulate. Most of all Kris, you have always watched out for me and you have always been there for me. I love you.

These are eight people who taught me, mentored me, supported me, gave to me, put me first, and were committed to me and my work, all because I had a vision and a dream to attain my PhD. This journey has allowed me to see how amazing these people are, how much I mean to them, and how blessed I am!
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Chapter One

Introduction

The Health Resources and Services Administration (2007) projects a nursing shortage of one million nurses in the United States (U.S.) by 2020. The U.S. is in the midst of a nursing shortage that is expected to intensify as baby boomers age and the need for health care grows. Compounding the problem is the struggle nursing colleges and universities across the nation are having expanding enrollment levels to meet the demand for nursing care (Winfield, Melo, & Myrick, 2009). Over the next twenty years, the average age of the Registered Nurse (RN) will increase and the size of the workforce will plateau as large numbers of RNs retire. Because the demand for RNs is expected to increase during this time, a large and prolonged shortage of nurses is expected in the U.S. in the latter half of the next decade (Delaney, 2003).

More patients and fewer nurses working in hospitals is very concerning for the future of healthcare. Hospitals are having difficulty finding experienced nurses to work in specialty patient care areas such as the emergency room, labor and delivery, surgery and critical care (Delaney, 2003). In an effort to address the shortage of nurses experienced on a daily basis in U.S. acute care hospitals, neophyte nurses are being recruited for and hired to practice in highly specialized patient care units, including critical care. Newly graduated nurses often experience culture shock when transitioning from the academic ideal of nursing to the clinical reality of nursing practice (Valdez, 2008). Rapid immersion into the modern-day acute care work environment and feelings of inadequacy lead many new graduates to feel overwhelmed, unsupported and disillusioned (Valdez, 2008). Known stressors that accompany entry into practice, coupled with the high-stress,
fast paced, life and death environment of critical care, place the new graduate nurse at increased risk for failure to thrive in clinical practice (Valdez, 2008). With new graduate nurses now being employed in critical care, (a new practice in nursing at the time this study was initiated), educators in critical care units are challenged to create and provide these new graduate nurses with meaningful and successful orientation programs. When designing such programs it is helpful to know what the new graduate nurse brings to critical care and what he or she will have to learn in order to become a competent, safe, and skillful critical care nurse.

The purpose of this chapter is to describe the problem that generated an investigation of the process new graduate nurses experience as they transition from student nurse to staff nurse during their orientation program in critical care, to describe the research question for this study and to describe the significance of this knowledge to practice, research, theory and policy.

**Statement of the Problem**

Patients in critical care are of much higher acuity than patients on a medical/surgical unit (Rush, 2012). A nurse working in critical care must possess sophisticated expertise in nursing care as well as knowledge of the critical care patient. In the past new graduate nurses who wanted to work in critical care were told to work on a medical/surgical unit for a minimum of one year in order to refine their nursing knowledge. After that one year, the new nurse could then apply for a position in critical care. Today with new graduate nurses starting their career in critical care, they must begin to apply basic nursing while learning critical care nursing (Santucci, 2004). In order to be a critical care nurse, a nurse must possess proficient assessment skills,
knowledge of emergent interventions, the ability to quickly and accurately problem solve, possess sound decision-making skills and a comprehensive knowledge of diagnoses and hemodynamic monitoring (Santucci, 2004). Overall it is estimated that it takes a new graduate nurse twelve to eighteen months to feel competent in their practice in critical care (Schloesser & Waldo, 2006).

Working in critical care can be very challenging for the new graduate nurse. Because the employing agency cannot assume that every new graduate nurse attended a nursing program that exposed their student nurses to critical care nursing, it is important to acknowledge that new graduate nurses in critical care have limited knowledge. Caution must be exercised so that no assumptions are made when creating and/or updating orientation programs.

Orientation programs in critical care that once were appropriate for experienced nurses must now be redesigned to meet the needs of the new graduate nurse. As orientation programs are reviewed and created for the new graduate nurse in critical care, it is important that they be developed based on an understanding of the new graduate nurses’ learning needs and developmental processes (Woodfine, 2011). As a new graduate nurse embarks on his or her professional career, it is crucial for him or her to find an environment and culture that will be committed to his or her professional development (Thomason, 2006).

While direct hiring of new graduate nurses into critical care, as well as concern for their transition, is relatively new, the transition experience of new graduate nurses in medical/surgical units is well documented. The majority of writings about transition into medical/ surgical patient care areas describe challenges associated with this transition
process (Winfield, Melo & Myrick, 2009). Some of the challenges are physical and emotional exhaustion, a sense of inadequacy and frustration with what they don’t know, a realization that an instructor will no longer be with them, wonder and apprehension about whether they know enough to be successful in their nursing practice, and the realization they lack organizational skills and fear when having to contact a physician (Schloesser & Waldo, 2006; Reddish & Kaplan, 2007; Chestnutt & Everhart, 2005; Casey, 2004).

In 2008, Duchscher conducted a grounded theory study on a medical/surgical unit to identify and describe the process of transition for the new graduate nurse as he or she moves from new graduate nurse to staff nurse. She identified three stages that new graduate nurses experience as they move through the transition. The stages are titled “Doing”, “Being”, and “Knowing”. Respectively, the new graduate nurse moves on a continuum from tremendous intensity as he or she discovers and learns about patient care, to a period of rapid advancement in thinking and competency, to finally achieving a separateness that distinguishes his or her nursing practice as being his or her own. From this study it is evident that the new graduate nurse works through a process as he or she transitions from student nurse to staff nurse on a medical/surgical patient care unit.

Another study on the transition process experienced by new graduate nurses on medical/surgical units was completed by Washington in 2011. In this study, Washington describes new graduate nurses as being “challenged” to successfully transition from student nurse to staff nurse. The stress involved in the transition can manifest as “performance anxiety”. Washington defined performance anxiety as being fearful of observation and evaluation and of interacting with others. Currently there is urgency by health care institutions for new graduate transition to occur as soon as possible after being
hired. The purpose of Washington’s study was to verify the presence and identify the level of performance anxiety in a sample of 34 new graduate nurses working on a medical/surgical unit. All of the new graduate nurses experienced a significant level of performance anxiety during their orientation. The new graduate nurses described fear of making a mistake, interacting with physicians, and caring for complex patients as examples of what increases their anxiety on the nursing unit. However, their level of anxiety did diminish greatly as the new graduate nurse moved toward completion of their orientation. Washington (2011) did note that, although minimizing the new graduate nurse’s anxiety is desirable, a certain amount of anxiety is an effective coping mechanism and can positively stimulate learning.

The most recent literature on new graduate nurses in critical care includes a study by Chestnutt and Everhardt (2007) in which they assessed a critical care orientation program at the University of Colorado Hospital in Denver, Colorado. They investigated whether the orientation needs of new graduate nurses were being met and if nurses were adequately prepared to care for critical care patients. They found that the current orientation program was not meeting the needs of new graduate nurses so they developed a new orientation program that was six months long and contained five different stages within the orientation. In each stage patients with certain diagnoses were cared for by new graduate nurses, specific competencies were completed and specific classroom education was provided. The five stages allowed for specific tracking of the progress of the new graduate nurse and the new graduate nurses themselves described feeling prepared to care for critical care patients by the end of the orientation.
Other literature on new graduate nurses in critical care identified when new graduate nurses were considered competent in critical care (Reddish & Kaplan, 2007), the relationships between new graduate nurses’ educational preparation, clinical experience, self-reported preparedness to work in critical care (Halcomb, Salamonson, Raymond, & Knox, 2011), and the identification of various critical care orientation practices across the United States (Thomeson, 2006). Although a review of current research on new graduate nurses in critical care provides important information, no published research was found that examined the transition process experienced by these new graduate nurses. Knowing that this transition process exists for new graduate nurses on medical/surgical units, it is not unreasonable to think that a similar process exists for new graduate nurses in critical care and should be investigated.

Data obtained from such a study could eventually be compared to what is known about new graduate nurses on medical/surgical units. Having insight into a transition process experienced by new graduate nurses in critical care could contribute to developing orientation programs that are sensitive and fit into the development of these new staff nurses in this high acuity patient care area.

In summary, having new graduate nurses in critical care exposed to meaningful and comprehensive orientation programs is considered vital to their success. In order to provide such an orientation program, it is important that we know and understand what these new graduate nurses experience as they transition from student nurse to staff nurse in critical care during orientation. We know that new graduate nurses on a medical/surgical unit go through a process of transition that is described as having specific thoughts, actions, and learning as they change from student nurse to staff nurse.
(Duchscher, 2008). It is therefore reasonable to explore if such a transition exists for the new graduate nurse in critical care. Knowing and understanding such a process provides us with knowledge that can be used to meet the needs and promote success for these new graduate nurses in this high acuity patient care unit.

**Purpose**

The purpose of this research was to address the identified gaps in the literature related to new graduate nurses working in critical care. This research sought to identify the process new graduate nurses in critical care experience as they transition from student nurse to staff nurse during orientation. Finally it was critical that the right method of research be chosen for this study. Such a research method had to be able to identify and define a process that describes the experience of the new graduate nurse as they transition from student nurse to staff nurse in critical care, hence the use of grounded theory.

**Definition of Terms**

In this qualitative study, the definitions of specific terms are provided:

**Transition** – any event or nonevent that results in changed relationships, routines, assumptions and roles (Goodman, Schlossberg & Anderson, 2006).

**Process** – a series of events or actions that occur over time and involve change; the process has a beginning and an end, with a sequence of events or actions in the middle (Lofland et al, 2006).

**Safe Practitioner** – one who practices a profession such as nursing, who is reliable and keeps patients free from harm or risk (McKinnley, 2008)
Research Question

The research question for this study was: What is the process new graduate nurses experience as they transition from student nurse to staff nurse during orientation in critical care?

Theoretical Perspectives

When seeking to identify the process new graduate nurses experience as they transition from student nurse to staff nurse in critical care, two theoretical perspectives are particularly relevant: Symbolic Interaction /Grounded Theory (Griffin, 1997) and Patricia Benner’s Novice to Expert Theory (1984).

Symbolic Interaction/Grounded Theory

American philosopher George Herbert Mead introduced symbolic interactionism to American sociology in the 1920’s. Symbolic Interactionism is a social theory that focuses on the analysis of the patterns of communication, interpretation and adjustment between individuals (Mead, 1920). The theory is a framework for understanding how individuals interact with each other and within society through the meanings of symbols. The term “symbolic” refers to a basic premise that humans live in a world of objects that do not have intrinsic meanings. Instead, the meanings of objects arise out of the interpretation that people assign to them during the course of everyday social interactions (Blumer, 1969). People make sense out of their world using symbols that convey the meanings of different objects and these meanings in turn influence people.

Symbolic Interactionism explores how people define reality and how their beliefs are related to their actions. Reality is created by people through attaching meaning to situations. Meaning is expressed by symbols such as words, religious objects, clothing
The meanings of objects arise out of the interpretation that people assign to them during the course of everyday social interactions. Peoples’ meanings come from an interpretive process and are a result of how they interpret their surroundings, topics, symbols, or an experience they had and how they make sense of the social roles.

Wanting to know what new graduate nurses in critical care experience as they transition from student nurse to staff nurse can be obtained by interacting and asking questions of those going through that transition process. There are no other true, direct and meaningful data than that obtained from the participants themselves.

Glaser, in his 1992 writing, explicitly states that people actively shape the world they live in through the process of symbolic interaction and that life is characterized by variability, complexity, change and process. These assumptions by the founder of grounded theory suggest that symbolic interaction is indeed the underpinning of grounded theory (Glaser, 1992). By focusing on what is going on in particular social contexts, symbolic interaction allows for the identification of social, emotional or cognitive change as it emerges.

Grounded Theory was developed initially by Glaser and Strauss (1978) as a means to enable the systematic discovery of theory from the data of social research. Essentially grounded theory methodology incorporates a system of analytic steps that endeavour to generate sociological theory (Jones, 2011). Simple descriptions of events or situations are replaced by theoretical conceptualization. Concentrating on the interactional processes at work within the social world from the perspective of the participants themselves, grounded theory begins with the identification of a potential research question and involves simultaneous data collection and several phases of analysis. The ultimate aim of
grounded theory is the identification of core categories achieved by the grouping and integration of coded concepts under a single cover term. These core categories are used to explain the properties of the social processes under study.

Grounded theory is used to describe a process. In this study the research question asks what do new graduate nurses in critical care experience as they transition from student nurse to staff nurse during their orientation. As these new graduate nurses begin and move through this transition process, we learn what they experience, how they interpret symbols, interactions, learning, experiences and reality by interviewing them at various times throughout their orientation. Transcribing the interviews, analyzing, reading and finally identifying “like” situations/interpretations, the researcher is able to identify what takes place during the process and a theory can be identified that describes that process. The final theory derived from the data describes what the participants experienced during the process encountered, what they worked through, what happened at one point, changed at another point, and a description of where the participants are and what they have and do at the end of a specific process (Walls, Parahoo, & Fleming, 2010).

Patricia Benner’s Novice to Expert Theory

Another theoretical perspective used to underpin this descriptive qualitative study was the Novice to Expert Theory by Patricia Benner (1984) derived by means of interpretive phenomenology. Benner’s theory is the result of years of observing and interviewing nurses from the time they graduated from nursing school and throughout their nursing practice. Benner herself interviewed nurses for over twenty years in order to learn the “meanings” they gave to things such as care of patients, patient and family
relationships, collaboration with other nurses and physicians, orientation to their place of work and patient and family interventions through the use of symbolic interactionism. She also evaluated how nurses gained experience and the “meanings” they gave to those experiences. Benner (1984) introduced the concept that nurses develop from experience and described and defined the behaviors and the development of a nurse across a continuum of “novice to expert”. According to Benner, the transition from novice to expert occurs as a result of experiential learning in clinical practice. In her seminal publication; From Novice to Expert: Excellence and Power in Clinical Nursing Practice (1984), Benner described a body of practical knowledge embedded in nursing practice, utilizing the Dreyfus Model of Skill Acquisition applied to the nursing profession.

According to Benner, the nurse moves along a continuum as she or he learns and gain experience. Every nurse moves along this continuum at his or her own pace and he or she move from one identified level to the next, depending upon experiences they encounter, how much they learn, and how competent they become within their profession. Each area has its own description of behaviors, clinical knowledge, and ability to work with patients and families.

Benner described the process of clinical judgment and skill development at five levels of proficiency: novice, advanced beginner, competent, proficient and expert. Each is discussed briefly in the following paragraphs.

Novices in nursing are beginners with no prior experience in the nursing practice where they are expected to perform. During this phase of skill acquisition, the learner has negligible contextual understanding of the theories and concepts they are being taught. To guide clinical practice and patient care experiences, the novice learns measurable
nursing “rules and procedures.” A lack of situational context with which to correlate rule
application limits the novice nurse and generally results in an inflexible, universal
approach to clinical practice. The novice nurse is very task oriented. If she or he is told to
get a blood pressure on their patient, remove the peripheral IV line and perform a
dressing change on the abdominal incision, the novice nurse can complete each of those
tasks. However, if she or his patient becomes confused and delirious, the novice nurse is
not able to connect delirium to specific medications, lack of sleep etc. This level of
proficiency is frequently seen in the pre licensure nursing student, although even an
experienced nurse entering a new specialty role may function at this proficiency level.
New graduate nurses enter the acute care setting with some contextual understanding of
the rules and procedures of clinical nursing; however, often these nurses have no
sufficient exposure to the emergency or critical setting to practice beyond the novice
level.

The advanced beginner has been exposed to patient situations of sufficient variety
and complexity to progress to a marginally acceptable level of performance. Patient
situations may have been direct patient care or exposure through mentoring in the clinical
setting. The rules and procedures of nursing practice are no longer context free for the
advanced beginner. At this stage of experiential learning, the nurse is beginning to see the
whole clinical picture and is able, with assistance, to recognize unique aspects or
characteristics of individual patient situations. Nurses at this level of skill acquisition
frequently are asked to function independently- often without a sense of comfort or
confidence- in the acute care setting. During this phase of the experiential learning
process, nurses need support and mentoring by experienced nurses who have reached at least the competent level of skill and performance.

Competent nurses have a broader perspective; they are able to see nursing actions in terms of long range patient care goals. During this phase of skill acquisition, the nurse plans care based on identified priorities rather than providing stimulus-response-based interventions. According to Benner (1984), the competent nurse lacks the speed and flexibility of the proficient nurse; however, at this level of aptitude, the nurse is able to cope with and manage many of the more challenging contingencies of clinical nursing practice. Although there is no established time frame that can be applied to these phases of skill acquisition, the competent nurse generally has two to three years of experience in the clinical setting (Benner, 1984).

At the proficient level, the nurse effectively perceives the entirety of the clinical situation. Rather than responding to aspects of patient care, this level of clinician usually is guided by substantial practical experience, an understanding of the key principals of nursing and basic human needs. The proficient nurse has an experienced based ability to recognize nuances in clinical situations and can identify when the expected normal picture does not occur. A holistic understanding of clinical situations provides the proficient nurse with the ability to make clinical decisions without the need to consult learned rules or procedural guides. The proficient nurse typically has three to five years of experience in a given clinical setting.

The expert practitioner does not rely on analytic principle such as rules, guidelines or maxims to connect his or her understanding of a patient situation to the appropriate nursing action. This is not to say that the nurse does not utilize skilled analytical abilities
when necessary. However, the expert is a highly experienced and skilled nurse who, based on significant experiential learning, possesses an intuitive grasp of clinical situations. This nurse performs in the clinical setting with certainty, fluidity, and flexibility. The expert nurse operates from a deep understanding of the total situation, which allows for rapid identification and response to individual patient situations. Not all nurses will become experts, and there is no time frame in which a nurse generally reaches this level of skilled performance. According to the theory becoming an expert requires that a person’s knowledge moves along two dimensions: from explicit to implicit and from abstract to concrete.

Benner’s work lays the foundation for understanding nursing expertise and skill acquisition. Since the Novice to Expert introduction (1984), Benner looked at the critical care nurse to see if the novice to expert theory continues to hold its own in an environment like critical care and found the Novice to Expert Theory continues to be applicable in critical care nursing (Benner, 1996). Benner’s theory appears to coincide with the learning and the progression of new graduate nurses transitioning from student to staff nurse in critical care. The knowledge of the developmental stages of a nurse provides nursing units with the understanding that these new graduate nurses come to them with little to no experience of critical care and allows a critical care unit to design and provide orientation programs that must start at the very basic of skill and cognitive ability, and move toward the development and acquisition of critical thinking and proficient practice.

Benner’s work is coherent, well written, and most importantly, strong and theoretically grounded (Cash, 2005). The attraction of Benner’s work is that she moved
the emphasis away from strictly skill performance to the cognitive development of the clinical practitioner and their clinical practice. However, Benner’s work is not without criticism. Altmann (2007) reviewed the seminal work of Patricia Benner and concluded that her theory is more of a philosophy than a theory. Altmann (2007) defines a philosophy as the study of the principles underlying conduct, thought and the nature of nursing practice. Benner’s ideas are based on the difference between practical and theoretical knowledge (Cash, 1995). Benner’s theory provides important insights on the complex interaction between nursing theory and practice (Cader, 2005).

The new graduate nurse in critical care learns basic nursing and critical care nursing at the same time. With so much to learn as a novice nurse, Benner might agree that the new graduate nurse in critical care remains in the novice phase much longer than the new graduate nurse on a medical/surgical unit. Once the new graduate nurse in critical care learns the foundations of basic and critical care nursing, this nurse may then move from novice to the advanced beginner phase quickly. Advancing from advanced beginner to competent might also take place rather quickly for the new nurse in critical care. The general expectation at the end of orientation is that the nurse can care for two stable critical care patients plus be able to identify when a patient requires emergent interventions. It is clear; the new graduate nurse in critical care develops a practice that is very different and much more complex than the practice of a nurse on a medical/surgical unit.

Benner’s Novice to Expert theory evolved from the experiential theory of Dreyfus and Dreyfus (Benner, 1984). The experiential theory says that a person with a lot of experience has an awareness of a greater number of options for intervention when
problem solving a situation on the topic of which they have experienced in the past. A novice nurse will not have the number of options for intervention like the nurse with 10 years of experience. The more experience a nurse has, the more they can relate to when dealing with a symptomatic patient. Benner might see that the critical care nurse has different thoughts and ideas toward a patient than what a nurse on a medical/surgical unit can offer. We all have different experiences and according to Benner, the more experience the nurse attains the further they move along the novice to expert continuum.

Both Symbolic Interaction (Mead, 1920), with grounded theory methodology and Benner’s Novice to Expert Theory (Benner, 1984) allow us to see the nursing experience begins at a very basic level. When a new graduate nurse is the participant in a study, that nurse is at the most basic level within nursing. When that novice nurse experiences any transition (change) process, an understanding of the abilities of the new graduate nurse is necessary in order to identify and/or understand any change that occurs over time. Symbolic interaction allows us to identify the meanings of symbols, interactions, communication and behavior related to the new graduate nurse. Grounded theory provides us with the mechanism by which there is interpretation of data and allows for the identification of a social process that evolves into a theory that is grounded in the data. Benner shows us how every nurse starts as a novice nurse who is very task oriented, but over time as the nurse learns from experience, the more skilled they become within their practice. These theories are helpful when trying to identify the process a new graduate nurse experiences as he or she transitions from student nurse to staff nurse in critical care during orientation.
Significance

Knowing the process new graduate nurses experience in critical care as they transition from student nurse to staff nurse will provide clarity about the new nurse experience in critical care and could enhance the contribution of the new graduate nurse in a critical care setting. Relevance of the study is presented for four areas.

Nursing Practice

The findings from this study could provide significant information to the profession of nursing that can be used on many levels to promote success, motivate learning and contribute to the provision of quality patient care. Knowing new graduate nurses’ experience (thoughts, feelings, behaviors, frustrations etc) as they transition from student nurse to staff nurse would provide relevant and timely information to design orientation programs that are sensitive to the new graduate nurse experience and that could ultimately alleviate stress, support learning and enhance recruitment and retention. The information may help to prepare preceptors to be more sensitive to new graduate nurses and to be proactive with interactions between themselves and new graduate nurses in order to diminish unnecessary anxiety and worry. The information from this study could also contribute to nursing practice that impacts quality and patient safety. Overall, the development of a theory that describes the new graduate nurses' transition from student nurse to staff nurse in critical care would provide nursing with a sound theory grounded in the reality of the data that can be used to advance nursing practice.

Research

The theory generated could be tested in various critical care units as well as in other specialized patient care units such as labor and delivery, surgery and the emergency
department; where these areas, like critical care, are for the first time, hiring new
graduate nurses. Developing such a theory can contribute to increasing the effort to
generate practice-based theories that are relevant, testable, and derived from data. The
theory from this study could provide a new level of awareness of the new graduate nurse
in critical care which in turn could initiate additional research and provide direction for
interventions designed to enhance their integration into practice.

Policy

Findings from this study could provide beginning data for identification of
interventions to be included in policies related to the new graduate nurses. For example,
many institutions have a “graduate nurse policy”. Such a policy explains the scope of the
new graduate nurse’s practice during orientation to the nursing unit they work on post
orientation. By presenting the components of the transition process experienced by new
graduate nurses in critical care in such a policy, critical care units can pattern orientation
programs to address the key processes experienced by new graduate nurses during
orientation into critical care. The facility can also share the theory with academic liaisons
and with accredited agencies in order to present a theoretical framework that can be
reviewed, discussed and addressed prior to graduation from nursing school. The
information obtained from this study can also contribute to the designing of new graduate
nurse critical care orientation programs within nursing for new nurses coming to work in
critical care. Knowing and understanding what takes place during this transition process
can allow hospital and critical care units to address these issues and include them in
policies related to new orientation that will be part of all orientation programs.
Education

A theory of transition could be used as a guide to clinical educators, unit managers, and hospital administrators who are recruiting, orienting, mentoring and seeking to successfully integrate new graduate nurses into their workplace. Educational classes for new graduate nurses in critical care should include teaching new graduate nurses that the system is aware of this transition and that the transition fits within the orientation of these new nurses. Nursing programs will be able to know that such a transition takes place for new graduate nurses in critical care and can include this information into their classroom lecture and clinical in order to prepare new graduate nurses with what is to come. By doing that, new graduate nurses will know to expect the transition process and it may be less stressful when they encounter it. Colleges and universities also need to address these transitions with the overall goal of alleviating anxiety and letting these new nurses know they will be entering an orientation program where it is not expected that they know everything, but that knowledge and experience comes over time.

Chapter Summary

For a very long time new graduate nurses were not allowed to work in critical care. With today’s nursing shortage, hospitals needing to fill positions, are now hiring new graduate nurses directly into these specialized patient care areas. From the literature, we know that new graduate nurses on medical/surgical units move through a transition as they change from student nurse to staff nurse. The literature describes specific areas within critical care orientation that are important to the new graduate nurse, however, it is most significant that critical care units know what these new nurses experience as they transition from student nurse to staff nurse. Orientation programs in critical care that were
once created for experienced nurses, must now be meaningful and sensitive to the needs of today’s new graduate nurses. What occurs during this transition from student nurse to staff nurse in critical care provides us with information that can be used to address the needs of the new graduate nurse, to lessen anxiety, motivate learning, and guide them on the path to success as a critical care nurse.

For this study two theories are used to guide the study of nurses transitioning from student nurse to staff nurse in critical care. Grounded theory methodology using the theory of Symbolic Interaction (giving meaning to symbols, interactions, actions and behavior), provided the process by which data were elicited from the new graduate nurses during their transition in critical care. Equally relevant is the work of Patricia Benner (1984) who placed expertise development on a continuum from novice to expert. Benner (1984) brought the Novice to Expert nursing theory to the nursing world. This theory states that as a nurse learns and gains experience, they move along a continuum that holds various stages of clinical knowledge, caring and collaboration, decision making abilities, the building of trusting relationships and more. The stages are Novice Nurse, Advanced Beginner, Competent, Proficient, and finally Expert nurse.

The problem to be examined, as well as the theories providing direction for this study, has been described in this chapter. The research question, along with definitions, have been offered. Additional information will be provided in Chapter Two.
Chapter 2

Introduction

New graduate nurses working in critical care is a fairly new concept within nursing (Halcomb, Salamonson, Raymond, & Knox, 2011). Investigators have provided many studies trying to describe what new graduate nurses need and experience as they begin their career in critical care (Valdez, 2008; Casey, 2004; Reddish & Kaplan, 2007). To successfully incorporate new graduate nurses working in critical care, it is important that we understand the process by which they transition from student nurse to staff nurse, and appreciate how that process unfolds during orientation. Only then may new nurses be provided with an orientation program that is sensitive to their needs and that will promote success. In order to provide such a program we must learn everything we can about the new graduate nurse in critical care thus appreciating how they learn, what is important to them, what they need, and specifically what is the process they experience as they transition from student nurse to critical care staff nurse during orientation?

The purpose of this chapter is to discuss and critique the current literature/research on new graduate nurses in medical/surgical units, new graduate nurses in critical care, and current literature on nurses “transitioning” from student nurse to staff nurse on general patient care units and in critical care. That information could be used to improve orientation programs, and enhance retention of new graduate nurses in critical care. Key words that were used for the literature review included: critical care, new graduate nurse, orientation, intensive care, studies, graduate nurse, orientee, symbolic interaction, grounded theory, transitioning, Meleis, retention, Patricia Benner, Glaser, Strauss,
Novice to Expert, nursing, nursing student, hospitals, nurse residency programs, internships and patient care. Searches were specific to the years 2002 – 2012 unless there was specific information from a person, study or theory from years prior to the year 2002. Databases used were Medline, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Ovid, Ovid Full Text, and Google.

**New Graduate Nurses**

A review of the literature revealed a variety of topics that have been investigated and/or addressed when looking at the experiences of new graduate nurses on medical/surgical units and new graduate nurses in critical care. The following topics have been discussed in the literature: What student nurses experience as they transition to professional nurse (Casey et al, 2004), the transition of new graduate nurses on a medical/surgical unit (Duchscher, 2008), new graduate nurses ‘experiences in their first year of practice (Parker, Giles, Lantry, & McMillan, 2012), the impact of nurse residency program on new graduate nurses (Olsen-Sitka, Wendler, & Forbes, 2012), performance anxiety in new graduate nurses (Washington, 2012), intensive care orientation programs (Thomason, 2006), meeting the needs of graduate nurses in critical care (Chestnutt &Everhart, 2007), determining when new graduate nurses are competent in the intensive care (Reddish & Kaplan, 2007), graduate nurses in the intensive care unit: an orientation model (Proulk&Bourcier, 2008), and graduate nursing students perceived level of preparedness for working in critical care (Halcomb, Salamonson, Raymond, & Knox, 2011).

Casey et al. (2004) used a descriptive, comparative design and survey questionnaire methods to study graduate nurse experiences in six institutions during timed data periods
in the first year of transition into nursing practice. The intent of the study was to identify the stresses and challenges experienced by new graduate nurses working in 6 Denver acute care hospitals. A survey (now known as the Casey-Fink Graduate Nurse Experience Survey) was developed, piloted, and revised to measure the new graduate nurses’ experiences at the beginning, at three months, six months and twelve months of their nursing practice. The graduate nurses were surveyed to determine if there were similarities or differences in demographic profiles, skills or procedures they found difficult to perform, level of comfort and confidence in their new role, organizational support and differences in self-reported job satisfaction. The convenience sample of 270 nurses was drawn from six acute care hospitals in the Denver area. Participants were recruited by asking all new graduate nurses at each facility to voluntarily complete a survey. A site coordinator was identified from the staff development office at each facility to manage study procedures. Data were collected using confidential procedures to assure anonymity of participants.

Participants were asked a series of open-ended questions that permitted the new graduate nurses to give voice to their personal experiences. In response to the question, what difficulties if any did you experience during the transition from the “student role” to the “RN role”? participants reported the following as the most difficult to work through: 1) lack of confidence in skill performance, 2) relationships with peers and preceptors, 3) struggle with being dependent on others yet wanting to be independent, 4) frustration with the work environment, 5) difficulties mastering organization and prioritization skills, and 6) communicating with physicians. These topics were what the new graduate nurse encountered and what he or she struggled with while in orientation. A key finding was
that each participant perceived that it took at least twelve months in practice before they felt comfortable and confident. Another key finding was how important the role of the preceptor was to graduate nurses.

One strength of the study was that a variety of nurses from multiple locations/sites comprised the sample, which gave the investigator a diverse sample. A methodological limitation in this study was keeping track of the participants within six hospitals. The investigators noted a decreased response rate and attrition over time, which affected the validity of future results after the initial participants. The investigator concluded there are various topics that should be addressed during orientation so new graduate nurses can learn how to work through these difficult areas, making their transition from student nurse to staff nurse a positive experience. Even though the researchers discussed the “transition” from student nurse to staff nurse, the questions, answers and timetable of a new graduate nurse were treated very general in nature. There was no definition or specific note of what was meant by “transition”, nor was there any reference to when certain things occurred during the time referred to as the “transition”.

Duchscher (2008), employing grounded theory methodology, set out to identify what new graduate nurses in medical/surgical units experienced as they transitioned from student nurse to staff nurse during orientation. The study took approximately eighteen months. There were fourteen participants in the study. Each new graduate nurse came from the same four-year baccalaureate undergraduate nursing program. Data collection strategies included a demographic survey at the start of the research, and six interviews at one, three, six, nine, twelve and eighteen months. There were pre-interview questionnaires, the completion of a process-revealing exercise (letter writing and drawing pictures),
monthly journals and on-going email communication with all participants during the 18 months. Duchscher found that these new graduate nurses go through a transition that includes three stages: Doing, Being, and Knowing.

Doing is the initial part of the transition. This stage was marked by tremendous intensity, range and fluctuation of emotions as new graduate nurses work through the processes of discovery, learning, performing, concealing, adjusting and accommodation. The majority of new graduate nurses enter their professional orientation with expectations and anticipations that are more idealistic than realistic and experience “reality shock” (Kramer, 1974).

Being is the part of the transition that was marked by consistent and rapid assessment in thinking, knowledge and skill competency. The start of this stage was delicate for the new graduate nurse as the desire to hold on and let go are equally as strong.

Knowing is the final time in orientation. It focused on achieving a separateness that distinguishes them from the established practitioners around them and permits them to unite with the large community of professionals. By this time the new graduate nurse continues to need experience but has a relatively stable level of comfort in their role. This study was the first of its kind to look at what new graduate nurses experience when they transition from student nurse to staff nurse on medical/surgical units.

This was a very well thought-out study that obtained data from the participants in a number of ways. Interviewing the participants, reading their journals, having them complete drawing and writing exercises, and staying in contact with them via email were all methods by which the investigator could examine their thoughts, ideas and concerns
of what they were experiencing throughout the orientation process. It allowed the investigator to see if a participant’s interpretations, issues, thoughts, concerns, and ideas were consistent, if and when they changed and what triggered any change (positive or negative) throughout the transition process. It gave the participants many different venues by which they could communicate what they were experiencing. These findings served as the impetus for the current study triggering the research question: What do new graduate nurses experience in critical care as they transition from student nurse to staff nurse during orientation?

Parker, Giles, Lantry, and McMillan (2011) explored new graduate nurses’ experiences in their first year of practice in order to identify factors that impact new graduate nurses’ transition into nursing, their satisfaction with their career choice and the likelihood of retention. The nature of new graduate nurses’ experiences in their first year of employment has been shown to have a significant impact on their future career directions. It is well reported that these experiences can be stressful and unsatisfying (Madjar et al., 1997; Chang & Handcock, 2003; Beecroft et al., 2007; Wilson et al., 2008; Spence Laschinger et al., 2010). A mixed method cross-sectional design was used combining quantitative and qualitative approaches. The study took place in Australia and participants were drawn from the cohort of newly graduated nurses in 2008. The new graduate nurses were invited to participate in a survey via postal mail and email. Data were also gathered by focus groups. The survey was developed from a review of the literature including questions related to demographics, current employment, prior nursing experience, the nature of transition into the workforce, career aspirations, employment intentions, confidence in practice, job experience and job satisfaction. To assess content
validity, the survey was reviewed by fifteen nursing clinicians and educators. A total of 282 new graduates, aged 21 to 54 responded to the online survey (response rate of 24%). Overall, respondents were satisfied with their recruitment process and support for professional development, but job satisfaction was rated lower.

Qualitative findings from focus groups and survey comments revealed a number of key factors affecting the experience of transition for new graduate nurses. These were: the nature of the workplace environment, the level and nature of support available to new graduate nurses, the new graduate’s propensity to learn and adapt to workplace cultures and accommodate their own expectations, the expectations of others, and to a lesser degree, the amount of prior experience. The investigators concluded that the factors that impact the experience of transitioning of new graduates to the workplace are complex and integral to challenges that confront nurses and health care generally. There are many reports of rewarding and enjoyable experiences where new graduate nurses were welcomed, encouraged and supported in their learning. This study did not focus on the specifics of what occurs during the transition period for new graduate nurses. Instead the study identified variables that would affect the transition of new graduate nurses.

Olson-Sitki, Wendler, and Forbes (2012) evaluated the impact a nurse residency program had on new graduate nurses. While nurse residency programs designed to support graduate nurses as they assume the professional role have become popular, evaluation of these programs has been inconsistent. This descriptive study evaluated a yearlong nurse residency program using a non-experimental, repeated measures design with qualitative questions. The purpose of the study was to determine the effect of a nurse
residency program on new nurse job satisfaction, on the overall new graduate nurse experience, and retention rates of new graduate nurses.

The residency program itself, different from a general orientation, consisted of three phases: new employee onboarding and central nursing orientation, unit based orientation, and the nurse residency program which was developed to supplement and extend the traditional orientation program for new graduate nurses.

There were 38 participants enrolled in the study. Each participant was given a data collection packet that contained the Casey-Fink Graduate Nurse Experience Survey (Casey & Fink, 2004) and an investigator-developed tool that asked specific questions related to residency programs. These were distributed to the participants at six months and again at twelve months. Once participants completed the questionnaires, they participated in an interview with the investigator of the study. Quantitative data analysis revealed nine responses on the Casey-Fink survey that were statistically significantly different at six months and twelve months. Communicating with physicians and patients and family members, knowing what to do for the dying patient, delegating, prioritizing patient care, being supported by other nurses on the unit, having opportunities to practice skills, managing time and feeling prepared all improved at the twelve month mark.

Participants were all highly engaged in the residency program. In examining the qualitative data, the researchers discovered that positive comments about the New Graduate Nurse Residency program far outweighed the negative comments. Nurse satisfaction remained high at both six months and twelve months, there was low turnover rate throughout, and nurses felt supported at both six and twelve months. A limitation identified by the investigator was that there was a 38% attrition rate of participation
between the six and twelve month data. This attrition rate raises questions about the generalizability of the findings. The investigators recommended implementation of residency programs to guide the growth and development of new graduate nurses. One problem noted across the United States is nurse residency programs are different from hospital system to hospital system so this same study performed with a different nurse residency program may not end with the same conclusions. It would be a reasonable goal to replicate this study with a larger sample and see if the same results are attained. If so, it would be advantageous to write up the criteria for what the investigator believes to be a successful nurse residency program.

Washington (2011) evaluated whether performance anxiety in new graduate nurses was real. Washington hypothesized that every new nursing graduate is challenged to successfully transition from student to professional nurse and that stress involved in the transition could manifest as performance anxiety. This study was conducted to identify the presence and level of performance anxiety in a sample of new graduate nurses.

Anxiety is an unexplainable, uncomfortable feeling that is cognitively stimulated in an individual by any real or perceived internal or external threat to personal security, the body, or the psychological self (Washington, 2011). When an individual has a fear of observation and evaluation and a fear of interacting with others, it is termed performance anxiety. For new graduate nurses and employers, safe, competent clinical performance is the major goal of transition to professional practice. According to Washington, anxiety about clinical performance is one reason that new graduates do not experience successful transitions to the workplace and profession. During orientation, constant observation and evaluations are necessary to determine progress. This observation, along with their
inexperience and insecurity, increases the new graduate nurse’s anxiety about performance. Thirty four new graduate nurses enrolled in the six month study.

The new graduate nurses completed both a demographic survey and the Clinical Experience Assessment Form (Kleehammer, Hart & Keck, 1990) as the measure of performance anxiety at the beginning and again at the end of the orientation program.

Results showed new graduate nurses had significantly less anxiety at the six month mark of working as a new nurse versus when they started their orientation. Knowing that new graduate nurses have a high level of performance anxiety when they start orientation, tells us that there is a need to work with the new graduate nurse to help them alleviate some of their anxiety and fear. Many times if new graduate nurses know it is normal for them to feel anxious and the preceptor is not going to allow them to be placed in any compromised situations, they calm down. A less anxious person is able to think clearly and learn. This is the only study found by the investigator that acknowledged the significance of anxiety.

Thomeson (2006) presented the results of a random survey sent to critical care units throughout the U.S. regarding orientation practices for newly hired RNs in critical care. Questions focused on customized critical care training of two types of nurses: newly licensed RNs, and RNs new to critical care. The survey tool consisted of 35 questions. Experts were asked to review the information in the survey ranging from demographics to methods of training new nurses, length of training, completion of orientation, preceptor training and post orientation resources and retention of new critical care nurses. Representation from twenty-four hospitals completed the survey. Of these, 87% of hospitals offered clinical and classroom education for the new graduate nurse in critical
care. The orientation programs in critical care averaged 12-26 weeks in length. All hospitals indicated the assessment of a successful orientation was measured by three elements: 1) the completion of the orientation competencies, 2) demonstration of knowledge, 3) assessment of the new nurse as a safe practitioner. The authors concluded that this was not really new information as these three components of a successful orientation are not specific to critical care and can relate to all successful orientation programs.

Chesnutt and Everhart (2007) assessed the orientation in the surgical intensive care unit (SICU) at the University of Colorado Hospital (UCH) in Denver. They sought to determine if the orientation needs of graduate nurses are being met and if the nurses are adequately prepared to care for the SICU patients. They found that their current orientation program needed improvement as it was the program used when only experienced nurses were allowed to work in critical care. They developed a detailed unit-specific staged orientation program to better prepare graduate nurses for critical care practice. The new “staged” orientation program took the 6 month orientation and divided it up into five defined stages. This division into stages permitted better tracking of each graduate nurse in the process and five specific times to evaluate the new graduate nurse’s progress. In each stage a specific type of patient was assigned to the new graduate nurse. The patient’s acuity and specific checklist matched the nurse’s skill and knowledge level. At each level there were competencies that need to get checked off by the new graduate nurse’s preceptor. They also created four didactic modules specifically developed as classroom adjuncts to the staged ICU orientation. Implementation of this new staged orientation program was evaluated by the graduate nurses and the preceptors. The
program was an overwhelming success. The graduate nurses described feeling confident about what they learned. They felt they learned a lot of pathophysiology, patient care, critical thinking, appropriate interventions and care specific to diagnoses. The preceptors shared that they could tell during the process that the graduate nurses were learning and understanding what was happening with the patients and they could see the graduate nurses’ interests grow and appropriate questions being verbalized. The preceptor stated they could not remember a time when they felt graduate nurses were more prepared after orientation.

This orientation program was created and designed to better prepare new graduate nurses for critical care practice. The new program was successful in preparing new graduate nurses better than they have ever been. The program also provided checkpoints to evaluate where the new graduate nurse was in the new orientation program. Were they learning the required skills, caring for the identified diagnoses required in orientation, and were they learning appropriate interventions for specific diagnoses. This new design of a critical care orientation built confidence in the new graduate nurse and prepared them for caring for critical care patients independently after orientation.

An orientation program like the one designed in this study is well thought out. The investigators did not go into detail as to how they determined their original orientation program needed to be changed. They did, however, obtain feedback from preceptors and new graduate nurses about what was needed and what would be significant to put into an orientation program in critical care. From experience they contributed ideas on what would make an orientation program meaningful. They reviewed the literature and created the new five stage orientation program. Having a well thought out orientation program
makes sure all of the needed components for a successful orientation are addressed, completed and evaluated. Nothing in this study focused on a specific transition process experienced by new graduate nurses.

Reddish and Kaplan (2007) conducted a study to identify when new graduate nurses can be considered competent in critical care. They used Benner’s (1984) novice to expert theoretical framework to define a nurse considered to be novice and a nurse considered to be competent. From there they set out to identify what the nurse experiences as they transform from novice nurse to competent nurse understanding that what would be found during this process of transformation would be critical to the appropriate design of training programs.

Over a ten year period, graduate nurses were oriented to critical care by Myra Reddish (author). Observations regarding graduate nurse skill set acquisition, progress through the orientation process and success at completing orientation were recorded by Reddish. From the observations Reddish created a new five stage process of progression to competency. To validate the authors’ observations, both preceptors and orientees were queried over 3 years using a questionnaire consisting of both yes/no questions, and open-ended question sets. While slightly different questionnaires were distributed to preceptors and preceptees, core questions were common to both. Eleven preceptors and thirteen preceptees were available and gave consent to participate in the study. All 24 individuals returned their questionnaires. The results supported the observations and conclusions of the author that a five stage process takes place from the time a novice nurse starts orientation until the time they are deemed a competent practitioner. The five stages are:
Stage One: The new nurse is overwhelmed by all of the details of patient care. By the end
of the first shift the new graduate nurse is wide-eyed and confused. Stage Two: The preceptee may suffer exhaustion while trying to manage their patients within the confines of unit guidelines and protocols. Stage Three: The preceptee starts to become more comfortable as they gain perspective of the “big picture”. The nurse can make mental connections between different aspects of care. Stage Four: There is a period of transition between the preceptor and the preceptee relationship. The preceptor now serves as a resource to the preceptee. The emphasis is placed on independent thinking. Stage Five: This stage represents a mixed blessing for the preceptor. It is at this stage that the comfort zone of a preceptor is withdrawn as orientation is successfully completed. The institution has deemed the new graduate nurse competent to practice critical care nursing.

The investigators of this study were familiar with the Benner (1984) novice to expert theory. Their research helped them to identify a five stage process of progression from what Benner describes as a novice nurse to what Benner describes as a competent nurse. The study identified greater detail of what occurs when according to Benner a novice nurse transitions to competent nurse. Once the new graduate nurse works through the 5 stages, they are then deemed competent and can then work independently in critical care.

Halcomb, Salamonson, Raymond and Knox (2011) examined the relationships between nursing students’ demographics, educational preparation and clinical experience and their self-reported preparedness for employment in critical care. The study was conducted in Australia using a cross-sectional survey design. The sample consisted of 357 nursing students in their final semester of their nursing programs. Participants were asked to rate, on a Five point Likert scale, their perceptions about the role of new
graduates in critical care areas, their confidence to practice in a critical care setting, and the impact a critical care subject and clinical placement had on their preparedness to seek employment in a critical care area. The nursing students were also asked to select, from a list, reasons for seeking or not seeking employment in critical care.

A total of 357 nursing students completed the survey, a response rate of 64%. Over half of the participants identified that they were interested in seeking employment in critical care as a new graduate, with 259 participants identifying that they would be interested in employment in critical care after gaining clinical experience as a registered nurse. There were three barriers identified by the nursing students to seeking employment in critical care. The barriers were: lack of knowledge to work in critical care, inadequate clinical skills for critical care, and being passionate about another clinical specialty. Nursing students did identify that they were interested in working in critical care because they perceived these areas offer varied and challenging work, opportunities for professional development, and the opportunity to work one on one with a patient. There were limitations in this study. One limitation was the participants were drawn from a single cohort of undergraduate students in one tertiary institution. Participants from a variety of nursing programs would have allowed for generalizability of the findings. Even though this study came from a single cohort, it does add to the body of literature on the preparedness of final year nursing students to work in critical care and the factors that impact upon career pathways of final year nursing students.

Proulx and Boucier (2008) worked to design an orientation model for new graduate nurses in critical care. This study is discussed in order to see what the authors thought were essential and not essential components of the orientation program for a new
graduate nurses in critical care. Their goal was to redesign their current orientation model to help new graduate nurses first become fluent with hands on technology and skills so their thought process could then be dedicated to higher level thinking. They wanted to put a process in place to ensure that each new graduate nurse was given the same information about basic care concepts so that the autonomy that critical care offers does not confuse the graduate nurses before they have developed their own critical thinking skills.

The current orientation program started with the new graduate nurse caring for one critical care patient. The preceptor taught them routines, organization skills, prioritization skills, how to care for a variety of diagnoses and more, however, it was not a program that ran smoothly. Frequently the preceptor might have to care for one patient themselves while precepting a new graduate nurse, the orientation program was dependent on what diagnoses were in the unit and frequently intense situations would arise before the new graduate nurse had any idea on how to care for such events.

The redesign of the orientation program allowed them to divide the orientation into three phases. Phase One starts with the new graduates’ first day on the unit. This phase was designed to outline a structured approach to patient care and to give standardized information on basic care to each graduate. In Phase Two, the goal was to have provided enough hands-on experience and structure in Phase One for the graduate nurse to now be able to care for one patient independently (under supervision). In phase Three, the graduate nurse should be ready to work the shifts he or she was hired for and to care for two patients under the supervision of their preceptors. An individualized orientation schedule of classroom and clinical hours was developed for each new graduate nurse by the unit educator, and a copy was posted on the preceptor assignment
board. Two calendar weeks are considered a single clinical week on the unit because of the two-day-a-week classroom schedule. The last day of the critical care course is dedicated to critical-thinking scenarios; mannequins and monitor simulators used to challenge the graduates with common clinical situations. Overall the redesign brought more structure to the orientation program. It became an orientation program where the same information was provided to each new graduate, technical skills were attained early in the program, the preceptor was dedicated to their new graduate nurse and the new nurses were beginning to demonstrate critical thinking skills by the end of the structured program. The new graduate nurses were asked to complete an evaluation of their orientation. Responses were all positive. The new graduate nurses described having confidence that they could care for stable critical care patients and if problems did arise, they knew the resources they could use for problem-solving.

Proulx and Boucier (2008) redesigned their orientation program in critical care. The new program was more structured and introduced concepts to new graduate nurses at planned intervals in order to prepare them for caring for critical care patients. This study was about restructure of the current orientation program. It is important to note the structure of this new orientation produced positive outcomes of orientee confidence and feeling prepared to work in critical care. The investigators never discussed any type of transition nor did they provide much information as to why the original orientation program needed revision.

**Summary**

A review of the literature revealed that the topic of new graduate nurses in critical care is of interest to many (Halcomb, Salamonson, Raymond, & Knox, 2011). Some studies
confirmed what we already know; that the new graduate nurses face reality when they
begin their first job (Proulx & Boucier, 2008). New graduate nurses realize there is so
much more to learn than what they experienced in school that new graduate nurses need
to work with a preceptor while they learn their new role, and an orientation program must
be meaningful, structured, and apply to the care they will provide to their patients.
Duchscher (2008) was the only investigator who identified what new graduate nurses
experience as they transition from student nurse to staff nurse on a medical/surgical unit.
That study provides hospital units, preceptors, orientees, nursing schools, and many more
with specific information about what new graduate nurses experience as they transition
from student nurse to staff nurse on medical/surgical units. The dynamic transition
experience for those new graduate nurses should inspire educational and service
institutions to provide preparatory education on transition as well as extended, sequential
and structured orientation programs that bridge senior nursing students’ expectations of
professional work life with the reality of employment.

Other studies evaluated redesigned orientation programs in critical care in an
try to meet the needs of new graduate nurses with the ultimate goal of new graduate
nurses feeling prepared to care for patients on their own after orientation. The remaining
studies reviewed when nurses are considered “competent” in their first year of practice,
new graduate nurses experiencing performance anxiety, and the impact nurse residency
programs have on the new graduate nurse. Currently in order to better prepare the new
graduate nurse, to promote their success, and to retain them within the organization,
many hospitals not only provide orientation but also provide a nurse residency or
internship program to provide the new graduate nurse with a smooth transition from school to the work world (Spector, 2010).

The review of the literature exposed well planned studies that are descriptive, examined factors that influence the experiences of a new graduate nurse, but did not reveal any studies that focused on the new graduate nurse’s perspective of what they experienced as they transitioned from student nurse to staff nurse. Investigators reported on what new graduate nurses’ face once they graduate from nursing school, and that there is a high possibility the new graduate nurse may experience new employment where the expectations are very different than what they prepared for in nursing school. These studies focused on areas the researchers thought to be significant for new graduate nurses and new graduate nurses in critical care. Some of the studies were qualitative and some were both qualitative and quantitative. All of the studies asked significant research questions and each study was well executed and provided information relevant to add to our knowledge of new graduate nurses and what new graduate nurses experience and need at the beginning of their nursing practice. There were some studies with small samples and some that were hospital specific which limited generalizability.

Transition

Given the focus of this study is on new graduate nurse experience as they transition from student nurse to staff nurse in critical care during orientation, an overview of how transition has been investigated and conceptualized in the literature is presented.

The literature describes the transition from student nurse to staff nurse as characterized by a period of intense socialization into the culture of the clinical work world. Socialization, in this context, may be defined as a “reciprocal” process by which
the neophyte nurse learns to exert control over their new environment (Doelling, Levesque & Clifford, 2010). It is a process through which new registered nurses learn to behave as nurses in the hospital setting. It is through this process that the new nurse learns how to behave accordingly to culturally prescribed rules and standards of the clinical work world (Doelling, Levesque & Clifford, 2010). During this process of transition, the new graduate nurse learns their role as an RN on the unit they have chosen to work. They begin learning basics related to patient diagnosis, appropriate assessments and interventions, the use of monitoring equipment and more. What they encounter is similar to working with building blocks. They will learn the basic information and from there they will build additional learned information and on and on.

As described earlier, Benner (1984) describes nurses experiencing various transitions of development throughout the life of their nursing practice. Benner (1984) was one of the first nurses to describe how new graduates gain knowledge and skill, moving from a position of novice to one of expert over time. New graduates, who are the novice task oriented nurses, will eventually learn various methods of caring for a variety of patients. As they gain more and more experience, they will transition to the advanced beginner and then to the competent levels of nursing. Each nurse encounters various experiences and each nurse will make the transitions to the next level at their own pace. For some nurses it may take five – ten years before they will become expert and for some nurses they may never achieve that level. It all depends on the experiences the nurse encounters, the types of patients they care for, and how much they learn about patient care etc.

Theories about Transition
Two theories about transition are particularly relevant to this study and discussed in the following section: Schlossberg’s Transition Theory (1984) and Meleis’ Transition Theory (1987). The former was developed by a non-nurse while the later was developed by a nurse.

**Schlossberg’s Transition Theory.**

Nancy Schlossberg (1981) a professor of counseling and sociology developed a systematic framework that can facilitate an understanding of adults in transition and direct them to the help they need to cope with the ordinary and extraordinary process of living (Evans, Forney, Guido, Patton & Renn, 2010). Schlossberg is known for the Schlossberg Transition Theory. Often categorized as an adult development theory, Schlossberg’s theory is relevant to traditionally-aged college students (Evans et al, 2010). She describes a transition as “any event or nonevent that results in changed relationships, routines, assumptions and roles (Goodman, Schlossberg & Anderson, 2006).

Schlossberg’s theory describes three different types of transitions: anticipated, unanticipated, and non-events. Anticipated transitions happen expectedly and include such events as graduating from college. Unanticipated transitions happen unexpectedly and are not scheduled such as sudden death of a family member or a divorce. Nonevent transitions are ones an individual expected to occur but did not happen like a marriage that did not happen. Transitions include both obvious and subtle life changes. In Schlossberg’s theory a transition exists only if it is defined as such by the individual experiencing it. For an individual undergoing a transition, the impact or degree to which the transition alters one’s daily life is also important. Both positive and negative transitions can produce stress and multiple transitions happening simultaneously can
make coping especially difficult. A transition may be linked to one identifiable event or nonevent, a transition is actually a process that extends over time.

While transitions may be linked to one identifiable even or nonevent, a transition is actually a process that extends over time (Goodman et al, 2006). At first a person is consumed by their new role. Gradually they begin to separate from the past and establish new roles, relationships, routines and assumptions. Transitions provide opportunities for growth. Schlossberg (1984) found that transitions having three phases which are called the “moving in”, the “moving through”, and “moving out”. People moving into a situation need to familiarize themselves with the rules, norms, and expectations of the new event. Once in a new situation, individuals must learn to balance their activities with other areas of their lives as they move through the transition. Moving out can be seen as ending one transition and thinking about what comes next. The role of perception by the individual going through the transition is crucial; it defines whether or not it is a transition. Retirement might be a terrible experience for one person and an amazing experience for another.

According to Schlossberg (1984), a person’s ability to cope with a transition is reliant on their resources in four areas known as the “4 S’s,” situation, self, support, and strategies. A person’s effectiveness in coping with transition depends on his or her resources in these areas. Individuals have both assets and liabilities as they encounter transitions. Assets may outweigh liabilities, making adjustment relatively easy or liabilities may outweigh assets making the transition more difficult to manage. An individual’s appraisal of a transition as positive, negative, or neutral also impacts how the
person feels and copes with the transition. When examining the first “S”, a person’s situation, it will vary according to what triggered the transition, the timing, the amount of control the person has over the transition, the new roles the individual is taking on, the duration of the transition, one’s previous experience with a similar transition, how the individual assesses the transition, and other stresses the individual is experiencing.

Factors considered important in relation to the second “S”, self, are personal and demographic characteristics and psychological resources. An individual’s personal and demographic characteristics affect how they view life and include socioeconomic status, gender, ethnicity/culture, age, stage of life, and stage of health. Psychological resources include ego development, outlook, personal values, spirituality, and resiliency.

The third “S”, support that an individual has, impacts one’s ability to adapt to a transition. People receive support from family, friends, intimate relationships, and institutions and/or communities. Functions of support include affect, affirmation, aid, and honest feedback.

The fourth “S”, strategies, refers to the ways individuals cope with a transition. Coping responses include those that modify the situation, those that control the meaning of the problem, and those that aid in managing stress (Evans et al. 2010). Individuals who want to change their situation or reduce their stress can choose among four coping modes: information seeing, direct action, inhibition of action, and intrapsychic behavior.

When viewed from Schlossberg’s theory, a new graduate nurse prior to beginning their first job know how to practice nursing as a student nurse. When they begin their orientation as a staff nurse in critical care, they become consumed by their new role.
Gradually, they separate from the role as student nurse and begin to establish their new role as a staff nurse, developing relationships and new routines. When they begin their orientation, they could be considered to be experiencing “moving in” the transition. They begin to familiarize themselves with the norms and rules of the new role of staff nurse. As they “move through” the transition, they learn how to balance their new role with other areas in their lives. Also during the “moving through” phase, they are learning how to become an independent staff nurse, the resources available to them and the standards of care they must provide. “Moving out” could be seen as ending one transition and thinking about what comes next. For new graduate nurses, “moving out” may be completion of orientation when they work one-on-one with a preceptor. They know what comes next will be working and caring for critical care patients independently.

Schlossberg’s theory of transition, although not designed with the new graduate nurse in mind, describes processes new graduate nurse could encounter as he or she goes through orientation and transitions from student nurse to staff nurse, irrespective of clinical unit.

Meleis’ Transition Theory

Meleis (1987) is known for her work with the development of the Transition Theory. In her latest body of work, Transitions Theory – Middle Range – Situation Specific Theories in Nursing Research and Practice (2010), Meleis defines a transition as “a passage from one fairly stable state to another fairly stable state” and is a process triggered by change. Transitions are initiated by critical events and changes in individuals or environments. The transition experience begins as soon as an event or change is anticipated. Transitions are characterized by different dynamic stages,
milestones and turning points and can be defined through processes and/or terminal outcomes (Meleis, 2010). A transition is a passage from one life phase or condition to status of another. Meleis (2010) discusses many different transitions people go through during their lives and how nurses care for patients as they experience transitions related to health and illness. Meanings attributed to transition events vary between individual’s perceptions. Hospitalization is considered necessary for healing by some, and as a step toward dying by others. Transition is a personal phenomenon not a structured one. Processes and outcomes of transitions are related to definitions and redefinitions of self and situations (Meleis, 2000).

Transitions fall into the domains of nursing when they pertain to health or illness or when responses to the transition are manifested in health-related behaviors (Meleis, 2010). An acutely ill patient who is discharged from a healthcare institution or a patient undergoing surgery, are all examples of conditions or situations with impending states of transition. Meleis (2010) used Webster’s Third International Dictionary’s definition of transition as, “a passage or movement from one state, condition or place to another”. Meleis (2010) sees transition as a passage from one life phase, condition or state to another that embraces elements of process, time span and perception. Process suggests phases and sequence, time span indicates ongoing but bounded and perception is the meaning of the transition to the person experiencing it. Meleis (2010) notes transitions to be positive. In other words, whoever experiences the transition reaches a “period of greater stability relative to what has gone on before”.
Transition is a process. Nurses experience personal transitions when they begin their profession as a student nurse and move into the role of being a staff nurses, if a nurse changes employment to a different specialty area, as they grow in the profession, move to an administrative level etc. The nurse will experience starting at a fairly stable state in their profession and end at a fairly stable state with development and movement in between. Transitions occur when people go through expected life changes such as marriage, a new job, having a first child etc., how nurses care for patients as they experience transition and how nurses themselves experience transition both personally and professionally.

Types of Theories

Theorists usually describe someone transitioning as either moving along a continuum (Cader, 2008) or moving from one distinct stage to another distinct stage (Lewin, 2011). Continuum theories explain variation as involving gradual transition without abrupt change. Continuum theories have been used for decades to analyze and predict the behavior of materials, structures and systems (Cader, 2008). Often with continuum theories one has the ability to monitor when something or someone may be between phases on the continuum. Continuum theories are not as strict as some stage theories. One phase may be dependent on completion of the previous phase but it is not uncommon to move back and forth in the continuum theory.

Benner’s (1984) Novice to Expert Theory is an example of a continuum theory. In Benner’s theory it is possible to note when a nurse may have moved out of one phase and is beginning another phase, as well as when a nurse might be between phases. A nurse
might be a novice nurse in critical care and may be beginning to make some connections related to diagnosis, interventions and potential patient problems. They still exhibit being task oriented but at the same time they are starting to exhibit behaviors considered to be Advanced Beginner. Nurses might show some behaviors and abilities of the next phase while continuing to hold on to the current phase.

Stage theories are based on the idea that elements in a system move through a pattern of distinct stages over time and these stages can be described based on their distinguishing characteristics (Lewin, 2011). A stage theory can have a distinct order of succession where one cannot move to the next stage until the previous stage is complete (Levinger, 1976). Stage theories can be applied to describe phenomenon where multiple stages lead to an outcome. The term stage theory has been applied to various scientific, sociological and business disciplines. In these contexts, stages may not be as rigidly defined and it is possible for individuals within the multi-staged process to revert to earlier stages or skip some stages entirely (Weinstein, Rothman & Sutton, 1996). Some theorists offer that all stage theories have a hierarchical order, meaning an individual must pass through the stages in chronological order and cannot move back after moving through a stage.

Finally all stage theories are considered to be universal. This implies that there are no individual or cultural differences in how people experience stages. Stage theorists believe that all people, regardless of gender, race, culture, pass through stages in the same order and experience the stage the same way (Levinger, 1976). Some examples of stage theories include; Freud’s Psychoanalytic Theory, Piaget’s Cognitive Theory, and
Erickson’s Stages of Psychosocial Development Theory (Lewin, 2011). In each of these theories a person goes through stages in a specific order and cannot go to the next stage until they have finished the previous stage.

**Orientation**

The concept of new graduate nurses working in critical care is fairly new and while there is not much information about the process by which they experience orientation, there has been considerable discussion in the literature about various aspects of orientation with the goal of making the experience as positive as possible.

New graduate nurses are ill-prepared post-graduation to care for complex hospitalized patients (Green, 2001). When new graduate nurses, such as those in critical care, begin orientation at the start of employment, the transition from education to practice depends completely on the employer (Spector, 2010). New graduate nurses in their first year of practice have a heightened awareness of their need for additional learning. Currently in order to better prepare the new graduate nurse, to promote their success and to retain them within the organization, many hospitals not only provide orientation, but also provide a nurse residency or internship program to provide the new graduate nurse with a smooth transition from school to work (Spector, 2010).

The goal of an orientation program is to prepare new staff nurses to be confident and to provide competent, safe patient care (Jones & Park, 2010). An orientation program should change three aspects of skill performance: a) a change from confidence about abstract principles to the application of concrete experience; b) a change in the learner’s awareness of the demand situation as a whole; and c) a change from observer to active
performer (Elmers, 2010). Nursing students entering the clinical area can be characterized as having limited knowledge. They tend to be inflexible, and they are inexperienced in actual clinical situations (Elmers, 2010). Successful orientation programs should be those in which teaching and learning are provided to help the new graduate nurse demonstrate acceptable performance and cope in real situations.

Some healthcare systems have recently developed and reported orientation programs that have improved confidence, competence and retention of new graduate nurses. However, the research on the effects of these programs is limited by the small size studies and the experiences of single institutions. There are few systematic literature reviews focusing on orientation programs for the new graduated nurse (Newhouse et al, 2007).

The transition from student nurse to staff nurse is a challenging process full of unfamiliar experiences and anxiety-provoking situations. Despite hours of clinical experience and classroom education, new graduate nurses find themselves unprepared for their first job experience (Steen, Gould, Raingruber & Hill, 2011). Staff educators know the importance of orientation for nurses and strive to develop effective orientation programs both in general and in specialized clinical areas (Baxter, 2010). Little is really known about what constitutes a “good” orientation, especially for the new graduate nurse (Baxter, 2010).

It is estimated that as many as 60% of new graduate nurses will be lost from the workforce within their first year of employment (Halfer & Graf, 2006). Some have suggested that attrition from nursing is a direct result of job dissatisfaction, inadequate training, and lack of support (Marcum & West, 2004). A new threat to retaining new
graduate nurses is a trend to place these novice nurses directly into high acuity areas (e.g. critical care, labor and delivery, emergency rooms and burn units), areas once reserved for the experienced nurse (Everhart & Slate, 2004; Kollman et al, 2007). One strategy reported in the literature to ensure an effective transition into all clinical areas, including specialty areas, is a comprehensive, interactive, meaningful orientation (Gavlak, 2007; Halfer, Graf, & Sullivan, 2008; Kolliman et al, 2007; Rasdale & Mueller, 2005).

Smith (2007) identified particular stresses associated with a nurse’s first year of practice. These include discomfort with death and dying, insufficient knowledge of hospitals policies and procedures, and difficulty organizing a workload and managing time. A lack of self-confidence, perceived disrespect from more experienced nurses, discomfort with physicians and the need to be simultaneously autonomous and receptive to colleagues help can contribute to stress at the beginning of their practice.

The transition from student nurse to staff nurse in critical care has been described as traumatic, confusing, and shocking (Chandler, 2012). The difficulties encountered by the new graduate nurses have led to premature termination of their first position and sometimes they leave nursing all together (Chandler, 2012). New graduate nurses in their first year of practice are anxious and report considerable fatigue, so coaching should incorporate strategies to alleviate stress. There is a link between stress in new nurses and errors (Ebright, Unden, Patterson, & Chalko, 2004). Del Bueno (2005) found that 50% of novice nurses missed signs of life-threatening conditions and others have found that inexperienced nurses sometimes omit key aspects of nursing care.

In summary, the literature supports that there is a gap in knowledge and experience when the student nurse graduates from nursing school and begins his or her first job as a
staff nurse. Orientation programs were originally built and designed to help the new graduate nurse learn how to work in the reality of the nursing work world. As times have changed, orientation of a new graduate nurse is needed now more than ever. New graduate nurses now are being asked to work in specialized areas such as critical care. These new graduate nurses cannot be successful using orientation programs that were originally designed for the experienced nurse. Even new graduate nurses working on medical/surgical units need updated orientation programs as times have changed. The demands placed on a nurse are much greater than ever before, yet the need for these new graduate nurses to be successful and prepared to care for today’s patients is great. A meaningful, sensitive orientation program can mean the difference between success and failure as a staff nurse. However, in order for the orientation to be meaningful, we must have an accurate understanding of how the nurse transitions during the orientation experience.

**Chapter Summary**

The literature revealed studies that identified what is most important to new graduate nurses, what new graduate nurses found to be the most difficult during their orientation, how much anxiety the new graduate nurse experiences during orientation, how orientation models in critical care were redesigned for the new graduate nurse, and when new graduate nurses are considered competent to work in critical care. Each of the studies asked very valid questions regarding new graduate nurses in medical/surgical units and in critical care units. One study looked to identify what new graduate nurses on a medical surgical unit experienced as they transition from student nurse to staff nurse. The investigator of that research study identified three stages known as Doing, Being and
Knowing. These three stages describe what the new graduate nurse experienced when they began orientation and throughout the first 18 months of their nursing practice. The research question from that study is the same as the research question for this study except they studied nurses on a medical/surgical unit and this study looked at new graduate nurses in critical care. It appears as though the studies that are done on new graduate nurses look for cognitive growth, learning and progress with time.

When reviewing the current literature on new graduate nurses it becomes obvious that orientation programs are needed to bridge the gap between nursing school and real time nursing practice. Orientation programs must be meaningful and contain elements that will challenge the new graduate nurse yet teach them what they need to provide good, safe patient care. Understanding what is meant by transition was discussed related to a general review of the literature, Benner’s (1984) novice to expert theory Schlossberg’s (1981) theory of transition and Meleis’ theory of transition. From the review it is apparent that nurses do experience a transition as they evolve from student nurse to staff nurse. It takes skill, patience, learning, desire and acceptance to transition from one role to another. It is such a transition that contributes to the success and retention of new graduate nurses.

Theories are either stage theories or continuum theories. Stage theories usually show how someone moves from one stage of development to the next. There is usually no moving backwards yet people may move through the stages at their own pace and one stage must be completed before one can move to the next stage. Continuum theories show a person moving across a line from the beginning and moving from phase to phase until the final and greatest phase is achieved. One can move backwards on a continuum.
Benner’s Novice to Expert Theory moves along a continuum whereas Freud’s Psychoanalytic Theory is a stage theory. When creating a theory from using grounded theory, it must be determined which type of theory fits the data and the movement within the study.

When a new graduate nurse begins their first nursing job, the literature supports the fact that there is a difference between caring for patients as a student nurse versus when you are the nurse working in the real work world (Pratt, 2009). Orientation programs were originally built to help the new nurse learn the real nursing work world (Pratt, 2009). As a student nurse caring for patients in a clinical setting while in school, there is control over how many patients they care for (which is usually one-two patients where on a medical/surgical unit in the real world the nurse can be taking care of five patients at one time), what type of patient they care for and how long they will be on the unit for the day (sometimes the student nurse stays on the nursing unit and cares for patients for five hours of the day). What the student nurse does during clinical experiences can be very different from the real world of nursing and orientation programs are designed to help the new graduate nurse learn the reality of their new role and the types of patients they will be caring for (Dyess & Sherman, 2009). It is also during orientation that a new graduate nurse learns time management. When caring for a number of patients, it is critical that the nurse be organized and able to prioritize their time (Dyess & Sherman, 2009).

The majority of the studies on new graduate nurses discuss the importance of that initial time when the new graduate nurse begins their orientation and what takes place as the new graduate nurse gains experience and moves through the orientation process. Many agree that there is a transition process when the new graduate nurse changes from
student nurse to staff nurse yet only two studies looked at what takes place during that process.
Chapter 3

Introduction

The purpose of this study was to answer the question, “What is the process new graduate nurses in critical care experience as they transition from student nurse to staff nurse during orientation?” The study was conducted in such a way that it provided information that described the process of transition new nurses were experiencing as they transitioned from student nurse to staff nurse. The information describing such a process was obtained from interviews with the new graduate nurses asking about thoughts, feelings and concerns, asking other questions during this time in their new career, and observing them working on the unit, interacting with other nurses and patients. Grounded theory was the best research method for the research question of this study because grounded theory is specifically designed to discover and describe social processes (Newman 2008). Grounded theory provided a framework for the identification, description and theoretical analysis of the process the new graduate nurse in critical care experienced as he or she transitioned from student nurse to staff nurse.

In this chapter the following components of this research study are discussed: the design, the setting, the sample, ethical considerations, data collection, data analysis and the methodological rigor of the study.

Design

This study was a qualitative descriptive study employing grounded theory methodology. Grounded theory methodology is characterized by the simultaneous performance of data collection, data categorization, and data interpretation (Glaser, 1978; Glaser & Strauss, 1967; Strauss & Corbin, 1998). In addition, as data are collected and
analyzed, decisions regarding future sampling, observations, and interviews are modified based on the results of coding and categorization of data (Strauss & Corbin, 1998). The ultimate outcome of grounded theory is the discovery of a process (theory) consisting of components that describe a pattern of behavior in a particular social world or setting (Glaser, 1978). While the steps involved in conducting research in the grounded theory approach occur simultaneously and the direction of inquiry is dictated by the data, several essential components of the process can be identified. These are: the need to maintain a level of theoretical sensitivity, data collection through theoretical sampling, systematic coding and analysis of data, and a plan for insuring trustworthiness of data generated (Sandelowski, Davis, & Harris, 1989).

Theoretical sensitivity refers to the degree of familiarity that the researcher has with the phenomenon under study (Glaser, 1978). While recognizing the need to avoid allowing a priori knowledge to prejudice the direction of the research, a certain amount of insight about a phenomenon is required in order to have a starting point for the investigation and to assure that critical issues will be addressed (Glaser, 1978; Sandelowski, et al., 1989). One way of maintaining theoretical sensitivity is through review of the relevant literature during data collection and analysis (Glaser, 1978). For this study, the investigator reviewed the literature on new graduate nurses, new graduate nurses in critical care, transition theories and orientation.

The aim of grounded theory is to generate or discover a theory (Glaser & Strauss, 1967). Grounded theory may be defined as the discovery of theory from data systematically obtained from social research (Glaser & Strauss, 1967). The focus of the methodology is uncovering basic social processes. This is ideal for exploring integral
social relationships and the behavior of groups where there has been little exploration of
the contextual factors that affect individual lives (Crooks, 2001). The investigator gets
through and beyond conjecture and preconception to identify the underlying processes of
what is going on, so that professionals can intervene with confidence to help resolve the
participant’s main concerns (Glaser, 1978). The generation of a basic social process
(BSP) theory occurs around a core category. BSPs are ideally suited to generation by
grounded theory from qualitative research because qualitative research can pick up
process through fieldwork that continues over a period of time (Glaser, 2005). BSPs give
movement and scope to the analyst’s perception of the data. BSPs such as cultivating,
centering, highlighting, or becoming give the feeling of process change and movement
over time (Glaser & Hon, 2005). Basic Social Processes have two or more clear emergent
stages (Glaser & Hon, 2005). In this qualitative study, the BSP described the process of
“Making Meaning During Transition”.

In qualitative inquiry, informants are invited to participate in the study based on
their first hand experience with the phenomenon in question, their willingness to share
information, and their ability to be articulate and reflective (Coyne, 1997; Steubert &
Carpenter, 1995). Manipulation and control of the environment and/or participants is not
sought in grounded theory since the intent is to further the understanding of human
conduct with all of its variations (Glaser, 1978). The grounded theory product is simple.
It is not a factual description. It is a set of carefully grounded concepts organized around
a core category (Glaser & Holten, 2004). The generated theory explains the
preponderance of behavior in a substantive area with the prime mover of this behavior
surfacing as the main concern of the primary participants. Grounded theory is not
findings, not accurate facts and not description. It is straightforward conceptualization integrated into theory, a set of plausible, grounded hypotheses (Glaser, 2004).

Purposeful sampling of "information rich cases" provides a starting point from which to progress to theoretical sampling, a form of purposive sampling (Coyne, 1997). Using purposive sampling, data are gathered in a wide variety of areas that will yield as many categories of data as possible. As categories emerge from information provided by the initial sources, theoretical sampling is carried out to obtain the information that builds from and adds to those categories. The data collection in theoretical sampling is directed by the theory emerging from the analysis of data from previous sampling episodes (Strauss & Corbin, 1998). In this study, as categories emerged, additional information was obtained. Close to the end of coding the data from the interviews, it became apparent that additional information was needed, thus the participants were contacted again via email (with IRB approval) to clarify what they meant when a specific word was used and/or to be more specific about a response given in an earlier interview. An example was when participants were asked how they felt the very first time they cared for a critical care patient. Many of the responses actually used the term “overwhelmed”. This prompted further probing to ascertain what “overwhelmed” meant to each of them. When each participant defined “overwhelmed” additional categories emerged and subsequent coding was completed.

Stern (1980) emphasized that in grounded theory, it is impossible to control for the presence of the researcher. Investigators bring personal experience to the study to enhance understanding of the problem. Researchers openly recognize they have a role in the investigation. Stern and colleagues (1982) delineated that the grounded theory
researcher works within a matrix where several processes go on at once rather than following a series of linear steps. The investigator examines data as he or she gathers them and begins to code, categorize, conceptualize, and to write the first few thoughts concerning the research report almost from the beginning of the study. The researcher is an integral part of the investigation and consequently must recognize the intimate role he or she has in the actual investigation and interpretation of the data.

Grounded theory begins with a research situation. Within that situation the researcher is to understand what is happening and how the participants manage their roles. This is done through observation, conversation, and interviews (Hunter, 2010). Constant comparison is the heart of the process. In this study, once the data were obtained, they were reviewed and compared over and over again looking for similarities, differences, and independent concepts/ideas attained from interviews. The interview tapes were listened to over and over, the transcribed interviews were read over and over, each time comparing what was said and written from each participant. The method used to reach a grounded theory is termed the “constant comparative method” (Glaser, 1978). As data are analyzed, the researcher searches for a core variable which may serve as the foundation for theory generation. This core variable usually has some of the following characteristics: it recurs frequently, links various data, has an explanatory function, has implications for formal theory, becomes more detailed and permits maximum variation (Hunter, 2010). In this study there were core variables that came to the forefront and were concepts that were repeated from participant to participant. The core variables from this study were overwhelmed, fearful of making a mistake, the light bulb went on, learning,
learning, learning, anxious, know your resources, I know this and learning and experience. These core variables came out as data were reviewed time and time again.

When a theory emerges or is generated and is “grounded” in the data, it explains or helps us to understand the phenomenon being studied. “A grounded theory must be accessible and understandable to the people working in the area studied. A well developed grounded theory can be used to assist a population to understand and analyze ongoing situational realities, to produce and predict change in them and to control consequences both for the object of change and for the other parts of the total situation that will be affected (Glaser & Strauss, 1967).”

**The Sample**

The sample consisted of both male and female new graduate nurses who had graduated from accredited Bachelor of Science nursing programs. The inclusion criteria were: 1. Must be over 18 years of age; 2. Must read, write and understand English; 3. Must not have worked as a graduate nurse in any other patient care unit or hospital since graduation from nursing school; 4. Must not have worked as a nurse extern in a critical care unit during their senior year of nursing school. New graduate nurses were invited to participate in this study based on their firsthand experience with the phenomenon in question, their willingness to share information, and their ability to be reflective.

At the beginning of the study, ten new graduate nurses agreed to participate in this study. The first interview of all ten participants took place within two weeks of the participants starting their employment and orientation. Within the first four weeks of the new graduate nurses starting their orientation, four of the participants determined they
were not comfortable working in critical care and transferred out of critical care, leaving six participants. The six participants completed the “after” orientation interview. When the remaining six participants were approximately four - six weeks into Phase II of orientation, the participants were asked to answer a few more questions via email. Five of the six final participants answered the additional questions. Thus, ten new graduate nurses were interviewed initially, six were interviewed the second time, and five answered the additional questions.

**The Setting**

In this study the setting included four selected medical/surgical critical care units. Three were in one hospital, while one was in a different facility; however, all were in the same health care system. Patients admitted to these critical care units had various diagnoses such as: heart failure, respiratory distress, keto acidosis, sepsis, end stage renal disease, end stage liver disease, suicide attempts, alcohol withdrawal, pneumonia, and abdominal surgeries such as colon resections, whipples and nephrectomies. All of the critical care units shared the same physical layout. Essentially patient rooms were side by side making a circle around the nurses’ station situated in the middle. Outside of each room there is a small desk with computer for staff to sit and document while being able to see their patients. The nurse- to- patient ratios were usually 2:1 but could be 1:1 with higher acuity critical care patients. The critical care unit in which the investigator was employed was never used in this study.

All of the hospitals and critical care units were within the same healthcare system. The documentation system, policies, standards of care and orientation programs were
consistent across units. All critical care units hire new graduate nurses and conduct orientation programs which consist of three phases lasting approximately one year.

Phase I of orientation is when the new graduate nurse works one-on-one with a preceptor. This phase is twelve weeks long. During Phase I the new graduate nurse learns many basic nursing skills such as organization, prioritization, patient safety, medication administration etc and critical care nursing skills like hemodynamic monitoring with appropriate interventions, ventilators, blood gas interpretation etc. During this time the preceptor tries to get the new graduate nurse exposed to as many patients with a variety of diagnoses as possible in order to expose him or her to the appropriate monitoring and interventions per diagnoses. The new graduate nurse learns the standards of practice for their unit, how to organize their assignment, how to prioritize what is most important, what and how to document, how to delegate and how to notify a physician. Phase I is described as the time in orientation when the new graduate learns the greatest number of skills and competencies. It was within the first two weeks of Phase I that the first interview with the new graduate nurses took place. The second interview took place after completion of Phase I and within the first 4-6 weeks of Phase II.

Phase II is the time when the new graduate nurse no longer works one on one with a preceptor. The new graduate nurses have been deemed “safe” practitioners by their preceptors and Clinical Nurse Specialist, can now care for patients by themselves, but will have a “resource” nurse assigned to them for any questions, issues or concerns. This phase usually lasts approximately eight weeks. When the participants had been in Phase II for approximately four - six weeks, additional questions were asked of them in order to
obtain clarity or additional information about previous responses. This time when the questions were asked it was done via email. The participants were given two weeks to answer and return the email questions. Each participant was asked the same questions (Appendix E).

Phase III includes the final months of the first year of practice of the new critical care staff nurse. It is described as the time when the new nurse concentrates on getting as much experience with different diagnoses and situations as possible. No data were collected during this time.

**Ethical Considerations**

Approval to conduct this study was obtained from the research review boards of the University of Wisconsin Milwaukee and Aurora Health Care (Appendix A & B). Informed Consent (Appendix D) was the primary means of protecting the autonomy and right to self determination of the research participants. Upon initial meeting with the interested participants, they were informed that participation in this study was completely voluntary and that they could withdraw from the study at any time with no repercussions to them. Each participant was given a code name for identification. The real names and other identifying data of the participants were kept separate from the data and all data were locked in a file cabinet in the researcher’s office. The list was destroyed once data analysis was concluded.

**Role of the Researcher**

The researcher for this study is a clinical nurse specialist (CNS) in a surgical ICU. The researcher has been a nurse for 34 years with 20 of those years in critical care either as a staff nurse or as a CNS. The researcher made sure during the study that there were no
participants from the researcher’s ICU. Each interview except the final email questions were completed personally by the CNS. One goal of the researcher was to make sure none of the participants ever felt they were being led in any direction when interviewed and that each participant knew they could withdraw from the study at any time.

Data Collection

After obtaining IRB approval from UWM-Milwaukee and Aurora Health Care (Appendix A & B), the investigator contacted each of the Chief Nurse Executives of the two hospitals chosen as the sites for the study. Both Chief Nurse Executives gave permission for the investigator to recruit nurses in the critical care units of their facilities. Once that was completed, the investigator met with the Clinical Nurse Specialist of each critical care unit. During that meeting, the study and the steps of the procedure for the study were explained. Time was allotted for any questions or concerns related to the study and the procedure. Involving the Clinical Nurse Specialist (CNS) was essential as each critical care unit has their own CNS. The CNS is responsible for the orientation program and meets with new graduate nurses individually in order to enroll the new graduate nurses in required classes at the beginning of their orientation. During this meeting, the CNS shared information with the new graduate nurse about the study, and gave each new graduate nurse a description of the study (Appendix C).

If the new graduate nurse was interested in participating in the study, he or she signed the form describing the study and wrote their phone number and/or email address for the investigator to use to contact them for the initial meeting. New graduate nurses were encouraged to take the “description” of the study home with them to think about participation knowing that all forms of interested candidates must be handed back to the
CNS within one week. At the end of one week the CNS gave the signed forms to the investigator. Ten new graduate nurses agreed to participate in the study and gave their contact information to their CNS to give to the researcher.

When the investigator had the names and information of the new graduate nurses interested in participating in the study, he or she was contacted to set up an initial meeting to discuss the study, give formal consent of participation (Appendix D) and ask any questions they had about the study. Participants met individually with the researcher twice during their orientation: within the first two weeks of the beginning Phase I of their orientation, and again approximately four-six weeks after completion of Phase I. All participants were emailed a descriptive explanation of the results of the study and a picture of the model depicting the theory from the study. They were asked to give feedback of their thoughts regarding the results of the study and the theory. It is always complimentary to share the results of a study and in grounded theory it actually adds credibility to the study when the participants see and agree with the results of the study (Cooney, 2011).

Each interview took place in a lounge or in one of the consultation rooms on the critical care unit. Deciding when and where to meet was made by the participant in order to minimize any disruption in their schedule. Each interview took approximately 30 - 60 minutes. The interviews were audiotaped. During each interview the participants were asked open ended questions (Appendix E) in order to avoid yes/no answers and to stimulate conversation. The goal of each question was to promote having the participant reflect on their thoughts, feelings, concerns, positive achievements, and negative situations within the current time frame of the orientation. Each new graduate nurse was
asked the same questions. Shortly after the final face to face interview within the first four weeks of Phase II of orientation, the data collected were transcribed, reviewed and analyzed. It was after the four - six weeks into Phase II that it became evident that some additional questions needed to be asked in order to clarify answers obtained from previous interviews. For example, when the new graduate nurses were asked how they felt the first day they cared for a critical care patient, many said they felt “overwhelmed”. When sending the participants additional questions via email they were asked, “What did you mean when you said you felt overwhelmed? The additional questions were written and sent to each participant via email. Prior to sending any questions, the IRBs from UWM-Milwaukee and Aurora Health Care were notified about asking additional questions via email and approval was obtained from both research boards (Appendix G).

Data Analysis

The management and analysis of the data obtained from the interviews is very important. The process of Grounded Theory encompasses the data collection process, the process of coding and analysis, and the compilation of results (Glaser, 2005). Coding and analysis includes 5 different areas: open coding, constant comparison, memoing, selective coding, and theoretical coding (Glaser, 2005).

Open coding

Initially, open coding was employed. At this stage, the raw data (for example, transcripts) were initially examined and coded through a process which fractures the interview into discrete threads of datum. These data are collated and accrue to form categories of similar phenomena. The process of open coding examines the data without limitations in its scope and without the application of any filters, thus all data are
accepted and none are excluded (Glaser, 1978). This allows the investigator to look for patterns that may lead to social processes which may be of eventual interest. As the categories begin to fill, those that are most dense become known as core categories (Glaser, 2001). Through this process of densification, core categories build to become the core focus of theoretical articulation through to the development of a basic social process (Glaser, 2001).

All interviews were recorded. The recordings were transcribed and almost immediately the interviews were listened to and listened to again. The transcribed interviews were read over and over again and coding began. It was important to begin this parallel task of collection and coding in a timely and synchronous manner to ensure a structured discovery of data which more easily illuminates emerging themes and potential areas of enquiry (Backman & Kyngäs, 1999). Open coding involved systematically reading and considering every comment made by each participant in an effort to find similarities between concepts. As the interviews took place and after each interview was transcribed, the interviews were placed on white poster board with the same questions and their answers next to one another. This gave the investigator the ability to compare responses. Then, these concepts were coded according to their meaning and relevance to the study. As this was the first set of interviews, the investigator was interested in what all the respondents had to say, and as a consequence coded the entire transcript.

**Constant Comparison**

Open coding utilizes a process of constant comparison (Glaser & Strauss, 1967). Constant comparison is a simultaneous and concurrent process of coding and analysis (Partington, 2000). In this study the poster board was moved throughout the day so the investigator could review it, identify similarities, create codes etc. As categories start to
accumulate and gain depth, constant comparison compels the investigator to begin to reflect on the data and to commence conceptualization, usually using ‘memos’ to record the researchers’ reflections and annotations of the data. The constant comparative method is designed to aid the investigator in generating a theory that is integrated, consistent, plausible, and close to the data (Glaser & Strauss, 1967). Validity arises through data saturation – when no new concepts emerge.

**Memoing**

Glaser (1978) refers to memoing as the *core stage* in the process of generating theory. Memos have four basic goals: they should develop ideas and codes, these ideas should develop freely, should be stored centrally, and should be sortable (Glaser, 1978). When recording memos, investigators should reflect on the data but should not limit their reflection to just the data. Everything is important in reflection. The rule is to write down everything – no matter how bizarre or nonsensical – and to interrogate one’s feelings and thoughts constantly. Sometimes as data began to accumulate into categories, the investigator needed to reflect on what was emerging. This process of reflection was greatly enhanced through the use of memos. As the categories filled through constant comparison and constant reflection, the memos started to become rich and reflective.

Memos are an important part of the grounded theory process. During the data collection, the investigator jotted down memos. The majority of the notes/memos written by the investigator described the participants’ moods, non-verbal behavior, level of anxiety when answering the questions, what the participants were wearing, things they said before and after the actual interview and anything else the researcher noted and thought would be significant information for the study. During one of the interviews the participant kept talking about her age. The investigator did note that the participant was
past the age of 30. This participant spoke about her age over and over again. She was worried she might not be able to keep up with the other nurses and it seemed no matter what questions were asked of her, she responded with an answer and then again brought up her concerns about the age factor. The investigator wrote numerous memos during this interview with the new graduate nurse, thinking it was important to note this participant’s concern with age. The investigator also kept this in mind to see if age became an issue with the other participants. During the data analysis, the memos were reviewed and any information that enhanced the data collection was noted and included in the study.

The memos written by the investigator reflected her thoughts, feelings, perceptions, ideas and impressions she experienced during observation time and during the interviews. During parts of interviews it was possible to identify when the participant was talking about something important to them. A participant was asked when they decided to be a nurse in critical care. Immediately after asking that question one of the new graduate nurses pulled themselves closer to table. The tone in their voice changed as they described having a very close family member in critical care for a number of months while they were in nursing school. One of the participants described in detail what she observed when the critical care nurses cared for her loved one. The investigator wrote a memo saying, “You can hear the passion in her voice as she described the experience”.

Memos are very important as they can describe the environment, the enthusiasm or lack of, details of various aspects of the interview, and everything the investigator experiences or observes as being significant to the interviewing process (Glaser, 1978). Memos can be jotted down when analyzing and comparing the data. They can be used anytime throughout the study as they help to set the scene, the tone and the accomplishments of the study.
Selective Coding

The second stage, selective coding, is reached when core categories become apparent. A core category is a category that has developed through densification and explains most of the variation which represents the participants’ major concerns. The core category should be an issue upon which the basic social process is centered. It should relate meaningfully and easily to other categories. It should have clear and grabbing qualities (Glaser, 1978; Glaser & Holton, 2004). The selective codes unify and explain the small categories and codes under them. The selective codes become the link between the data and the grounded theory. The selective codes form the stages of the theory. In this coding level, categories are further integrated and refined to identify a “central category”. The function of the central category is to pull the other categories together to form an explanatory whole (Glaser & Holton, 2004).

Selective coding allowed the investigator to filter and code data that are deemed to be most relevant to the emerging concepts. Therefore, only the most pertinent passages of a transcript are used and coded. When reviewing the emerging concepts were reviewed by the investigator it became apparent that a core category for this study is “transition”. The responses from the participants described thoughts, feelings, ideas, reactions and expectations that all related to the transition process of the new graduate nurse.

“Saturation” of data collected is a commonly used criterion for when sampling should cease in qualitative research studies. The premise of descriptive saturation is that the researcher finds that no new descriptive codes, categories or themes are emerging from the analysis of data (Rebar et al. 2011). Data saturation occurs when the researcher is no longer hearing or seeing new information unlike quantitative researchers who wait until the end of the study to analyze their data. Eventually, after a period of data collection, a
point is reached where no new data result from additional data collection. This is the point of saturation: “One keeps on collecting data until one receives only already known statements” (Seldén, 2005).

Samples for qualitative studies are generally much smaller than those used in quantitative research. There is a point of diminishing return to a qualitative sample; as the study goes on, more data do not necessarily lead to more information (Glaser & Strauss, 1967). When the collection of new data does not shed any further light on the issue under investigation, the data are considered saturated. There were ten participants for the initial interviews. Since four participants withdrew from working in critical care by the 2nd interview, the sample size of the study decreased to six, raising questions about the degree of data saturation.

In this study, themes were identified. The themes were; feeling “overwhelmed”, “fear of making a mistake” that could harm a patient, the “light bulb goes on”, and “learning, learning, learning”. Following this phase of the orientation, the participants moved into the next phase when they would work independently. The new graduate nurses would no longer work with a preceptor. The categories that emerged during that phase of the orientation were; “anxious”, “know your resources”, “I know this” and finally “learning and get experience”. Theoretical coding facilitated recognizing the pattern of concepts within the study. The core process identified for this study was transition.

**Methodologic Rigor**

In qualitative inquiry, reliability and validity of the data generated are established through processes designed to insure that the perception of the participants and their descriptions of what they experience are accurately represented (Sandelowski, 1986).
Rigor or trustworthiness, in qualitative study, is supported by several operational techniques. They include credibility, confirmability, and transferability (Guba, 1981).

**Credibility**

Credibility refers to the ability to have confidence in the data offered by the participants and that it truthfully and accurately represents their experiences related to the phenomenon under study (Lincoln & Guba, 1985). Streubert and Carpenter (2003) state that maintaining a sustained presence in the environment where the phenomenon exists, and collecting data over an extended period of time, are the best ways to establish credibility. During this study the investigator spent time on each critical care unit to observe the participant’s working, and interacting with their preceptors, other nurses on the unit, families and with their patients. Credibility can also be strengthened by having individuals from the same environment, who meet the same criteria as the original study participants, review the investigator's interpretations of the data generated through interviews and observations. Hence at the end of this study, the results of the study and the theory were presented to each of the critical care participants. The data, data analysis and the final theory were presented to the participants with dialog of the steps followed to operationalize the study. Each participant was asked for feedback related to the categories, theory and conclusion from the study. Did the investigator capture what the new graduate nurses were experiencing as they transitioned from student nurse to staff nurse during orientation in critical care? The participants agreed that what they were thinking and feeling at the beginning of orientation while working with a preceptor was accurately captured from the interviews as was how the nurses felt and thought at the end of their Phase I of orientation reflected where they were at emotionally and cognitively.
The participants felt their transition from student nurse to staff nurse was clearly and accurately portrayed by the investigator.

**Confirmability**

Confirmability is a process criterion and pertains to the extent to which the analytic activities and decisions of the investigator can be followed and substantiated by another individual (Sandelowski, 1986). By clearly documenting the evidence and thought processes that led to the conclusions presented in the report of the study, the researcher leaves a map that could be reviewed and critiqued by other investigators skilled in the research techniques employed in the study. This is referred to as an audit trail (Sandelowski, 1986). Confirmability was established by a PhD individual with qualitative research experience. This person reviewed the transcripts, the steps of coding and categorizing and the memos from the researcher. They confirmed the stages and themes identified in this study (Appendix I).

An Audit Trail is laying out a step by step process so if another researcher would like to perform the same study they can look at the Audit trail and follow it step by step. The audit trail consists of the steps performed by the researcher. An example for this study would include: 1) General literature review 2) Complete and submit IRB papers for UWM Milwaukee and for Aurora Health Care. 3) Communicate with the Directors of Nursing for each hospital in Aurora Health Care for permission to recruit nurses from the critical care areas at their facility. 4) Create and provide an Explanation of Study form to be given to potential participants of each critical care unit 5) Meet with the Clinical Nurse Specialist of each ICU etc… (Appendix H).
Transferability

Transferability is concerned with the probability that the findings will be relevant when applied to related contexts and similar situations (Sandelowski, 1986; Sandelowski, 1993). It is important to remember that in grounded theory, reality is assumed to be multiple and constructed. Collected data are time-bound, context-dependent, and subject to change. Therefore, while users of the research findings may respond positively to those findings, the fact that they may not does not necessarily undermine the reliability of the data or the validity of the findings (Sandelowski, 1993). It might however be advantageous at some point to redo this study if variables change, a number of years has elapsed since its construction or a similar situation presents itself yet different enough to warrant another round of exploration.

Chapter Summary

In summary, an overview of the grounded theory method of qualitative inquiry has been presented. The purpose of this study was to answer the question; what do new graduate nurses in critical care experience as they transition from student nurse to staff nurse during orientation. For this qualitative descriptive study, new graduate nurses from 4 critical care units within the same hospital system were invited to participate in interviews at the beginning of their orientation and again when orientation was completed. Once the interviews were complete, they were transcribed word for word. The constant comparative method was used in data analysis. Coding provided “like” categories which eventually provided the information that created a theory describing what new graduate nurses in critical care experience as they transition from student nurse to staff nurse. The significant of the use of memos was discussed with examples of how
they were used throughout the study and discussion on their significance to the data analysis. Saturation was discussed with examples of responses to some of the interview questions. Finally methodological rigor was explained and examples of credibility, confirmability, and transferability were provided.

Grounded theory begins with a research situation. Within that situation, your task as the investigator is to understand what is happening and how the players manage their roles. This was done through observation, conversation and interview. After each round of data collection, key issues, thoughts, observations, memos and additional notes were written. Constant comparison is the heart of the process. As data from one interview is compared with the next interview, theory emerges. Then new data is compared to theory. Coding takes place and categories emerge. The final result from these overlapping processes is a theory that explains the social process and answers the research question. Charmaz (2006) says, “Grounded theory provides a systematic method involving several stages which are used to ‘ground’ the theory, or relate it to the reality of the phenomenon under consideration.”
Chapter 4

Results

The results are presented in this chapter from initial interviews with ten new graduate nurses hired to work in critical care. Approximately three months later, orientation of the new graduate nurses was complete. Four participants were not successful during their orientation into critical care leaving six participants for the final interviews. After the final interview, as the investigator examined responses to questions it became apparent additional questions needed to be asked of the participants. The additional questions were emailed to the remaining six participants however only five participants responded to the email questions.

The purpose of this study was to answer the research question: What do new graduate nurse in critical care experience as they transition from student nurse to staff nurse during orientation? The first section of this chapter will summarize characteristics of the study’s participants as a group. The second section will present the data and memos obtained from interviewing the participants. The third section will present and discuss the grounded theory from this study.

Sample

To participate in this study, new graduate nurses had to meet the following criteria: 1. Graduated from an accredited nursing program; 2. Hired to work in critical care as a new graduate nurse; 3. Has not worked as a nurse extern in any critical care unit during their senior year of nursing school; 4. Must be able to read, write, and understand English; 5. Have not worked as a new graduate nurse anywhere prior to being hired to work in critical care at this time; 6. Must be over the age of 18 years.
Initially, there were ten new graduate nurses who agreed to participate in this study. The first interview with the participants was to be within the first two weeks of their starting to work on the critical care unit in the orientation program. Within the first four weeks of orientation in the critical care unit, four participants decided they were not “ready” to work in critical care at this time. They transferred to other units in the system. Their departure decreased the sample to six. Inspection of the data following the second interview with six participants revealed a need for additional information. All six participants were requested to respond to a series of questions via email. Five of the six participants responded to the emails.

The participants ranged in age from twenty to 20-46 years of age. The average age was 26 years. There were two male nurses and eight female nurses. Two were married and eight were single. Two participants were African American and eight were Caucasian. All ten participants graduated from a four year baccalaureate nursing program and all ten participants were working in critical care units within the Aurora Health Care System in the state of Wisconsin. Of the ten participants, four of them described having a critical care rotation as part of their clinical in nursing school. These four indicated their clinical rotation in critical care as their reason for wanting to work in critical care after graduation. None of the participants who had a critical care rotation in school quit the study. One participant shared a story of having a loved one as a patient in critical care and based on watching the nurses care for her loved one, she decided she wanted to work in critical care after graduation. Another participant wanted to be a “flight nurse” and in order to do that, had to have critical care experience. Four participants thought that their
school prepared them to work in critical care and two participants said they had a critical care theory class while in school.

Findings

A synopsis of each interview/participant is provided. Each participant was given a false name so that their anonymity could be maintained. The researcher’s memos are also attached to the interview synopsis to provide a context for the interviews.

Interview with Chelsea

Researcher’s Memos: Chelsea was very excited about working in critical care and she was very realistic to note that it is going to take some hard work by her in order to be successful. Chelsea completed a critical care semester while in school and she discussed the importance of her preceptor and that her preceptor taught her so many things about working in critical care. Chelsea and I met in a lounge on her critical care unit. Only the two of us were in the lounge and a note was placed on the door that an interview was “in session”. Chelsea had just worked a night shift, she was in her scrubs and all smiles. She shook my hand and we sat across from each other at a table. She told me about her shift, that she was learning a lot every shift and had no idea how much there was to know and do for critical care patients.

Chelsea genuinely appeared to be excited for the interviews. She took her time answering questions and at times asked for some clarification.

For the second interview we met again on her unit after she completed a night shift. At this interview Chelsea was not finished giving report on her patients and she had a couple of medications left to pass. This gave me an opportunity to stand out of the way and observe her. Chelsea’s preceptor was with her while she was giving report. I never
saw the preceptor interrupt or add anything to what Chelsea had to say. When Chelsea was passing medications I could see how serious she became. Twice she checked what medications she had with the electronic record of what was to be given. When she went into her patients’ rooms, the smiles were back and she was very pleasant when interacting with her patients. I was able to observe Chelsea in the patient’s room as every room is encased in glass. When she was finished passing her medications, she gathered her things and punched out. She joined me and we went to the same lounge we were in for the first interview.

When asked what she expected to learn during her orientation, Chelsea said that her initial thoughts were that by the end of her orientation she would be able to care for a critical care patient by herself. She went on to say that between her clinical rotation and just by spending time on the unit for a week she could already see how much is put into caring for a critical care patient. She described seeing how every nurse sought input from other nurses either for clarification or for assistance. Chelsea appreciated that no nurse could do it all by him or herself. When asked how she felt the very first day she cared for a critical care patient (with preceptor) she said she felt completely “overwhelmed”. Chelsea defined “overwhelmed” as not knowing where to begin. She immediately wondered if she could hurt the patient. She said there was so much to do, she questioned what she should do first; and she wondered whether every new nurse felt like this. She ranked her level of anxiety as a “7” on a scale of 1-10 with 10 being the most anxious one could possibly imagine. Once she determined what to do first, her next greatest concern was considering “what should she do if she made a mistake”. Chelsea defined “mistake” as doing anything that could potentially hurt the patient. She talked about how
much there is to remember for every patient and if you forgot something or maybe gave a patient someone else’s medications you could do great harm to others. She described setting up check points for herself when she would double check things such as medication administration, diet, fluid restrictions and activity.

When asked if she ever felt like she experienced a time when she was changing during her orientation or if she could feel like progress was being made, she described a time when all of a sudden she felt like the “light bulb went on”. Chelsea actually used those words when answering that question. It was a time when all of a sudden concepts began to “make sense”. She began to understand why things were done, what was most important for a diagnosis and when to notify a physician. She said it was at this time in her orientation that she started to care for many patients with different diagnoses and she was learning what she as the nurse needed to do, needed to focus in on, and what she needed to know.

Chelsea was asked how she felt when orientation was over and she would now be working without a preceptor, she said she felt pretty comfortable caring for two “stable” critical care patients. She described “stable” as meaning vital signs are within normal limits, the patient has minimal to no oxygen required, and essentially no potential for any emergencies to happen. She said she knew she could always ask for help if needed and she would never be working alone. Chelsea was asked again if she experienced a change within herself during her orientation. She said the orientation went by fast. One day she was working with a preceptor and feeling completely overwhelmed by everything and before she knew it orientation was over and her knowledge and nursing practice “were different” from when she started orientation.
Chelsea shared that when orientation was over she once again felt very overwhelmed but this time it was for a “different reason”. Now she was going to be the “one” caring for the patient, planning the care for the patient and identifying any patient changes that need interventions. She said that once she reminded herself that there are other nurses there to help her, the anxiety diminished. Chelsea also added that when she went out to work independently she became “frightened” again that she might “harm a patient by doing something stupid”. She shared that if she was to talk to a new graduate nurse coming to work in critical care, she would say “it’s a lot to handle but it does get better. All of a sudden things will start to make sense, just give it time and take advantage of the knowledge of the experienced nurses working with you”.

**Interview with Aaron**

*Researcher Notes/Memos*  Met with Aaron for the first interview on his critical care unit. He had just finished working a day shift. He was wearing scrubs and was talking to his preceptor as they led me into their lounge. Aaron’s preceptor was introduced to the investigator and then left. Aaron sat in a large leather chair and put his feet up on the coffee table in front of him. Aaron appeared very comfortable in the interview. He did not offer any conversation so I just asked how his shift went while I was getting my recorder ready and he essentially answered telling me he cared for two critical care patients that day and it went well. I asked him to define “well” and told me he did not get behind with anything and felt quite organized. He knew he would have a lot to learn and not just while he is in orientation but for years to come. The second interview took place at 0700 am in the coffee shop of the hospital where Aaron works. It was quiet and Aaron just came off of a night shift. He was on time for our meeting and seemed to be more relaxed
and more talkative this meeting. I did not have to elicit all of the conversation. I did not have an opportunity to observe Aaron as his unit is at a facility away from the hospital where the majority of the interviews took place.

Aaron was asked about his expectations related to learning during his orientation to critical care. He said that at the end of his orientation, he expected to feel he was competent enough to care for critical care patients on his own, yet still have some questions. Moreover, being a safe, competent practitioner was critical. When asked how he felt the day he cared for his first critical care patient; he said he was completely “overwhelmed” in that it was “difficult for him to determine what action to do and then needed to be done first because there is so much to learn”. Aaron ranked his anxiety at the beginning of his orientation at a “5” on a scale of 1 – 10. His biggest concern when starting orientation was being “safe”. Knowing where to go, knowing where to get things, who to call for what etc. When asked if there seemed to be a time when he felt like there was a change in him, Aaron in the affirmative said it was right around the middle of the orientation (6 weeks into orientation).

At the beginning he tried to learn everything, such as policies, where supplies were located, and how to get a hold of other departments like lab or respiratory therapy. Then all of a sudden he reached a point where he felt like “hey I got this” “I understand.” “When this happens you do that” etc. Once Aaron felt like he was beginning to understand patient diagnoses, patient symptoms, interventions, and specific assessments, it motivated him to learn more and more and for the rest of his orientation he was so “excited to keep learning”.

When asked how he felt when orientation was over and he would now be caring for patients without a preceptor, he said he did not feel overwhelmed but he did feel “nervous: as he did not want to forget anything. He saw how the nurses helped one another and was comforted knowing that other nurses were available to help him if needed. Aaron described his biggest “change” as moving from being very “task oriented” at the beginning of orientation, to being “able to prioritize” patient needs. He said he learned it was extremely important to know and use your resources. The resources are other nurses, the charge nurse, other departments, unit manuals, policies and procedures etc. At the beginning of orientation he relied on his report/assignment sheet which was where he wrote down everything he knew and everything that needed to be done for his patients. However over time he was able to walk into a patient’s room and identify what was happening and what needed to be done. Aaron said it was now time for him to get experience. Take care of as many different patients as he can but needs to learn from getting experience. The advice he would give a new graduate nurse hired to work in critical care is to observe as much as you can, ask a lot of questions and soak up as much information as you can.

Interview with Joel

**Researcher’s Notes/Memos**  Joel sat back in her chair for both interviews. She appeared to be very relaxed and always smiling. She seemed very comfortable more so at the second interview than at first, yet always realistic about her own limitations. I met Joel in the afternoon after she just gave report of her patients to the nurse coming on the p.m. shift. We went into a consultation room to minimize interruption. Joel was very pleasant. She appeared very “upbeat”, smiling, wanting to talk. She told me about her day shift
before I asked any questions. She became very excited and told me she helped a physician place a central line that day and she cared for a patient who received a tracheostomy early that morning. She said she loves the fact that “every day there is something new to learn”. The second interview with Joel took place after a twelve hour day shift on a Saturday. She was still excited when she spoke about what she was learning. One day during the week I went to the critical care unit where Joel works to ask a question of their Manager. While I was there I had to wait for the Manager so I took close to twenty minutes and watched Joel as she was caring for two stable critical care patients (I found that out after I spoke with her preceptor). Joel had questions for her preceptor but she was caring for her patients independently. I had an opportunity to speak to the preceptor and she told me Joel was doing very well. She knows to ask questions if she encounters anything she never did or heard of before and thinks Joel will be a good critical care nurse as she asks all the right questions and knows her patients well.

Joel said that during her orientation she hoped to be able to understand critical care nursing and to be able to care for a critical care patient. She was realistic in her desire to learn acknowledging that while she would possibly not be able to care for the sickest critical care patient in the unit; she would be on her way toward that goal. Joel described the first day of caring for a critical care patient as “oh my god!” and described feeling “very nervous” because patients were unfamiliar, you don’t want to forget anything, you don’t want to do anything wrong and “you don’t want to hurt the patient”. She described the preceptor talking to her like she understood what the preceptor was saying when actually it all sounded “greek” to her. Joel ranked her nervousness as a “4” on a scale of 1-10 with 10 being the most nervous anyone could imagine. Joel’s biggest concern as she
began orientation was that she wanted to do well, however, achieving this goal would require considerable work and she still had a lot to learn.

When asked if she noted a time when the she felt like “things changed for her” in her orientation? She indicated that during the mid to final weeks of working with her preceptor (six -eight weeks of orientation), she became more “comfortable” caring for her patients because she understood what was wrong with the patient and why certain interventions were chosen for those patients. Joel said that once orientation was completed she felt “extreme panic” that she would no longer have her preceptor working with her. She was worried if she would make the right decisions for her patients, if she would be able to see when something was changing with her patients, and if she was ready to do this by herself.

When she first got off of orientation Joel rated her nervousness at “8” on the 1-10 scale. Even though she was quite nervous, she was aware that there were quite a few other nurses around if she needed help. Joel was asked again at the second interview if she felt like she experienced a “change” in herself during orientation? She said yes, and said she felt that as orientation went on, the more comfortable she became, and the more her preceptor let her do things on her own. She said at the end of her orientation working with a preceptor, she knew she was a “different nurse” than when she started orientation. She was no longer the nurse with no experience who required another nurse to work by her side, but she was still a nurse who had a lot to learn, yet “could provide safe nursing care to her patients”. Joel said she feels confident she can care for patients and she will get help if and when it is needed. She stated she knows she has a lot to learn and once off of orientation she needs to just get experience. She said she was taught to know her
resources and use them which she will do in order to not make any mistakes. Her advice to new graduate nurses starting in critical care was to ask as many questions as they could and not to fear anything.

**Interview with Dan**

*Researcher Notes/Memos*  I met Dan on his unit after he completed working a day shift. He was ready for the interview when I arrived and we went into a conference room for the interview. Dan was wearing scrubs and was a very happy, smiling young man. Dan was great with conversation; in fact if the investigator paused to regroup to the next question, Dan was already talking about something else. Dan verbalized a lot of fear hoping if something happened to a patient, he would know what to do. He was always very worried if his lack of knowledge would harm a patient in any way. Dan was more confident at his second interview. Dan stated at the second interview (14 weeks of orientation), he felt more comfortable caring for the ICU patients. I took the time one afternoon to observe Dan on his unit when he was working independently. He was very organized with caring for his patients and he asked other nurses if they needed help with anything. He was very pleasant and exuded a great attitude with his co-workers

Dan expected to learn how to care for different types of critical care patients, how to monitor those patients, and what to do in emergency situations during his orientation. On his very first day caring for a critical care patient, Dan said he felt like he had no idea where to start to care for that patient and he used the term “overwhelmed”. He said he was very “nervous” and almost “felt lost”. Dan said “you don’t know much so you don’t know what you are supposed to be doing”. He ranked his anxiety as an “8” on a scale of 1-10. His biggest concern as a new graduate nurse was “losing a patient”. He said “It is
the biggest thing I am worried about. “What if my patient codes? What if I don’t know what to do or I don’t move quickly enough?” Dan described feeling like the “light bulb went on” toward the end of the orientation. During the 2nd interview Dan talked about never having been in a code situation as a student or a nurse and at the end of his orientation he had been in three of them. He said during his orientation he learned how to care for critical patients but once that light bulb went on, he was learning how to care for patients with different diagnoses and gaining an appreciation for specific physicians’ approaches to care. It was at this point his learning just took off. Once orientation was finished, Dan indicated he experienced a phase of “intense learning”.

With orientation over, he felt good and felt like he had a good grasp on who his resources were and should he face something he had not done previously, he would get help and never just try something on his own. He felt “comfortable caring for two stable patients” and defined “stable” as patients whose vital signs were normal, were not experiencing any potential life threatening problems, and were pretty close to no longer requiring the one on one care of critical care. When asked again (second interview) if he felt like he experienced a “change” with himself during orientation, he was very comfortable asking for help, he understood the hemodynamic monitoring of a patient, and he commented on the knowledge he had gained. Dan explained that what he knew when he started as a new graduate nurse to where he is now is like “night and day”. He was comfortable to say that in the beginning he knew pretty much nothing compared to where he is now (fourteen weeks in orientation). He said the most significant things a new nurse needed to do was “learn time management”, “how to talk with physicians and families”, and to always “know your resources”. The advice Dan would give to a new graduate
nurse in critical care is to do as many different things as you can while you have a
preceptor with you and ask a lot of questions!

Interview with Tammy

Researcher’s Notes/Memos  Tammy was a very outgoing person. She was talkative and
spoke to people like she has known them for a long time. For the first interview, I met her
on her unit after she completed a day shift and we went into the lounge to conduct the
interview. It was most memorable when talking to Tammy. When I asked her when she
decided she wanted to work in critical care, she told me a story about a member of her
family she is very close to who spent a significant amount of time in one of the critical
care units of the hospital where she is now working. Tammy told me about the care her
loved one received. She said the nurses went beyond just caring for him as a patient,
they demonstrated caring about him as a person and caring for her entire family. She
said it “touched her”. She was in nursing school at the time and ever since she had that
experience with her loved one, she knew she was going to work in critical care. You
could hear the passion in her voice and you could see the desire in her eyes. Tammy
seemed to have a good handle on her strengths and weaknesses. She could tell she was
learning as time went by and she was always very realistic about her own knowledge and
abilities. The second interview with Tammy took place on her unit. She was not finished
with her shift and some loose ends to finish. That gave some time to observe her. It was
obvious Tammy was very busy. Much busier than what she talked about in the first
interview. It took about fifteen minutes and we sat down for the final interview. This time
in our discussion Tammy mentioned how much busier she was. She was now caring for
two critical care patients and she was taking admissions into the unit and transfers out of the unit.

When Tammy was asked what she expected to learn during orientation into critical care, she said that by the end of her orientation into critical care she expected to feel competent. She said she knew she would not be an expert nurse but did expect to have a general foundation to care for patients having procedures and sharing common diagnoses. She said she expected to have a “higher level of knowledge” that would enable her to “hold her own”. When asked what she meant when she said “hold her own”, she described being able to care for her patients by herself without a lot of assistance. Tammy said when she cared for a critical care patient for the very first time she felt “excited and proud” but also “more anxious than she had ever felt before”. She said she knew that critical care was a unit where a patient’s status can “change on the dime” and even new nurses starting to care for very stable patients, should have a “heightened awareness” of what happens and what to do. She described her anxiety as a “5” on a scale of 1-10. She said she felt confident enough to dive right in, but also knows she must “proceed with caution”. When asked to describe her level of anxiety, she said it was when “too much information was trying to be processed by her brain”. “Too much is happening at once and you don’t know what to do first”. “You are put in a situation where you are not sure what to do, but you know something needs to be done”. Her biggest concern was to remain safe and to be able to draw that high level of critical thinking when caring for your patients. Tammy said she wants to “be a nurse who makes a difference”. Tammy described being a little bit past the middle of the orientation when she felt as though “concepts were finally making sense”. She understood why she was doing what she was
doing and was able to identify the significant components of an assessment for her patients. When Phase I of orientation was over and she was no longer working with a preceptor, Tammy described “feeling anxious and overwhelmed” again but this time it was “different”. She said now she was overwhelmed because she would no longer be with a preceptor and she did not want to miss anything, or make a mistake that could harm the patient. When saying “make a mistake” Tammy described that as “someone misinterpreting what needed to be done”. Something that happens that can hurt a patient.

When Tammy was asked if she felt like she went through a “change” during orientation, she agreed. She said she did feel like she changed. When starting orientation it was clear quickly that she did not know how to care for critical care patients. As orientation progressed she began to understand what was happening to the patient and why care was being provided as it was. By the end of orientation she felt like she could comfortably care for two stable critical care patients and defined “stable” as patients with stable/normal vital signs, without intravenous infusions, requiring minimal oxygen but still needing some closer observation than what they could get on the floor. Tammy’s advice to a new graduate nurse coming to work in critical care is “don’t be too hard on yourself. When you start everyone knows you don’t know how to do this, and ask a lot of questions.”

**Interview with Nora**

*Researchers Notes/Memos* When I first met Nora, it was obvious she was over the age of 30 and I wondered if this was a second career for her. Nora explained to me that she was an attorney but always wanted to be a nurse. She told me she was 46 years old and then went on to tell me she was very worried. She was very worried if she could do this
job, especially in critical care. Nora was worried she may not be able to keep up with the other nurses and with the work flow. Nora looked great. She had scrubs on, has a nice personality when you first meet her but seemed preoccupied with her thoughts at times. For the first interview we met in the conference room on her unit. Every time I asked Nora a question about her orientation she would mindfully answer the question and then she would talk about her age again. She would either bring up her fear of being able to keep up with her co-workers or it would be something else about her age. I was concerned for Nora. Working in critical care, she needs to be dedicated to the job at hand and not worried about her age. I told her she obviously knows her stuff as she already passed NCLEX and she should just relax and do the best she could. At that point she asked me if I thought she would be able to make friends on the unit since she was so much older than the other nurses. Between the first and second interviews I went to observe Nora on her unit. I was disheartened to see that she was working with her preceptor and every once in a while the preceptor would look the other way and roll her eyes. For a preceptor, that is unacceptable. I found the CNS on the unit and spoke with her about the observations. I was assured the preceptor would be talked to about the behavior. At the second interview, we met at the same place and to my surprise Nora was calmer than at the first interview. She spoke about her age once but in a good way explaining to me that she might be older but she has “life experience” that the other nurses don’t have. The second interview took place when Nora was working in orientation for a total of sixteen weeks. Nora learned quickly after her orientation that she would never be alone when caring for patients. She realized there are always plenty of nurses around for questions and to help when needed.
In the initial interview Nora said that in her critical care orientation she expected to learn the basics of critical care nursing. She expressed concern that it might take her longer than 3 months to get through the first phase of orientation. On her very first day of caring for a critical care patient, she said she “overwhelmed and nervous as all get out!” She said she was nervous about the environment, nervous about being unsure of the workflow, questioned if she would be competent or would it be too much for her to handle? On a scale of 1 -10 Nora ranked her anxiety at “8”.

Nora’s biggest concern coming into critical care was that she did not want to miss anything and she “did not want to do the wrong thing to her patient”. She did not want to harm any patient in any way. Nora described feeling as though she knew close to nothing at the beginning of her orientation and even though things made her anxious or worried, by the time orientation was finished she had learned how to safely care for a critical care patient. She completed the first Phase of orientation in twelve weeks. When she went out to work independently, Nora said she knew what questions to ask, to know her resources and to ask for help if she did not know how to do something. Nora said that when she started working by herself (without a preceptor), she started feeling “anxious”, not knowing where to begin, and having too many thoughts at the same time, like she felt at the beginning of orientation. She did identify that this time the anxiousness was not for the same reason. Being on her own gave rise to fear about harming a patient similar to what she felt at the beginning of her orientation. What Nora found out was when she was no longer working with a preceptor and she was caring for patients alone, other nurses would check up on her and ask her if she had any questions or if she needed any help
with anything. Once that happened Nora knew once more she would not be alone caring for these patients.

**Interview with Erica**

**Researcher’s notes/memos:** Erica was very happy and excited when we met. She started the conversation by telling me she was so excited to be working in critical care. We were in a consultation room and she was sitting in a lounge chair facing me. Throughout the interview she was very “bubbly” and shared a very positive attitude. The interview time seemed to go by quickly. She was most pleasant to talk with and was very honest with the responses she gave as not all of them were positive.

Erica was not present for the final interview. I was told she was struggling with organization skills and learning concepts of critical care nursing. The manager and CNS of the unit helped Erica find a different unit to work on in order to gain some experience and if she wants to try ICU again, that is always an option.

Erica said she decided she wanted to work in critical care while she was in nursing school. She told the story of her grandmother becoming very ill and being a patient in a critical care unit. She said that while her grandmother was in critical care she noticed how amazing the nursing staff was. She described the nurses as being very knowledgeable, wanting to do whatever they could for her grandmother and having command of everything that was happening bedside. Erica shared that during school she did not have any critical care rotations or classes. When Erica started her orientation in critical care she ranked her anxiety at a “9” on a scale of 1-10. The day she cared for her first critical care patient she said there was so much to do and so much to remember she had to write down many things but for the most part needed someone to guide her as she had no idea
where to begin to care for the patient. Erica said she expected to get the majority of what she needs to know during her three months of orientation and she knows this is not going to be easy. One of her biggest worries was that she never wanted to do anything wrong, make an error or hurt a patient. She was excited to learn more about her preceptor and she hoped they would work well together. Erica stated she wants to do well as she has wanted this experience for a long time and it was finally happening.

**Interview with Nancy:**

*Researcher’s note/memos:* Nancy was somewhat quiet but warmed up quickly during the interview. We sat a cross from each other at a table in a conference room on her unit. It seemed a bit awkward as she said nothing if I did not stimulate a conversation. Nancy did tell me she just took her state board examination and was waiting two days for the results. She is soft spoken and very pleasant, just quiet.

When asked why she wants to work in critical care Nancy told me she really did not find any other area in nursing to be as exciting. She said she knows she will have to work very hard and will have to probably study something every night after work but she is ready to do so because she really wants to work here. When asked to rate her anxiety on a scale from 1 – 10 she rated it an “8”. She told me she did not have a critical care class or clinical in nursing school. Her mother is a nurse and has worked in critical care for another system for over 25 years. I asked her what she expects to get from orientation. Nancy said she is hoping to learn the basics and to get a good foundation from which to learn and get more experience. Her biggest fear is making a mistake that could hurt a patient. Nancy described that first day caring for a critical care patient as being amazing. She said she was so nervous and overwhelmed, she would forget something or do
something wrong. Her preceptor pretty much walked her through the entire day but it was also very helpful and she wrote down so many notes for herself. She asked me if it would become routine for her someday. I asked her what she thought and her response was that she guesses it will. Nancy did volunteer that she is going through so many changes right now. She is starting her first nursing job, just got her first apartment and can definitely say she is out on her own. Nancy was very sweet. Five weeks later I was told Nancy left critical care and took a position at a different hospital in the same system working on a medical floor.

Interview with Jessica

Researcher’s notes/memos: Jessica was very talkative. She was all smiles when I met her and whenever I asked her a question I received so much additional information aside from the answer to the question. We met early in the morning at the back of the coffee shop at a table facing one another. Jessica told me she has worked for Aurora for a number of years before and while she was in school. She worked for dietary, outpatient surgery “greeter” and as a nursing assistant. Currently she is married and has a little boy who is two years old. Jessica was very comfortable with conversation, very sweet and very polite.

Jessica told me she decided she wanted to work in critical care when she met one of the nursing assistants from the critical care unit and they would exchange stories of where they worked. Jessica was allowed to shadow a nurse for four hours in the critical care unit and she told me she was “hooked” at that point. Jessica explained she was always told she has good common sense and she thinks that will be an asset to her in her nursing profession. When asked to rate her anxiety on a scale of 1-10 she rated it an “8”. Jessica
explained that she had been anxious to a point however when she started her orientation she became more anxious because there was so much to learn and so much to know. She was very worried she might make a mistake that would harm her patient. Jessica described her first week as being “over the top; overwhelming”. She told me she sat down with herself and thought…”they don’t expect me to know these things, yes it is a lot but I will learn it all in time and to do the best she can”. Jessica told me her first day caring for a critical care patient was absolutely crazy. She started with a very stable patient who was supposed to transfer out to the floor in the afternoon. The patient had a cardiac arrest late morning and did not make it. She said she left there that day questioning her decision about critical care but when she came back the next day spent some time with her preceptor and they went over what happened and why. After their talk she said she felt much better about things and realized that sometimes you can do everything right but somethings just happen. Five weeks later I was told Jessica left critical care and went to work on the unit where she was a nursing assistant and would now be an RN.

**Interview with Deborah**

**Researcher’s notes/memos:** Deborah and I met in the medical library of the hospital where she worked. Deborah was quite reserved, watched what I was doing when setting up my recorder and essentially did not offer much information until I asked questions. We were the only two people in the library except for the librarian and we sat at a table across from one another.

When asked why she chose to work in critical care, Deborah told me she thought it would be exciting and it would be good to care for two patients each shift instead of the
five -eight patients that are cared for by one nurse during the different shifts on the floor. I asked her if she understood how critically ill these patients were and that critical care nursing is very different from being a nurse on the floor. She said she knew all of that and she was ready to learn and to face the challenge. She ranked her anxiety as a “6” on a scale of 1 -10. She told me she did take a critical care class while in school but she did not have any clinical rotation in critical care. On the day when she cared for her first critical care patient, she described it as “overwhelming”. She said she felt like the preceptor just kept barking out do this, then do that, then do this…. She said it was extremely stressful to say the least. Deborah told me she currently is caring for one critical care patient each day she works and she is working on her organization of everything that needs to be done for that patient, her assessments, understanding all of the monitors, documentation, speaking with physicians, following orders and giving report to the next shift. She said she is exhausted every day she works. I asked her what she expects to get from orientation. She said she would like to be able to organize her shift, get done what needs to get done and not feel like she is “running a race” all day.

Deborah left critical care via her own decision three weeks after she started orientation. She is currently working with employment to find another unit less stressful to work on.

**Making Meaning During Transition**

Using grounded theory methodology the new graduate nurses “Making Meaning During Transition” process (Appendix I) was identified. The preliminary theory is composed of two clear emergent stages the new graduate nurse experiences as he or she
transition from student nurse to staff nurse in critical care. The first stage is titled, the
“Beginning” and the second stage is titled, “Moving On”. Each stage has 4 themes that
represent the meanings new graduate nurses gave to their experiences as they transitioned
during orientation. The meanings given to the new graduate nurses’ experiences came
from responses obtained from interviews with the new graduate nurses. Each stage is
discussed in greater detail in the following pages.

**Beginning Stage**

**Feeling Overwhelmed**

The first theme in the Beginning Stage is “Overwhelmed” and was shared by the
majority of new graduate nurses as they described how they felt when they cared for their
first critical care patient. They described emotions ranging from nervous to feeling
overwhelmed. For example, Nora said, “I was nervous as all get out. It was very nerve
racking. I was nervous about the environment. I was nervous about being unsure of the
work flow”. Aaron shared, “At first it was very overwhelming because there is so much
to know even with; who do you call for this? or when do you call for that? Even if my
patient had to have an MRI and the nurse needed to accompany the patient, where is the
MRI department? There is always so much going on, you have to be very good at
prioritizing. I guess the best word is overwhelming.” Joel describes, “I was overwhelmed.
I was very nervous because you don’t know the patient or the process of the unit. I was
nervous on how to do things, when I should do what and where. You don’t want to forget
anything or do something wrong.” Dan described being “very nervous!” “It’s kind of like
the deer in the headlights analogy. You know you really know very little which makes
you think; what am I doing? No two things are the same which also elicits some very
uneasy feelings.” Finally Tammy included she felt “excited”. Tammy said, “I was so
excited and was very proud. I know this is the type of environment where a patient’s status can change on a dime, I am very anxious and overwhelmed by all there is to know and do for a critical care patient.”

**Fear of Making a Mistake**

Participants were asked, “What is your biggest concern coming into critical care nursing?” The responses to that question included Aaron saying, “My biggest concern is that I might miss something and I am very afraid I may screw up.” Joel stated, “My biggest fear is making a mistake, forgetting something or missing something that will negatively affect the patient.” Nora contributed, “My biggest fear is that I might do something wrong and something might happen to my patient.” Chelsea said, “I was fearful I might miss something that would be very critical to the patient.” Overall the new graduate nurses were aware of the possibility that an error can be made by anyone when caring for a critical care patient and when a patient already may be unstable, a mistake could be fatal.

**The Light Bulb Went On**

The next theme was titled “The light bulb went on”. During this time in the orientation the participants described a time during orientation when they felt like things changes and they changed. Chelsea described, “I felt like the light bulb went on. It was a time when I realized I have learned quite a bit in orientation and what is happening to the patient and the interventions being performed on the patient was all making sense.” Aaron described this time occurring around the middle of orientation, at approximately 6 weeks. He said, “It was a time when I reached a point when I feel confident to say that I understand what is happening with the patient and the nursing care provided.” Tammy included that about half way through orientation, “I felt like I was making connections
between what was happening with the patient and what I was doing to care for the patient.” Dan stated, “This was a time when the light bulb went on, I realized I was getting the hang of it. I started to understand why certain interventions were initiated for certain patient conditions.”

Overall, the “light bulb went on” theme seems to be a time when the new graduate nurse became aware of a time when what they were learning was beginning to make sense. This time in the orientation was a very pivotal point as it describes when the new nurse became aware of what they were learning. The new nurses were able to identify what should be done for certain patient problems, learning when and for what to notify the physician, and to begin critical thinking skills.

“Learn, Learn, Learn”

This is the final theme in the Beginning stage. The new graduate nurses described this time as a time when they were able to care for a variety of diagnoses and able to care for two stable critical care patients. They had learned to provide safe patient care and are now ready to learn as much as they can.

Aaron said, “My goal is to every single day learn, learn and learn.” Joel shared, “To get to learn more and get to take care of some very sick patients on my unit.” Tammy stated, “My goal at this point is to just keep learning while caring for critical care patients.” Chelsea shared, “I want to care for many different patients and learn how to care for those diagnoses. I want to be more confident and more efficient. Dan said, “I want to gain as much experience as I can, caring for a wide variety of critical care patients, getting as many opportunities to work with physicians on plans of care, bedside procedures and appropriate goals for my patients.”

Moving On
**Being Anxious**

The first theme in the Moving On stage is being anxious. At this time the new graduate nurse will no longer work with a preceptor but will now care for their patients independently. The majority of new graduate nurses described feeling anxious at this time.

Chelsea said, “I still feel anxious but it is different now. The anxiety no longer applies to if I will make it as a critical care nurse, it is now normal anxiousness while working in the critical care environment.” Aaron shared, “I no longer feel overwhelmed, but I do feel a little anxious when I am learning how to do something new that I have never done before. I no longer have moments where I feel like; God will I ever feel comfortable caring for these patients?” Joel shared, “Once orientation with the preceptor ended, I think I am ready to not have a person so close to me while I am learning and caring for my patients. I am ready to do this on my own.” Tammy said, “I am still anxious and there is a certain amount of feeling overwhelmed at times, however, it is different. Now I know where to start, I know what I need to do, but my anxiety now is making sure I don’t miss something.” The new graduate nurses know they are still feeling some anxiety as they begin to care for patients independently. They know they still have a lot to learn and a lot to experience as they sketch out their own nursing practice.
Know Your Resources

The second theme in the Moving On stage is “Know Your Resources”. Now that the new graduate nurses are not working with a preceptor, they are now the decision maker for what they will do in various situations with their patients. No nurse is ever really alone as there are always other nurses on the unit. A nurse does however have many occasions throughout their shift when they have to make decisions regarding the care of their patients. Chelsea said, “I have all of the other nurses and departments involved with my patient as resources I can use when decision making and when working to problem solve a patient problem.” Aaron explained, “Every nurse I work with is a resource for me. My resources consist of the other nurses on the unit, the charge nurse, the house supervisor, other departments, unit manuals, physicians, and policies I can use to help me decide how to do something, if I should do something, and how to implement what I decide to do.” Nora said, “The other nurses on the unit are there and close to me if I need anything or need help with anything. Overall everyone is extremely helpful and I have resources everywhere to use.”

The new graduate nurses had noticed that all of the nurses on the unit use one another for questions, physical help and more. Such teamwork makes caring for critical patients that much easier and it promotes friendships with colleagues.

I Know This

When the new graduate nurse is no longer caring for patients with a preceptor, there are times when they need to remind themselves that they know what they are doing. They know how to care for two stable critical care patients and are continuing to grow in their nursing practice. Aaron said, “OK I got this! It may take me a minute or two to realize that I do know what to do and this is what I am going to do and why.” Joel shared,
“I felt more comfortable as time went on and I felt like I did understand what was happening and what I should do” Dan stated, “Often I get anxious when I encounter something I have not done before, but when I take the time to think it through, I realize I know what I am doing.”

Sometimes the new graduate nurse is so used to having a preceptor work with them, they have to remind themselves when they are working independently, that they know this, and they do know what they are doing. It is very reassuring to the new graduate nurse to know they are never alone. The other nurses will help them and in a short time of working independently they will realize the significance of teamwork in critical care.

**Learning and Getting Experience**

Once the new graduate nurse realizes they can care for patients independently and that they have many resources at their disposal, the new graduate nurse now needs to learn and gain as much experience as is possible. Aaron stated, “Time and the ability to gain experience is what I need now.” Nora stated, “I am going to need the help of my fellow nurses and my resources so I gain experience to the many different critical care patients. What will make me a better nurse is more learning and more experience.” Joel explained, “It’s going to take time. Some people say I won’t feel comfortable caring for any critical care patient in my unit until twelve – eighteen months after orientation.” Dan said, “I am going to need more experience. This will come with my caring for different diagnoses and my colleagues helping me to learn.” It is now time and experience that will contribute to the nurses’ knowledge and ability to care for critical care patients at all different levels of acuity.
Each stage and each theme was identified from the statements, sentences, messages, and conversations with the interviews throughout their orientation and transition from student nurse to staff nurse in critical care. Those interviews/conversations allowed the investigator to identify like concepts along with how those concepts fit into the transition process.

**Making Meaning During Transition Theory**

A tentative theory, the Making Meaning During Transition (Appendix J) has been constructed from the data obtained from new graduate nurses working through a transition process during orientation in critical care. It is a preliminary theory that is grounded in the research data obtained from interviews of new graduate nurses working in critical care. In this study, new graduate nurses in critical care move through two different stages of orientation. Stage I known as the “Beginning” is when the orientee works with a preceptor. Stage II called “Moving On” is when the orientee works independently.

During Stage I “the Beginning” new graduate nurses experience and made meanings from caring for their first patient, organizing everything to be done in their shift, performing assessments, interacting with physicians and more during orientation. Every experience is new to them, significant to them, and somewhat intense. There are four themes that explain what the new graduate nurses in critical care experienced as they began moving through the transition. The new graduate nurses experienced; feeling overwhelmed, fear of making a mistake, the light bulb goes on and then learn, learn, learn meanings. During Stage I, when the new graduate nurse works with a preceptor is twelve weeks long.
In Stage II of orientation known as the “Moving On” stage, there are 4 themes that represent the meanings new graduate nurses gave to experiences they had when they were caring for patients independently during their transition into critical care. Those themes are; “anxious”, “know your resources”, “I know this”, and “learning and getting experience”. This stage is twelve weeks long. The themes identified in Stage II - “Moving On”, are similar to the themes in Stage I but they are not as intense and do not last as long. There are some similar components to the themes from each stage but overall each theme represents meanings during a specific time in the process of orientation.

Chapter 4 Summary

The results of the study were presented in this chapter. The chapter described the Making Meanings During Transition Theory. First characteristics of the sample were identified along with a synopsis of each of the participants. Researcher memos are identified with the question/answer sheets. The theory from this study came from meanings the new graduate nurses gave to experiences they had during their transition from student nurse to staff nurse in critical care. The meanings were identified and described from interviews of the new graduate nurses during their transition into critical care. The interviews took place at the beginning of the new graduate nurse’s orientation and again at the end of the new graduate nurses’ orientation. The initial stage was titled “The Beginning” and consisted of 4 themes identified as “overwhelmed”, “fear of making a mistake, followed by “the light bulb went on” and finally “learn, learn, learn”. These themes were from Stage I of orientation. Stage II of orientation is when the new graduate nurse begins to work independently. It is during the beginning of this stage that the nurse feels anxious. They don’t have their preceptor working with them anymore, they are now caring for patients on their own. Then the nurse fears of making a mistake,
but not at the same intensity as in the beginning of orientation and it is called “know your resources”. The new graduate nurses described realizing that they might fear of making a mistake but soon realized they knew the resources they could use for questions, problems etc. Next they experienced the realization that they “know this” and they do know what to do, who to go to or how to respond to various situations. Finally they return to “learning and get experience”. With grounded theory, the plan is not to seek to verify a previous hypothesis; it is set out to build inductively an understanding of realities and needs. The aim is to develop a theory derived from or “grounded” in data from the study (Glaser, 2005). The analysis of the data obtained from the questions asked of the participants in this study created the preliminary Making Meaning During Transition Theory.
Chapter 5

Introduction

The tentative “Making Meaning During Transition” theory describes a process experienced by new graduate nurses as they transitioned from student nurse to staff nurse during orientation in critical care. A review of the literature contributed to the investigator’s knowledge on new graduate nurses and new graduate nurses in critical care. This study was guided by Symbolic Interactionism through the use of grounded theory methodology and Benner’s Novice to Expert Theory (1984).

In this chapter, findings are placed within the context of the literature and within the context of the two theories that undergirded the study. Implications of findings are presented. Lastly recommendations for further studies are offered.

The Literature

Two emergent stages were present in this study: The Beginning and Moving On. In addition, each stage was comprised of four themes. That inspection of findings revealed the presence of stages is not new. When performing the review of the literature prior to the beginning of the study, two studies were found that discussed experiences of new graduate nurses (Duchscher, 2008; Washington, 2011). Duchscher (2008) in her study of the experiences of new graduate nurses on a medical/surgical unit reported that new graduate nurses underwent three stages, Doing, Being and Knowing over an eighteen month period and Reddish and Kaplan (2007) in their study identified five stages the new nurse experiences as they become competent in their nursing practice in critical care.

Moreover, in Duchscher’s study (2008) during the Doing stage, (the beginning of orientation) participants discussed experiencing emotions, similar to the findings in the present study. Washington (2011) also describes new graduate nurses as feeling anxiety
at the beginning of their orientation, however, Washington’s definition of anxiety was restricted to what she called “performance anxiety”, which is when someone is anxious because they are being observed and evaluated.

What has not been reported, however, is the array of emotions reported by participants in this study. Two themes, “Overwhelmed” and “Fear of Making a Mistake”, were identified that described how participants felt nervous and overwhelmed the first day they cared for a critical care patient. They also described feeling fearful that they may make a mistake that could potentially harm a patient. It is possible that interviewing new graduate nurses within the first two weeks of their beginning employment in critical care provided a more timely opportunity to reflect on recent, relevant experience. Participants were invited to share their thoughts and feelings openly rather than by means of an instrument, as was the case in the study reported by Washington.

While the investigation of new graduate nurses is not new (Casey & Fink, 2004; Chestnutt & Everhardt, 2007; Duchscher, 2008; Reddish & Kaplan, 2007; Washington, 2011), the majority of the studies did not highlight the specific emotional experiences of the new graduate nurses, specifically feeling overwhelmed and fearful of making a mistake. These emotions became less intense in the second stage, reflected by participant identification of being anxious. Hence, these findings provide a beginning picture of a possible toll that arises during the transition period, expanding what is known about transitions during the orientation period.

These findings are significant, as emotions play an important role in learning; they can either impede learning or they can motivate learning (Dirkx, 2001). Serving as motivation to pursue desires, emotions can create purpose and shape the context of the learning experiences (Merriam & Caffellera, 1999). Emotion plays a critical role in the
construction of meaning and knowledge of the self in the adult learning process (Dirkx, 2001). Entering the cognitive system, emotions are recognized and can alter thought patterns, affecting the experience of how adults learn (Opengart, 2005). Through the experience of emotions, individuals come to recognize what is cognitively and affectively of value, helping to determine how and why they respond to the world around them. Emotions are part of one’s learning process and part of one’s everyday experiences (Dirkx, 2006). Meaningful learning occurs after emotional factors facilitate personal transformation, reflected in this study when participants indicated that “the light bulb went on”. However, this only occurred after participants experienced feelings of being overwhelmed and fearful of inflicting harm.

Some emotions have a positive effect on learning and other emotions block the learning process. They influence our ability to process information and to accurately understand what we encounter (Dirkx, 2006). This is very significant when examining new graduate nurses learning during orientation in critical care. As findings indicate, emotions were present in both stages of the basic social process; however, the intensity was less in the second stage. Moreover, once participants were able to identify their emotions, they were better able to process information. Thus, it is possible that they were able to make meaning once their emotions were diminished.

Other work focused on evaluating the cognitive growth and skill attainment of the new graduate nurse. For example, Chestnutt and Everhardt (2007) sought to improve the orientation on a surgical ICU, when Reddish and Kaplan (2007) sought to identify when a new graduate nurse can be considered competent, while Parker (2008) tried to identify factors that impact a new graduate nurse’s transition into nursing.
Participants in this study indicated they experienced a point at which knowledge and practice came together, similar to findings from Duchscher (2008) and Reddish and Kaplan (2007). In the second stage of Duchscher’s study (Being Stage), she describes the new graduate nurse experiencing times of “understanding” and “rapid learning”. Reddish and Kaplan (2007) in their journey to identify when new graduate nurses can be considered to be “competent”, also identified a stage when the new graduate nurse begins to create “mental connections between the patients and appropriate interventions”. In the beginning stage of this study, the new graduate nurse identifies a time when the “light bulb went on” and described this as experiencing an awareness that what they were learning was beginning to make sense. As in Duchscher’s study, after the new graduate nurse experiences the “understanding” of what they are learning, the participants in this study then experienced a time of learning and learning some more.

The current study departed from many of the other studies as it specifically captured what new graduate nurses experienced when they started to care for critical care patients independently. It addressed what the new graduate nurses thought and felt when starting to care for patients by themselves along with other notable moments they experienced as they were “moving on” in their journey to be a staff nurse in critical care.

**Theoretical Perspectives**

Findings may also be viewed from the theoretical perspectives that underpin the study. The assumptions of symbolic interactionism include that humans act toward things on the basis of the meanings those things have for them. Meanings come from interpretive processes that are the result of how individuals interpret their surroundings, topics, symbols, experiences, interactions, and social roles (Blumer, 1969).
New graduate nurses starting their career in critical care may enter with minimal to no experience caring for such high acuity patients. They begin their orientation having never cared for a patient who may or may not be cognoscente, connected to many intravenous lines and monitors, intubated and on a ventilator, attached to a variety of drains and each patient with a different diagnoses, history, set of interventions and potential outcomes. When they begin to care for these patients, they will each learn at a different pace and throughout their orientation will apply meanings to what they see, what they are told to do, what happens around them, how patients respond, and everything and everyone they encounter and have contact with.

The basic social process in this study is “Making Meaning During Transition”. It occurs over time and consists of two different stages. During each stage the new graduate nurse is making meanings from their surroundings, their interactions with patients and families, what they are taught, their patient assessments, physician interactions etc. The meanings they make and the meanings they will be guided to make will impact their learning, their growth, their experiences and their transition from being a student nurse to staff nurse in critical care.

Benner (1984) Novice to Expert Theory was initially chosen to guide this study. Her theory describes how a new graduate nurse is a “novice” nurse. The “novice” nurse is a task oriented nurse. The novice nurse can complete various duties and tasks, but these nurses have not developed the experience yet where they have developed critical thinking skills. At this initial point in their career, they are not able to assess a situation and identify the immediate problem at hand. All nurses start as “novice” nurses and they will move to the “advanced beginner” level once they have accomplished learning patient assessment skills, can identify some appropriate interventions related to diagnoses and
have demonstrated an understanding of clinical knowledge, decision making, and coordination and collaboration skills.

Benner’s Novice to Expert Theory (1984) provided a starting point for describing the new graduate nurse in critical care. Moreover, this theory describes how nurses behavior and skills develop and increase over time. For the new graduate nurse in critical care, they might stay in the “novice” role for a while as they have so much to learn just to be able to care for a stable patient. Once the stages and themes were identified in the current study, it became obvious that Benner’s theory did not address the emotional aspects of new graduate nurses, the point in time when the “light bulb went on”, the anxiety experienced when caring for patients independently, nor the realization the new graduate nurses experienced that knowing their resources was essential when caring for patients independently.

One of the reasons Benner’s Novice to Expert theory does not apply to the current study is because Benner’s theory does not address emotions experienced by nurses at the various levels, its focus is isolated to cognitive ability and cognitive growth. Also Benner’s theory expands and is applicable to the nurse over the lifetime of their career, whereas the current study only focused on the first sixteen weeks the new graduate nurses spent working in critical care. Thus while a common theory employed in practice, other transition theories may have greater applicability.

Schlossberg’s Transition Theory (2000) describes a transition as any event or nonevent that results in changes relationships, routines, assumptions and roles. The new graduate nurse learning to become a staff nurse in critical care is an anticipated event according to Schlossberg. When the new graduate nurse begins their orientation in critical care they are “moving into” the transition. In this study as the new graduate nurse
cares for their first patient they are anxious and overwhelmed. As they begin to “move through” the transition they fear they may make a mistake that could potentially harm a patient. From that point the new graduate nurse experiences the time when “the light bulb goes on” and they realize that what they are learning is starting to make sense. They continue to learn as they “move through” the transition. When the new graduate nurse begins to care for patients independently, they once again became anxious however, it is less intense and did not last as long as it did when they cared for their first critical care patient. The new graduate nurses immediately realized they know their resources and they do know how to care for two stable critical care patients. As they “move out” of the transition the new graduate nurse continued to care for a variety of patients and focused on gaining as much experience as they can.

Schlossberg (2000) describes the 4 S’s in her theory that are four major sets of factors that influence a person’s ability to cope with a transition. Situation, Self, Support and Strategies help the person going through the transition identify what triggered the transition, what personal characteristics affected one’s view of life, what intimate relationships helped or hindered going through the transition and what strategies and/or coping skills helped with moving through the transition. In this study, it is possible that the identification of being overwhelmed, fearful of making mistakes, being anxious, acknowledging their degree of knowledge could be reflective of the Self component of Schlossberg’s theory. Similarly, knowing your resources could be reflective of the Support component.

Another theory within which to view findings is that of Meleis (2010). According to Meleis’ (2010) Transition Theory, a transition is a passage from one fairly stable state to another fairly stable state; a process triggered by change. She offers that in each
transition there is a sense of movement, development and a flow associated with it (Meleis, 2010). Although much of Meleis’ work is with people who become ill and go through transition during their illness and healing, she does describe, that nurses go through their own transitions when they begin employment post graduation from school when they transition from student nurse to staff nurse, when nurses change their roles in nursing such as a staff nurse who becomes a manager of a patient care unit, and nurses who go back to school to become advanced practice nurses to name a few.

Placing findings from the current study within the context of Meleis’ (2010) theory, new graduate nurses (a fairly stable state) who move through a period of sixteen weeks of experiencing emotions, being fearful they may harm a patient, becoming aware that what they are learning is making sense, caring for patients independently, anxious again, realizing they know their resources and they know how to care for two stable critical care patients and continuing to gain as much experience as possible. By the end of those sixteen weeks, the new graduate nurse is a staff nurse in critical care (another fairly stable state). Between beginning as a student nurse and finishing as a staff nurse in critical care, the nurse worked through changing, developing, learning, accepting and movement to their new role as a staff nurse in critical care.

Meleis’ Transition Theory (2010) works with and is applicable to the current study and what happened to that new graduate nurse as they transitioned to staff nurse in critical care. This transition theory may be the most applicable lens from which to view the transition that took place for these new graduate nurses.
Limitations

Two limitations in this study merit attention: Recruitment and attrition. At the beginning of this study, the goal was to recruit as many new graduate nurses who wanted to participate into the study. At a minimum, the investigator anticipated being able to recruit ten to fifteen participants. IRB approval was obtained quickly from the educational institution, site approval took longer than anticipated. Thus, by the time site IRB approval was obtained, new graduate nurses hired to work in critical care were already too far into their orientation to participate in this study. Thus, only ten participants were found and agreed to participate in the study. All ten were interviewed at the beginning of their orientation.

Within the first four to six weeks of the new graduate nurses orienting into critical care, four left critical care to work on medical/surgical units within the same healthcare system. Those four new graduate nurses were not from the same critical care unit. The decisions for the new graduate nurses to not continue orientation in critical care at that time was mutual between the new graduate nurses and leadership on the critical care units. Their leaving critical care reduced the number of participants to six. Moreover, when the researcher sought additional information from the remaining six participants, only five participants responded. The final sample of five participants for this study raises questions about the degree of data saturation, limiting the investigator’s ability to generate a grounded theory that comprehensively describes the transition process experienced by participants. Nonetheless, it is important to note that, in this study with the five participants, saturation was achieved for each theme. However, given the limited sample size, even with saturation achieved, these findings will be considered “preliminary”, with the goal to repeat the study with a larger sample size.
Nursing Implications

Nursing Practice

Nursing practice consists of many different areas in today’s nurse. We know there is a nursing shortage on the horizon, that many new nurses leave their first job within one year and hospitals are hiring new graduate nurses to work in high acuity patient care areas where in the past the new graduate nurse was asked to work on a medical/surgical unit for a year in order to learn basic nursing experience and then they could apply to work in the high acuity units (Valdez, 2008).

One area that is very influential and extremely important in the career of new graduate nurses is their orientation. Critical care units need to be knowledgeable of how the new graduate nurse cognitively grows during orientation and we need to know not only what the new graduate nurse learns during orientation but also what they experience emotionally during their transition. Such information will allow us to identify the needs of new graduate nurses and how their emotions may be contributing to their progress and success during their transition and orientation. Students learn and perform more successfully when they feel secure, happy and excited about the subject matter (Wolfe, 2006). Although emotions have the potential to energize a student’s thinking, emotional states also have the potential to interfere with learning. If students or new graduate nurses are overly excited or enthusiastic, they might work carelessly or quickly rather than work methodically or carefully. Learners who are anxious or depressed about learning often do not feel competent academically. They do not trust themselves and are likely to take more time double-checking and questioning their work (Opengart, 2005).

Although emotions and learning are symbiotic in the cognitive experience, the two constructs are just as vital in creating settings in which learning will take place. Educators
need to give thought to the type of environment needed for learners to feel safe to interact, experience and explore new topics. The learner must feel safe to succeed. Orientation and learning should focus on the practice of creating emotionally safe environments where learners are free to construct their realities (Cranton, 2006). Positive, emotionally safe environments during orientation will provide for optimal learning.

It is important that nursing units provide a meaningful orientation that will meet the needs of the new nurse and provide education, support and reassurance. Based on these experiences, it would be beneficial for everyone who works with orientees, (educators, clinical nurse specialists and preceptors) to know that new graduate nurses are extremely overwhelmed when they begin their orientation and they are also very afraid they might harm or hurt a patient. Knowing this before the orientation begins gives everyone important information about their frame of mind along with their thoughts, emotions and fears. Preceptors can use this information at the beginning of the orientation to reassure new nurses and let them know they are right there at their side and will not allow the orientee to make any harmful mistakes. Preceptors can share that new graduates will experience intense emotions and that they should not feel they are unusual. They will teach the new nurse and at the same time make sure the patient’s needs are being met. With repetitive reassurance and lessening of the fear and anxiety, the orientee will be in a better frame of mind for learning.

It is important for everyone working with the new graduate nurse to know that at approximately six to eight weeks into orientation the orientee’s “light bulb goes on”. Once it is evident that for the new graduate nurse that concepts are making sense and that new graduate nurses understand interventions for specific diagnoses, they can now move
forward with giving more autonomy to the new nurse and provide them with a variety of experiences caring for critical care patients.

Information gained from this study allows individuals involved in orientation programs to implement strategies to help the new graduate nurses deal with any anxiety or fear they might experience. Strategies can reinforce how critical attending to emotions are in order to engage new graduate nurses in their learning and overall nursing practice.

**Research**

Identifying the process of transition experienced by new graduate nurses during their orientation into critical care provides us with new information about the emotions experienced by these nurses. The creation of this tentative mid-range nursing theory should stimulate additional research on this topic. Given the sample size replication of this study with a larger sample size would be beneficial, as would extending the time beyond orientation. Another area of research worthy of being considered would be interviewing new graduate nurses from other high acuity areas, such as the emergency room and the labor and birth suite. Lastly, undertaking a meta-synthesis of qualitative work done related to transition would help consolidate understanding of the experience.

Future recommendations for this study includes: 1) Replicate this study with a larger sample size to assure saturation of the data. Obtaining input from additional participants will contribute to developing a descriptive grounded theory. 2) Perform a qualitative study where an experienced nurse leaves their area of practice and they begin to work on a nursing unit completely new to them. Interview such nurses during and throughout the orientation process and see if they identify the same stages as when they were a new graduate nurse. 3) Replicate this study with a larger sample size in one of the
other units where new graduate nurses are now allowed to work without having prior nursing experience such as Labor and Delivery, the Emergency Department, or Surgery.

4) Perform another qualitative study with new graduate nurses in critical care and with the preceptors of the new nurses. The study would include interviews with the new graduate nurses and interviews with the preceptors (to be kept separate). Hearing what the preceptors have to say related to the new graduate nurse transition would be very interesting since the current study was specific to the new graduate nurses in critical care.

Policy

Institutions and hospital systems hold a variety of policies related specifically to nursing and nursing practice and to the care the nurse provides to the patients and their families. This study, its results and its implications are significant when creating or reviewing the Graduate Nurse Policy and any Human Resource policies that might contain information on the new graduate nurse and/or orientation. The Graduate Nurse policy typically contains information related to the paperwork of permits and taking state board examinations. The policy usually includes information about orientation programs, length of orientation and identifies success measures for the new graduate nurse. The policy usually does not address specifics about orientation programs, however with many new studies providing important information about the orientation of a new nurse, this policy might be the right place to address components within orientation that will be required for some or all departments. It might itemize specific areas to be addressed in specific orientation programs such as critical care? The policy might also address the length of orientation for specific areas. New policies might also be written for new concepts initiated in the orientation programs. When one thinks of policies as the written guide to how things are to be done, there are many different policies that could include
the new graduate nurse, what they do and what there is for them to participate in such as residency programs, new graduate nurse “talking” groups, orientation programs and much more. Perhaps there is a policy about how preceptors are determined, how sensitive are they to emotional aspect of interpersonal interaction?

**Nursing Education**

To identify what happens during the transition process of a new graduate nurse in critical care provides significant information that can affect and/or stimulate nursing education (Reddish & Kaplan, 2007). To know what the new graduate nurse feels and the stages they move through is important information that needs to be a part of nursing education for preceptors. When preceptors know this information they can prepare to address these issues when working with the new graduate nurse (Proulx & Bourcier, 2008). Knowing when the new graduate nurse in critical care is going through their time of intense learning might be beneficial to the unit educator or the Clinical Nurse Specialist so they can enroll the orientee in some education classes such as a case study day, a class that goes through various case studies of patients throughout the day, or a class on critical thinking which may help the new graduate nurse to purposefully begin to look at specific information on their patients and think about specific interventions and potential outcomes. Perhaps institutions may wish to consider offering a class or providing some formal guidance in terms of educating preceptors in terms of emotional intelligence.

Many hospital systems have educational offerings specifically for new graduate nurses and hopefully the information from this study will provide additional information that can be shared in different classes for a variety of audiences. Knowing the results of this study also provides information that would be beneficial to bring up when the new
graduate nurse is still in nursing school. If they become aware that they will go through different stages in a transition process, knowing about it ahead of time makes it less stressful and they can also learn to understand and how to deal with some of the emotions before they experience them.

**Chapter Summary**

Findings were discussed within the context of the literature and theory. This study identified the new graduate nurses going through stages as they transitioned to staff nurse in critical care. Duchscher’s (2008) study and Reddish and Kaplan (2007) also identified stages their new graduate nurses went through as they moved forward in their nursing practice. The emotional component identified in this study was also identified in two other research studies with new graduate nurses. This emotional component might be a new concept for nursing orientation but is identified as significant in the literature on adult learning. It is important and needs to be a part of creating meaningful orientation programs. Another area that was identified in this study and in two other studies on new graduate nurses was a time when the new graduate nurse could describe that what they were learning was beginning to make sense.

Benner’s Novice to Expert Theory was used to guide this study however in retrospect, other that identifying a new graduate nurse as a “novice” nurse, Benner’s theory focused solely on cognitive development and skill attainment. Benner’s theory did not contribute to this study as was hoped. Schlossberg’s Transition Theory (2000) partially applied to this research study but it was Meleis’ Transition Theory (2010) that fit what the new graduate nurses in this study experienced as they moved from being a student nurse to staff nurse in critical care. Implications within nursing practice, education, research and policy were reviewed with recommendations discussed in order
apply what was learned from this study into orientation programs, to be brought to the attention of hospitals, preceptors, nursing faculty and new graduate nurses themselves so awareness of what the new graduate nurse experiences can be addressed before orientation begins, hence helping the new graduate nurse to be less emotional and know that those teaching them are aware of what they experience, address it and help them to move forward to promote their success. Future recommendations were offered with the most significant recommendation to complete this study with additional participants in order to attain data saturation and validity to the study. There were too many new concepts identified in this study that if determined valid could help many new graduate nurses wanting to work in critical care.
References


APPENDIX A

UWM – Milwaukee IRB
Department of University Safety & Assurances

New Study - Notice of IRB Expedited Approval

Date: April 19, 2011
To: Karen Morin, RN DSN ANEF
Dept: Nursing
Cc: Mari St Clair, RN, MS
IRB#: 11.329
Title: The Transition Process Experienced by New Graduate Nurses Working in Critical Care

After review of your research protocol by the University of Wisconsin – Milwaukee Institutional Review Board, your protocol has been approved as minimal risk Expedited under Category 6 and 7 as governed by 45 CFR 46.110. This protocol has been approved on April 19, 2011 for one year. IRB approval will expire on April 18, 2012. If you plan to continue any research related activities (e.g., enrollment of subjects, study interventions, data analysis, etc.) past the date of IRB expiration, a continuation for IRB approval must be filed by the submission deadline. If the study is closed or completed before the IRB expiration date, please notify the IRB by completing and submitting the Continuing Review form found on the IRB website. Unless specifically where the change is necessary to eliminate apparent immediate hazards to the subjects, any proposed changes to the protocol must be reviewed by the IRB before implementation. It is the principal investigator’s responsibility to adhere to the policies and guidelines set forth by the UWM IRB and maintain proper documentation of its records and promptly report to the IRB any adverse events which require reporting. It is the principal investigator’s responsibility to adhere to UWM and UW System Policies, and any applicable state and federal laws governing activities the principal investigator may seek to employ (e.g., FERPA, Radiation Safety, UWM Data Security, UW System policy on Prizes, Awards and Gifts, state gambling laws, etc.) which are independent of IRB review/approval. Contact the IRB office if you have any further questions. Thank you for your cooperation and best wishes for a successful project.

Respectfully,

Melissa C. Spadanuda

IRB Administrator
Investigators:
Mari St Clair RN MS
Clinical Nurse Specialist
Surgical ICU / ASLMC
UWM Doctoral Candidate

Karin Morin RN DSN ANEF
Director of PhD Program Nursing
Major Professor to Mari St Clair

Design: Qualitative Grounded Theory
Title: The Transition Process Experienced by New Graduate Nurses in Critical Care

Purpose:
The area of research is nursing practice, specifically the transition period immediately following graduation from nursing school, starting their first job in critical care and up to the time of completing orientation.

The purpose of this study is to describe the process and create a theory that describes what is experienced by new graduate nurses, who begin their first professional employment in a specialized area of nursing practice, that of critical care.

Historically, clinical agencies required new graduate nurses to obtain clinical experience on medical/surgical units prior to applying to work in critical care units. However, given the supply of nurses, this practice has changed, and new graduate nurses are now hired to work in critical care. As little information exists about how best to incorporate these new graduate nurses into the critical care unit, it is imperative that we gain as much knowledge as possible about these new graduate nurses so we can create orientation programs that meet their needs, facilitate their transition and promote their success as critical care nurses.

There is no literature that directly identifies or describes what new graduate nurses experience as they transition from student nurse to staff nurse in critical care. Duscher (2008) studied the transition process of new graduate nurses on medical/surgical patient care units. He was able to identify different stages the new graduate nurse experiences as they transition from student nurse to staff nurse. The information obtained from that study was very beneficial for orientation programs on medical/surgical units and for the overall understanding of the needs of a new graduate nurse.

It is now important that we learn and understand the transition process experienced by new graduate nurses in critical care so we can create orientation programs sensitive to the needs of the new graduate nurse in order to promote and support their success as a critical care staff nurse.
Recruitment and Consent:

The study will be open to all new graduate nurses hired to work in critical care within the Aurora Health Care System except for the Surgical Intensive Care Unit at Aurora St Lukes Medical Center which is the critical care unit the investigator works as the Clinical Nurse Specialist. The sample for this study will be a minimum of ten new graduate nurses working in critical care. The maximum number of participants will be identified when answers to the questions during the interview are no longer eliciting new information.

Inclusion criteria: must be hired to work in critical care, must be able to read, write and understand English, be eighteen years of age or older and must have graduated from an accredited nursing school program.

Exclusion criteria: must not have started working as a graduate nurse in any other nursing care area, and must not have worked in the nurse extern role in critical care during their senior year of nursing school.

Procedure:

Once the new graduate nurse is hired to work in the critical care unit, the new graduate nurse meets with the Clinical Nurse Specialist, Nurse Clinician, or Nurse Educator of the unit to discuss the orientation process and to sign up for required classes related to critical care. At this time the Clinical Nurse Specialist, Nurse Clinician or Nurse Educator will tell the new graduate nurse about the research study and will give each new graduate nurse an “Invitation to Participate” form (Appendix A) which describes the research study. They will inform the new graduate nurse that if they wish to participate in the study, they must complete the contact information on the “Invitation to Participate” form and give the form back to the Clinical Nurse Specialist, Nurse Clinician or Nurse Educator within one week of their receiving the form.

The Clinical Nurse Specialist, Nurse Clinician, or Nurse Educator will give the contact information to the researcher. The researcher will then contact the new graduate nurses wishing to participate and set up a time and place to meet with each of them to discuss the study and to obtain written consent (Appendix B) to participate. It will be explicit and clearly explained to the new graduate nurses verbally and in the consent that the participation in this study is completely voluntary and they can withdraw from the study at anytime with no repercussions to them. It will also be explained that any personal information about the participants will be kept in a locked file drawer in the researcher’s office and the information will be destroyed at the end of the study.

Data Collection:

Each participant will meet with the researcher for an approximate sixty minute interview within the first three weeks of their orientation into critical care. A second sixty minute interview will take place three months later at the end of their orientation. During each interview the participants will be asked questions (Appendix C) related to their experiences, behaviors, thoughts, feelings etc during their orientation into critical care. Each interview will be audio-taped and at a later time will be transcribed to paper word
for word by the researcher. In a grounded theory study the transcribed information will be analyzed many times and the data will be coded for “like” categories.

The “like” categories and information will then be analyzed with the intent to create a theory that describes the transition process experienced by new graduate nurses working in critical care. Findings will be reported in the aggregate. Once completed, the findings will be presented to the participants with the intent of ensuring credibility.

**Benefits for Aurora Health Care:**

The theory/data generated from this research study will provide insightful information that can be incorporated into the new graduate nurse critical care orientation. Knowing what the new graduate nurse in critical care experiences during this transition process will allow us to create orientation programs that are sensitive to the needs of this new graduate nurse and will promote and support success of these new graduate nurses hired to work in this high acuity patient care area.

**Risks to Participants:**

There are minimal to no risks related to this research study. There is a minimal likelihood of feeling coerced to participate in the study. This may come from a new graduate nurse feeling they should participate in everything offered in their new work area. The decision to participate or not participate will repetitively be explained to the new graduate nurses with emphasis on no repercussions if they choose not to participate or to withdraw from the study.

All data will be kept in a locked file in the researcher’s office. The participants will be assigned given names that will be used to identify them in the study in place of their real names. Only the principle researcher and major professor will have access to that data. Any identifiable information will be shredded and discarded at the end of the study.

**Benefits and Compensation:**

A direct benefit for the new graduate nurse is that it allows them to share their experiences, thoughts, feelings etc. with another person which at times can be therapeutic when working in such a stressful environment.

The risk is so extremely minimal that the benefit of having another person to share their experience with should be the only outcome.

A $25.00 gift card will be given to each participant at the end of the final interview.
Appendix C

Invitation to Participate
You are invited to participate in a research study undertaken by me, a Doctoral student from the University of Wisconsin – Milwaukee. The purpose of the study is to understand the process new graduate nurses hired to work in critical care experience during their orientation as they transition from student nurse to staff nurse.

New graduate nurses working in critical care are a fairly new concept within nursing. In order for new graduate nurses to be successful in critical care, it is important to learn everything possible about new graduate nurses working in this high acuity patient care area. The information obtained from this study will allow for the creation of orientation programs that meet the needs of the new graduate nurse in critical care, and may possibly promote success as a critical care staff nurse.

Participation in this study is completely voluntary. You are not required to participate and can leave the study at anytime with no repercussions. Participation involves being interviewed by the researcher for approximately 60 minutes at the beginning of your orientation and again approximately 3 months later, at the end of your orientation. The questions will reference your thoughts, feelings and experiences during your orientation in critical care.

Should you agree to participate, you will receive a $25 gift card at the end of the study. In order for the researcher to contact those interested in participating in the study the following contact information must be filled out.
Name____________________________________  Date____________________

ICU Unit__________________________________________________________

Nursing School_____________________________________________________

Home phone___________________________ Cell phone___________________

Date for start of orientation____________________________________

Address___________________________________________________________

________________________________________________________________________

Please turn in this completed form to the Clinical Nurse Specialist of your unit. The researcher will contact you within 5 days of receiving the form.

Thank you

Mari B St Clair RN MS

Aurora St Lukes Medical Center

(414) 649-5709
APPENDIX D

Consent
Subject
name:_______________________________________________________________

Informed Consent/Authorization to Participate in a Research Study

Study Title: The Transition Process Experienced by New Graduate Nurses Working in Critical Care

You can choose whether or not you want to participate in this study. The information in this informed consent form will help you decide if you want to be part of the study or not. Please take your time to decide, and talk about this study with your colleagues if you like. If you decide you do not want to sign this consent form, you cannot take part in this research study.

You are being asked to take part in a research study. You are being asked to voluntarily take part in a research study that will explore the transition process experienced by new graduate nurses working in critical care. If critical care units have a good understanding of the transition process experienced by new graduate nurses, such information can be used to create orientation programs that are sensitive to the needs of these new graduate nurses working in critical care.

You are being asked to take part because you are a new graduate nurse working in a critical care unit at Aurora Health Care.

This study is being conducted by Mari St Clair, MS, Principal Investigator.

Where is this study being done?
This study is being conducted at 10 Aurora Health Care Hospitals: Aurora St Luke’s Medical Center, Aurora St Luke’s South Shore, Aurora Medical Center Grafton, Aurora Medical Center Oshkosh, Aurora Medical Center Sinai, Aurora Medical Center Burlington, Aurora Medical Center West Allis, Aurora Medical Center Sheboygan, Aurora Medical Center Hartford, Aurora Medical Center Baycare, and Aurora Medical Center Kenosha.

How many people will take part in this study?
Up to 15 new graduate nurses working in critical care units will be invited to take part in this study at the 10 Aurora Health Care hospitals.
Who is sponsoring this study?

There are no sponsors for this study.

What is involved in the study?

If you agree to participate in this study, you will have an interview with the Principle Investigator at the beginning of your orientation and again at the end of your orientation. Each interview will last approximately one hour long and will be audio-taped. The Principle Investigator will also transcribe the interview into hard copy documents. Once the study is completed you will be invited to attend a review of the results of the study.

How long will you be in this study?

If you choose to participate in this study, your participation is going to last approximately 3 months. The whole study, outside of the time you will directly participate, is expected to last for 12 months.

What are the risks to you from participating in this study?

This study involves minimal risk to you, that is, it involves no greater risk than ordinarily encountered in everyday life. You don’t have to answer any questions that you do not want to answer.

Are there benefits to you from participating in this study?

Your participation in this study will help to determine how new graduate nurses in critical care transition to their professional role. You will receive a $25 gift card for participating in this research study, which will be given to you at the completion of the second interview.

What are your rights if you take part in this study?

This study has been reviewed and approved by an Aurora Health Care Institutional Review Board (Aurora IRB). An IRB is made up of a group of people (both scientists and lay persons) who review and approve research studies. The IRB checks that the research being done follows federal regulations for human subject research. IRB approval of a research study only means that everything is okay according to the federal regulations and Aurora policies to start the study. The IRB wants you to know that only you can decide if being in this study is the right decision.

Being in this study is your choice. Because you volunteer to be in this study, you may also choose to leave this study at any time. If you do not want to participate, or if you later leave the study, you will not be treated differently, your employment will not be affected in a negative way, and you will not lose any benefits you would normally receive.
For general questions, concerns, or complaints about the study, contact the Principal Investigator, Mari St Clair RN MS, at telephone number 262-309-4240. If you want to speak with someone not part of this study about your rights as a human subject, contact the Human Protections Administrator in the Aurora Research Subject Protection Program office at 414.219.7744 or toll-free at 1.877.219.7744 (outside the Milwaukee area). **What about the confidentiality of the transcription of my interview?**

Your name will not appear on the transcripts of the interview. Your voice recordings of the interviews will be kept on a password protected drive and accessed only by the Principle Investigator. The voice recordings will be erased upon conclusion of the study.

**Signature Section**

This study has been explained to me by:

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I, ________________________________, have read, or have had read to me, this informed consent document and have had my questions answered. I know that I can ask more questions any time today or in the future. I agree to take part in this research study as it is described. I have been told about the potential risks and benefits of this research study. I have been told that I will be given a copy of this informed consent document after it has been signed but before I participate in this study. I can also ask for another copy at any time.

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<th>Signature of witness [Use only if appropriate]**</th>
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**The signature of a witness is not required when the subject reads and is capable of understanding the consent document, as outlined in 21 CFR 50.27(b)(1). When the subject is unable or has no opportunity to read the consent document to verify the accuracy and completeness of the information provided, the signature of a witness is required, 21 CFR 50.27(b)(2). The intended purpose is to have the witness present during the entire consent interview and to attest to the accuracy of the presentation and the apparent understanding of the subject.**
APPENDIX E

Initial and Post Interview Questions
Interview Questions

Initial Interview Questions

1. What made you decide to work in critical care?
2. What nursing program did you graduate from?
3. Do you feel like your school prepared you to work in critical care?
4. Did you have a critical care clinical rotation while you were in school?
5. Did you have a critical care theory class while in nursing school?
6. In the literature on new nurses graduating from school and starting their first job, they describe these new nurses as experiencing stress and actual grieving from saying goodbye to the routines they developed over the past few years, saying goodbye to people they studied with, lived with, ate with and leaving professors who taught them and mentored them. Have you experienced anything like this after graduation?
7. What do you expect to learn in your orientation to critical care?
8. What do you feel you bring to nursing in critical care?
9. What is your biggest concern coming into critical care nursing?
10. What were your thoughts and feelings the day you cared for your first critical care patient?
11. On a scale of 1-10 with 10 being the most severe, rate the level of anxiety you have coming into critical care nursing?
12. Is there anything specific you think about or are concerned with starting your orientation in critical care?
13. What do you see as the difference between working on a medical/surgical floor vs. working in critical care?
14. Describe for me, what is critical care nursing?
15. Tell me about the preceptor you have for your orientation into critical care.
16. Where do you expect to be at the end of this orientation into critical care?

Final Interview Questions

1. Tell me about your orientation.
2. In general, what have you learned in your orientation to critical care?
3. Was there any time during your orientation when you felt like all of a sudden the “light bulb” went on?, a time when things began to make sense and when you began identifying what was appropriate for the critical care patient?
4. What do you see to be the biggest difference between working as a student nurse vs. working as a staff nurse?
5. When new graduate nurses begin their orientation in critical care they usually describe it as “overwhelming”, now that your orientation is over, how do you feel about being a nurse in critical care?
6. As a nurse in critical care, what do you identify as one of your strengths?
7. As a nurse in critical care, what do you identify as one of your weaknesses?
8. Was there a time during your orientation when you questioned if you would be able to do this? If so when?
9. On a scale of 1-10 with 10 being the most severe, what is your level of anxiety caring for critical care patients?
10. Now that orientation is over, what goal(s) do you have for yourself?
11. Now that orientation is over, what resources are available to you if you need help caring for a critical care patient?
12. What part of your orientation did you find to be the most challenging?
13. In your own words, describe nursing in critical care
14. You just completed your orientation to critical care. What types of patients do you feel the most comfortable caring for?
15. Would you do this again? Would you start your nursing career in critical care? Why or why not?
16. Now off of orientation, in one word, tell me how you feel when caring for a critical care patient.
17. You have been working without a preceptor, what do you think will help you to become proficient at critical care nursing?
APPENDIX F

Email Questions
Email Questions for the Final Interview

1. Prior to you being hired to work as a nurse in critical care, how long did you know you wanted to work in the critical care environment?

2. Do you as a new graduate nurse who completed orientation in critical care feel that you did experience a transition of some sort when you went from graduate nurse to staff nurse in critical care? If so, describe what you experienced during that transition period.

3. Many of the nurses in the interviews stated that their school of nursing did prepare them for working as a new graduate nurse in critical care. How did your nursing program prepare you to work in critical care?

4. Some of the nurses said in their interviews that they had a critical care theory class while in school that prepared them for working in critical care. What did that critical care theory course teach you that helped you as a new graduate nurse in critical care? answer question 4 or question 5

5. If you did not have a theory class in critical care prior to your orientation as a new graduate nurse, what do you think (if anything) would have been very important to learn about prior to you starting your orientation into critical care?

6. I asked each of you if post graduation you felt like you experienced any additional stress while starting your orientation program as a graduate nurse in critical care? By additional stress I described how many people post graduation feel a sense of loss or grieving as they are now moving on. The people you had lunch with, studied with, learned with, partied with etc are no longer with you sharing those experiences with you. If you feel like you did experience some of this additional stress, how did it impact or affect you as you started your orientation in critical care?

7. What do you feel a new graduate nurse must possess in order to be successful as a staff nurse in critical care?

8. During the interviews when asked how you felt the first day of orientation when you were going to take care of your first critical care patient, the majority describe feeling "overwhelmed". Describe for me what does "overwhelmed" mean? When feeling overwhelmed, how do you feel, what are you experiencing/thinking?

9. When asked, what do you expect to learn in your critical care orientation? everyone said they expected to be able to care for two stable patients in their critical care unit. What do you mean when you say "stable"critical care patient?

10. When asked, what is your biggest concern starting your orientation to critical care nursing, the majority stated they they are worried they will make a "mistake". Describe for me what you think is a "mistake"?
11. At the beginning of orientation, the participants rated their anxiety level at an average of "6" on a scale of 1-10 with 10 being the worst anxiety imaginable. When orientation ended you were asked again what your level of anxiety was at the end of orientation. The average level of anxiety at the end of orientation was also 6 on the 1-10 scale. Why do you think the level of anxiety at the end of orientation is just as high as the level of anxiety at the beginning of your orientation?

12. What do you feel are the most significant things, areas, components, elements or factors, the new graduate nurse experiences as they transition to staff nurse in critical care.

13. What advice would you give to a new graduate nurse when they are about to begin their orientation in critical care?

14. What advice would you give to a nurse who is about to come off of orientation and care for critical care patients independently?
APPENDIX G

IRB Approval for Email Questions
Melissa Spadanuda

IRB Administrator
Institutional Review Board
Engelmann 270
P. O. Box 413
Milwaukee, WI 53201-0413
(414) 229-3173 phone
(414) 229-6729 fax
http://www.irb.uwm.edu
spadanud@uwm.edu

Department of University Safety & Assurances
Modification/Amendment - IRB Expedited Approval

Date: May 30, 2012
To: Karen Morin, RN DSN ANEF
Dept: Nursing
Cc: Mari St Clair, RN, MS
IRB#: 11.329
Title: The Transition Process Experienced by New Graduate Nurses Working in Critical Care

After review of your research protocol by the University of Wisconsin – Milwaukee Institutional Review Board, your protocol has received modification/amendment approval for:

☐ The study will be re-opened to ask participants follow-up questions via email or interview (their choice). IRB approval will expire on May 29, 2013. If you plan to continue any research related activities (e.g., enrollment of subjects, study interventions, data analysis, etc.) past the date of IRB expiration, a Continuation for IRB Approval must be filed by the submission deadline. If the study is closed or completed before the IRB expiration date, please notify the IRB by completing and submitting the Continuing Review form found on the IRB website. Unless specifically where the change is necessary to eliminate apparent immediate hazards to the subjects, any proposed changes to the protocol must be reviewed by the Institutional Review Board before implementation. Please note that it is the principal investigator’s responsibility to adhere to the policies and guidelines set forth by the University of Wisconsin – Milwaukee and its Institutional Review Board. It is the principal investigator’s responsibility to maintain proper documentation of its records and promptly report to the Institutional Review Board any adverse events which require reporting. Contact the IRB office if you have any further questions. Thank you for your cooperation and best wishes for a successful project.

Respectfully,

Melissa C. Spadanuda
IRB Administrator
APPENDIX H

Audit Trail
Audit Trail

Step by step process used for the research study:

- Obtained IRB approval from UWM Milwaukee and Aurora Health Care
- Obtained consent from each Aurora facility Chief Nurse Executive to bring the study into their critical care unit(s).
- Visited each Clinical Nurse Specialist in the ICUs and explained the study and their role to discuss the opportunity to participate with their new graduate nurses who have not been on the unit longer than 2 weeks. CNS gave each new graduate nurse an Invitation to Participate.
- Received copies of Invitations filled out by graduate nurses who wanted to participate in the study. Contacted the each nurse. Talked more about the study, consent and time commitment. Made appointments for the first interview.
- Interviewed all participants who consented to be in the study.
- After the participants completion of Stage I of their orientation, completed the final interviews.
- The participants then worked independently Stage I was complete.
- Approximately 5 weeks after completion of Stage I of orientation, obtained additional IRB approval from UWM Milwaukee and Aurora Health Care.
- Sent additional questions to participants via email.
- Transcribed all interviews. Placed answers from each question of each participant together for review, coding, categorizing.
- Completing the write up of the study
APPENDIX I

Reviewer Process
Reviewer Process

1. All 10 initial transcripts were read numerous times to get a sense of the interview

2. Text within each transcript was highlighted

3. All five transcripts of the second interview were read numerous times, and text within each transcript highlighted.

4. Highlighted text was reviewed for themes

5. Themes were identified, with supportive comments included

6. Themes and supportive comments were compared with investigator’s determinations.

7. Seven of eight themes were similar. All themes, with discrepancies, were shared with the investigator.

8. Lastly, investigator memos were reviewed
Appendix J

Theoretical Model
Making Meaning During Transition Theory

Student Nurse

Basic Social Process

Transition

Two Stages

Stage I
Beginning

4 themes

Overwhelmed

Fear of Making a Mistake

The light bulb goes on

Stage II
Moving On

4 themes

Learning, learning, learning

Being Anxious

Know your resources

I know this

Learn and get experience

Know your resources
Appendix K

Patricia Benner’s Novice to Expert Model
Patricia Benner’s Novice to Expert Model

Nurses move along this continuum left to right
APPENDIX L

Resume
Mari St Clair PhD RN

Objective
Resume – Mari St Clair RN PhD

Experience

June 12, 2006 to present
Aurora - St Lukes Medical Center
Clinical Nurse Specialist Surgical ICU

- Responsible for the nursing practice of the nurses and nursing assistants in the surgical ICU environment.
- A member of the Metro Nursing Practice Counsel for Aurora Health Care.
- Creates, coordinates and evaluates patient care policies.
- Work with dyad partner (manager of the unit) with interviews, hiring new staff and coordination of the orientation.
- Identify areas within nursing practice in the SICU that need additional educational programs.
- Create educational programs that will educate and improve nursing practice in SICU
- Identify areas of practice that will benefit from PDSA (Plan, Do, Study and Act) cycle implementation.
- Creates and provides educational classes for staff and also on a site and Metro level.
- Updated and revised surgical ICU Orientation program
- Work with the nursing staff through Outcome Facilitation Rounds to identify nursing interventions to improve patient outcomes.
- Mentor staff with moving forward in their nursing profession.
- Coach staff with writing narratives that will reflect their level of practice to be staged within Benner’s novice to expert model.
- Frequently utilized as a resource for identification of appropriate patient care interventions.

Oct 2003 to June 10, 2006
The Wisconsin Heart Hospital                                Wauwatosa WI
Clinical Nurse Specialist
- Developed competencies for staff members from Patient Care Technicians to Registered Nurses.
- Created and coordinated the development of patient care policies.
- Developed staff orientation program.
- Worked with administration to develop an ethics committee and ethic guidelines for The Wisconsin Heart Hospital.
- Co-chair of The Wisconsin Heart Hospital Ethics Committee
- Participant of the Covenant Ethics Committee
- Active participant in the Covenant Falls initiative
- Active participant in Performance Improvement Committee for the facility.
- Developed and teaches numerous educational classes for clinical staff.
- Developed Clinical orientation class for the hospital.
- Designed and implemented annual “skills fair” for clinical staff.

1987 - 2003 Aurora Health Care Milwaukee WI

**Staff Nurse (1987-2000) and Nurse Clinician (2000-2003)**

- Staff nurse for cardiac and cardiovascular patients.
- Nurse Clinician (CNS role) on a cardiac telemetry unit.
- Member of the Metro Nursing Practice Council for a 3 year term.
- Chairperson of unit based nursing council
- Developed policies and procedures for patient care
- Member of the Aurora Health Care CHF Initiative
- Member of the Aurora Health Care ACS Initiative
- Received the Aurora Nurse Excellence award in 2000
- A member of the planning committee for The Heart of the Matter conference.
- Member of the Aurora Sinai Medical Center Nursing council.
- Preceptor and mentor for new nurses to cardiac telemetry unit
- Level 5 Expert nurse per Benner model.
- Charge nurse on the cardiac telemetry unit

1984 - 1987 Methodist Hospital Omaha, Ne

**Staff Nurse – Cardiac, Cardiovascular and Surgical ICU**

- Preceptor and mentor to new nurses to the intensive care units.
- Charge nurse for each of the intensive care units.

1981 - 1984 Scottsdale Memorial Hospital Scottsdale, AZ

**Staff Nurse – Trauma Intensive Care Unit**

- Charge nurse
- Preceptor and mentor to new nurses in the unit
- Provided specialized one to one education to patients and families pre and post cardiac surgery.

1980 -1981 St Lukes Medical Center Milwaukee WI

**Staff Nurse – Cardiovascular Telemetry Unit**
• Provided nursing care for patients pre and post cardiac surgery.

1979 -1980 St Josephs Hospital Milwaukee WI
**Staff Nurse – General Surgical Unit**
• Provided nursing care to general surgical patients.

**Education**
January 2004 – December 2013 UWM- Milwaukee Milwaukee WI
• PhD in Nursing
• Successfully passed written and oral components of requirements for doctoral degree

2000 -2003 UWM -Milwaukee Milwaukee WI
• Masters of Science Degree – Nursing, Clinical nurse Specialist
• Grade point average 3.958
• Deans List
• Sigma Theta Tau

1975 -1979 Alverno College Milwaukee WI
* Bachelor of Science Degree – Nursing.

**Professional Organizations**
• American Association of Critical Care Nurses
• Sigma Theta Tau
• National Society of Clinical Nurse Specialists

**Misc.**
• Poster Presentation on Anxiety and Social Roles in Women with Heart Failure – 2007

• Presenter at the Cutting Edge Trauma Conference on New Graduate Nurses in Critical Care – September 2009

• Teach the following courses for Aurora Health Care:

  New Graduate Orientation
  Aurora Development and Advancement Model
  Ethics
  Basic EKG
  Pain Control at End of Life
  Preceptorship
  Care of the Cardiovascular Surgical Patient
  Reflection and Experiential Learning
References Upon Request