**UNF** UNIVERSITY *of* NORTH FLORIDA.

**UNF Digital Commons**

UNF Graduate Theses and Dissertations                    Student Scholarship

2009

# New Nurse Residency - An Evidence Based Approach

Alice M. Nied
*University of North Florida*

**UNF** UNIVERSITY *of* NORTH FLORIDA.

.

New Nurse Residency-an Evidence Based Approach

by

Alice M. Nied

A project submitted to the School of Nursing
in partial fulfillment of the requirements for the degree of

Doctor of Nursing Practice

UNIVERSITY OF NORTH FLORIDA

BROOKS COLLEGE OF HEALTH

December, 2009

# Certificate of Approval

This project by Alice M. Nied is approved:

DATE

_____

12/11/09

Lillia M. Loriz

_____

12/11/09

Barbara J. Olinzock

_____

12/11/09

Kathaleen C. Bloom, Committee Chair

Accepted for the Department:

_____

12/11/09

Lillia M. Loriz, Director, School of Nursing

Accepted for the College:

_____

12/14/09

Pamela S. Chally, Dean, Brooks College of Health

Accepted for the University:

_____

12·18·09

Mark E. Workman, Provost and Vice President for Academic Affairs

Dedication

To my husband, Tom—when we began this journey many years ago, when I was a diploma prepared RN, content with small dreams.  It was your love, support, and belief in me that made me believe I could dream and achieve bigger dreams.

To Dr. Kathy Bloom of the University of North Florida—you supported my efforts when I was ready to walk away; thank you for your guidance, assistance, but most of all, for your encouragement.  It is greatly appreciated.

To the other nursing faculty and administrators at UNF, you began as my colleagues and ended as my faculty.  I would not have entered your program if I had not had the utmost respect for each and every one of you—you are the best!

To my parents, Walter and Lucille Fiedler—I wish you were here to see me reach this goal.  You were the ones who told me that education was a way out, a way to improve my life, and once achieved, something that no one could ever take away from me.  I am happy to say that I have reached the point in my life where I can admit that you were right!

Table of Contents

List of Tables

Abstract

Nurse educators believe that their graduates are well-prepared for entry level positions in nursing.  In the acute healthcare setting, new graduates are placed on virtually every type of nursing unit, including critical care.  Employers have developed formal orientations to familiarize new graduate nurses new with the institution and its policies and procedures and to teach the things employers believe new RNs need to know but do not, either because they were never taught the material or they have not retained it.

The purposes of this project were to (a) examine the evidence relative to a disconnect between nursing education and nursing practice, (b) design a formal residency program for new graduates based on the evidence, and (c) implement and evaluate the residency program.  Based on the evidence, a 16-week new nurse residency was developed in which Residents were each assigned both a Preceptor and Mentor to assist their progress. Weekly educational offerings were targeted at specific competency deficits identified by Residents, Preceptors and Mentors at the beginning of the residency program.

Seven out of the original 10 Residents completed the Residency.  Pre-residency, the Residents were very confident of their clinical skills and abilities and this was unchanged post-residency. The Preceptors and Mentors were much less confident of the clinical skills and abilities of the Residents pre-residency.  Post-residency, the confidence level of the Preceptors and Mentors was improved, but significantly so only for the Mentors.

It is imperative that nursing administrators be aware of the discrepancy between the confidence new nurses have in their own skills and the perceptions of the nurses who

work side by side with them on a daily basis.  Residencies for new graduate nurses are

costly. Nursing administrators must make the determination if the benefits outweigh the

costs.  They may find the results of not having a residency are far more costly.

Chapter 1: Introduction

The mission statements of all health care organizations are related to the restoration of optimal health to their clients. As acuity levels in acute care facilities rise, a skilled and knowledgeable staff of registered nurses (RNs) is essential to making this mission a reality. The current and predicted future nursing shortage has been well-documented in all areas of nursing (Altier & Krsek, 2006; Cavanaugh & Huse, 2004; Duchscher & Myrick, 2008). The nursing shortage is a global crisis. It is estimated that by 2020 the supply will be 20% below the demand (Cavanaugh & Huse, 2004) or an estimated RN shortage of 400,000 in the United States (Altier & Krsek, 2006). The shortage will continue to escalate since, as Herdrich and Lindsay (2006) report, the age of the average American RN is increasing and seasoned nurses are retiring, becoming the recipients of care instead of the providers of care. The logical way to combat this problem is with new graduate RNs.

The call for additional nursing graduates has resulted in baccalaureate nursing programs increasing enrollments nationwide by 5% from 2005 to 2006 and 4.98% from 2006 to 2007 (American Association of Colleges of Nursing [AACN], 2007). There was a rise again in 2008 by an additional 2.2% (AACN, 2009) . Associate degree programs report similar increases in enrollments (National Organization for Associate Degree Nursing [NOADN], 2007). This increases the numbers of new nurses available. However, turnover rates of new RNs in the first year after graduation range from 29.5%

(Halfer, 2007) to 61% (Pine & Tart, 2007). In addition, 25% of these nurses have had two or more positions in their first six to eight months of employment (Halfer, 2007).

The question of why new graduate nurses leave one or more employers in their first year of professional nursing practice is an important one. Duchscher and Myrick (2008) found five factors that contribute to new graduate nurses leaving a job: (a) abuse from seasoned nurses who are unhappy and worn out, (b) loss of self-confidence and self-concept on the part of the new graduate nurses, (c) poor staffing patterns in the acute setting, (d) an institutional culture that supports the status quo preventing autonomous practice, and (e) a lack of transitional support for the new graduate nurse.

The costs associated with nursing turnover are a significant drain on the organization. The cost to hire one new graduate RN is approximately $41,624 (Halfer, 2007). It costs the organization between $35,000 and $49,000 each time a nurse with less than one year tenure leaves the organization (Beecroft, Kunzman, & Krozek, 2001; Lindsey & Kleiner, 2005). This makes it imperative for the welfare of our hospitalized clients and the fiscal health of hospital organizations to enhance the skills and abilities of new RN hires and to insure that they make a commitment to remain with the organization for many years.

The increase in the numbers of new nurses entering practice has resulted in attention being focused on ways to successfully transition them into their nursing careers. Traditional orientation programs allow employers to complete checklists of organizational policies and procedures but they do not promote professionalism, stress the importance of lifelong learning or teach strategies to decrease the stress level of the new nurse (Herdrich & Lindsay, 2006).

In addition, concerns about the graduate nurses' clinical competence need to be addressed.  It is a widely held belief that new RNs do not come to the workplace ready to take the place of an experienced nurse (Diede, McNish, & Coose, 2000).  One strategy that has been successfully utilized to bring these new RNs to the desired level of clinical competence is through a structured new nurse residency.  The residency is in addition to the traditional orientation and is focused on areas not mastered in the new nurses' education.  These areas include improving critical thinking and clinical judgment such as time management skills, prioritization, delegation, and knowing when and why they should contact the provider.

## Purpose

The purposes of this project were to:

1.  Examine the evidence relative to a disconnect between nursing education and nursing practice;

2.  Design a formal residency program for new graduates based on the evidence; and

3.  Implement and evaluate the outcomes of the residency program.

Chapter 2: Literature Review

This chapter will begin with an overview of the complexities of nursing practice and nursing education and the apparent disconnect between the perceptions of practice and education with respect to the competencies of new nursing graduates. This will be followed by a description of search strategies used to identify the best evidence for addressing the issues related to new nursing graduates. The chapter will conclude with an evaluation and synthesis of the evidence regarding interventions that have been shown to assist the new graduate in the transition from nursing education to nursing practice.

Nursing Education and Nursing Practice

*Nursing Education*

The road to becoming an RN is not uniform. There remain three different paths to this goal; the diploma, the associate degree, and the baccalaureate degree (Aranda, 2007). The first nursing programs were hospital-based diploma programs. These programs were developed in the 19th century and continued until the 1970's. A few still remain in operation, the majority of them in Pennsylvania. These programs were administered by the sponsoring hospital who often housed the student nurses in dormitories on the hospital grounds. The programs were three calendar years in length, had a strong clinical focus and few or no college credits as part of the curriculum. (Woolley, 2004)

The nursing shortage following World War II prompted the development of the associate degree (AD) in nursing in 1954 (Newton, 1964). Associate Degree education was the result of the doctoral dissertation of Mildred Montag and was intended to replace

the nurses who left the profession to become wives and mothers after World War II. The

program was to be completed in two years and was designed for non-traditional students

who would bring maturity and life experience to their nursing education. Associate

degree programs are generally housed in community or technical colleges and award

college credits that can be transferred into senior institutions for baccalaureate credit

(Woolley, 2004).

Baccalaureate nursing education began as 'postgraduate education'—certificate

programs for nurses who wished to teach, become administrators, and public health.

Generic baccalaureate nursing education began with the Yale University nursing

program in 1923 and was established to change the paradigm from the needs of the

hospital to the educational needs of the student. The baccalaureate program provides the

student with a foundation in liberal arts that was missing in the diploma and AD

programs. (Woolley, 2004)

*Nursing Practice*

New nurses begin their first professional nursing position in a variety of practice

settings, including general medical-surgical units, specialty units such as pediatrics,

obstetrics and mental health as well as the fast-paced, high acuity areas of critical care

units, emergency rooms, labor and delivery and operating rooms. Nursing administrators

are vocal in their dissatisfaction with graduate nurses. Nurses in nursing specialties are

even more unhappy with the clinical skills and abilities of new graduate nurses. For

example, Jones and Sheridan (1999) believe the weakness in graduate nurses'

performance in pediatrics is due to lack of exposure to the area and the isolation of

education from nursing practice. Beecroft et al. (2001) agree, but add that new graduates fear working in a dedicated pediatric hospital where the acuity is so high.

In the area of critical care, Cavanaugh and Huse (2004) and Messmer, Jones, and Taylor (2004) describe the difficulty nurses experience when attempting to transfer classroom knowledge to the bedside. The authors report that in periods of less shortage, RNs were required to have one to two years experience in the medical/surgical area prior to working in critical care, but the current shortage has allowed new graduate RNs to be hired directly into critical care. Novice nurses struggle with the pace of an intensive care setting and the need to make critical decisions quickly.

Orsini (2005) reported on an orthopedic unit with an attrition rate of 22.6%. This unit was able to decrease the attrition rate to 7.7% with a one year retention rate of 100% after the implementation of a unit-specific residency. After the residency was established, the unit also received two organization-wide awards; one for "Best Team Spirit" and "Most Improved Customer Satisfaction". Other units in the hospital have now adopted this model in hopes to replicate the orthopedic unit's success.

Truman (2004) reported on an emergency department where the nurses made the conscious decision to not 'eat their young' but to put their efforts into teaching the new nurses. New nurses reported their confidence in their clinical skills increased. Knowing that the staff nurses would help them is key to their continued clinical growth (Etheridge, 2007). The new nurses' intent to remain in a position is influenced by the unit culture, whether they felt they belonged and were wanted on the unit (Altier & Krsek, 2006).

*Disconnect Regarding the Competencies of New RNs*

Employers express concerns about the readiness of new nurses to assume the role

of the professional nurse in clinical practice (Anders, Douglas, & Harrigan, 1995;

Beecroft et al., 2001; Conger, 1999; Goode & Williams, 2004; Lindsey & Kleiner, 2005;

Santucci, 2004).  These concerns are based on the complaints voiced by the colleagues of

the new RNs and center around the following areas; (a) a lack of knowledge of

appropriate delegation, (b) inability to perform physical assessment or interpret lab data,

poor prioritization and time management skills, (c) ineffective response to emergencies or

the (d) ability to determine that an emergency exists (Goode & Williams, 2004; Owens et

al., 2001); and (e) critical thinking (Halfer, 2007; Turner, 2005).

Nurse educators have a somewhat different perspective.  When asked, 80% of nurse

educators responded that their graduates meet their competency expectations at the time

of graduation, while only 47.5% of the surveyed hospital directors of nursing agreed

(Anders et al., 1995).  Allmark (1995) reiterated the existing gap between the theory and

practice of nursing.  AD nursing faculty believe their curricula meets the needs of nursing

practice and speaks of the need to maintain the relevance of their curricula in order to

meet the changing needs of the nursing profession (Diede et al., 2000).

How to effectively teach or improve the critical thinking of student nurses is an

evolving pedagogy, and effective means of evaluating a change in the critical thinking of

nursing students are lacking.  In a review of the evidence regarding critical thinking

published between 1975 and 2002, Staib (2003) identified several strategies used by

nurse educators to enhance critical thinking:  (a) computer-assisted instruction (CAI), (b)

case studies, (c) group learning strategies focused on the process of thinking, (d) critical

thinking vignettes designed to teach critical thinking in a simulated clinical situation, and (e) role playing and the use of imagery. This review of the evidence revealed no consistent evidence between the years 1975-1995 that any strategies employed by nurse educators increased the level of critical thinking of nursing students (Staib, 2003).

More recently, Horan (2009) reported on the use of human patient simulators to enhance the critical thinking of a group of nursing students. Although the students were more enthusiastic, their critical thinking ability was no more improved than the critical thinking of a group of students who studied critical thinking in a classroom setting.

State of the Science: New Nurse Assimilation into Practice

Attempts have been made to decrease this disconnect between education and practice. An extensive literature search was done to identify and synthesize the evidence related to facilitating assimilation of the new nurse into the practice setting.

*Search Strategy*

The Cumulative Index of Nursing and Allied Health (CINAHL), PubMed, the Cochrane Library, and Medline were all utilized to locate evidence for this project. All of the following terms, in various combinations were used to search the listed databases; nurses, new nurses, new RNs, new graduate nurses, competence, perception, clinical skills, clinical judgment, improving, technical skills, abilities, job performance, job expectations, critical thinking, acquisition of critical thinking skills, decision making, teaching, technical skills, attrition, turnover, professionalism, reality shock, simulation and skill acquisition, delegation, curricula, impact of curricula on learning, professional commitment, residency, orientation, preceptors, and mentors. The search covered the years 1990 to 2009. A total of three studies were found that examined the perception of

the new RNs' own competence (see Appendix A).  A total of seven studies were found

examining nurse residency programs (see Appendix B).

*Evidence Regarding Competence of New RNs*

New nurses begin their professional career possessing an eagerness to learn,

wanting to feel competent in their practice, and feeling impatient at their own learning

curve (Graham, Hall, & Sigurdson, 2008; Hodges, Keeley, & Troyan, 2008; Oerrman &

Moffitt-Wolf, 1997).  New nurses also possess a strong theory-base for practice (Graham

et al., 2008), but are aware of their limited clinical experiences (Heslop, McIntyre, &

Ives, 2001).  They often report feeling overwhelmed at their work load (Oerman &

Moffitt-Wolf, 1997).  The new nurses seek the approval of the experienced nurses with

whom they work (Etheridge, 2007) and seek employment at hospitals where there are

opportunities for guidance and support (Heslop et al., 2001).

The concerns of nurses in clinical practice and administration are clear regarding

the shortcomings of new RNs.  At the University of Pittsburgh Medical Center, only 43%

of the nurses surveyed felt that the new RNs were able to practice safely (Keller,

Meekins, & Summers, 2006).  Their concerns included the ability of the new graduate to

resolve conflict, problem solve, use critical thinking, delegate, and interact with

physicians.  This concern is mirrored by Pine and Tart (2007) who found clinical

judgment, decision making, leadership, professional commitment, and a lack of evidence

based practice in new RNs.  Weakness in critical thinking, clinical judgment, supervision

of others or ineffective delegation, response to emergencies, inability to recognize

abnormal lab or other diagnostics, and performance of psychomotor skills have been

documented in multiple studies (Altier & Krsek, 2006; Beecroft et al., 2001; Goode &

Williams, 2004; Herdrich & Lindsay, 2006).  Other areas of concern voiced by seasoned

nurses concerning new graduates were the intangibles: lack of commitment to the

profession, lack of confidence in professional skills (Beecroft et al., 2001), an inability to

handle stress, poor problem solving skills (Herdrich & Lindsay, 2006), and subpar

organizational and teamwork skills (Goode & Williams, 2004).

Nurses who begin their professional nursing practice in a specialty area such as

perioperative nursing have a huge learning curve (Persaud, 2008).  Traditionally, new

graduate nurses were barred from specialty areas, but no more.  It is now the norm for

graduates to go from school to specialty areas due to the current nursing shortage.  These

new nurses must not only make the leap from nursing education to nursing practice, they

must also learn the intricacies of a nursing specialty.

*Evidence Regarding Nurse Residency Programs*

Both fiscal and job performance issues have resulted in hospitals seeking out ways

to facilitate the transition of new graduate RNs into the professional role in hopes of

increasing clinical competence and decreasing turnover.  Formal nurse residencies are

one strategy that has had positive outcomes (Altier & Krsek, 2006; Beecroft et al., 2001;

Cavanaugh & Huse, 2004; Conger, 1999; Goode & Williams, 2004; Grindel &

Hagerstrom, 2009; Halfer, 2007;  Halfer, Graf, & Sullivan, 2008; Herdrich  & Lindsay,

2006; Jones & Sheridan, 1999; Lindsey & Kleiner, 2005; Mills & Mullins, 2008; Morrell,

2005; O'Brien-Pallas, Duffield, & Hayes, 2006; Oermann, 1998; Orsini, 2005; Owens, et

al., 2001; Pine & Tart, 2007; Thomka, 2001; Tourangeau & Cranley, 2006; Verdejo,

2002; Wagner, 2007; Williams, Goode, Krsek, Bednarski & Lynn, 2007).  The goals of

the residencies are to improve critical thinking and enhance the ability of the new nurse

to perform physical assessment, interpret lab data, and determine when and why to contact the primary provider. Other goals include improving time management skills and ability to prioritize, learning how to identify and function in an emergency, improving conflict resolution skills, understanding how to safely delegate, and generally improve clinical competence. There is some variation in the components of various residencies but the common goals are to improve clinical performance, decrease attrition and eliminate the cost of replacing nurses.

Common elements to successful nurse residency programs include preceptors and mentors, the curriculum itself and a positive return on investment. Because of the key role preceptors and mentors play, it is essential for them to be formally trained prior to the beginning of the residency (Altier & Krsek 2006; Beecroft et al., 2001; Cavanaugh & Huse, 2004; Goode & Williams, 2004; Halfer, 2007; Halfer, Graf, & Sullivan, 2008; Herdrich & Lindsay, 2006; Lindsey & Kleiner, 2005; Messmer, et al., 2004; Mills & Mullins, 2008; Owens et al., 2001; Persaud, 2008; Truman, 2004; Verdejo, 2002; Williams et al., 2007). Selection, training, and roles of mentors and preceptors in formal new RN residencies are critical, and the two roles should not be confused. (Altier & Krsek, 2006; Halfer, 2007; Truman, 2004; Verdejo, 2002).

*Preceptors.* The preceptors guide the new nurse resident through the day-to-day residency experience. The role of the preceptor is to teach, support, evaluate, advocate and protect the new nurse resident (Vermont Nurses Internship Project [VNIP], 2003). In addition, preceptors model the behaviors they want to see in the new nurse resident including a positive attitude and the ability to work with different members of the interdisciplinary team to support positive patient outcomes (Godinez, Schweiger, Gruver,

& Ryan, 1999).  Santucci (2004) emphasized the role of the preceptor in socialization, performance, professionalism, and job satisfaction for the new nurse resident.

Preceptors are key to the success of a residency program (Spector & Li, 2007) and so care in the selection process is essential.  Preceptors are generally selected following an application process during which several factors are evaluated: academic credentials, tenure at facility, clinical competence, effective interpersonal and communication skills, support of nurse manager, commitment to professional development, a willingness to precept, and a supportive attitude toward new graduates (Owens, et al., 2001; Truman, 2004).  A preceptor training course including strategies for identifying learning needs, mutual goal setting, facilitation of critical thinking, and giving effective feedback is recommended (Goode & Williams, 2004).  While Messmer et al. (2004) believe that preceptors should be competent or proficient nurses, but not experts,  others purposefully select preceptors based on expert knowledge, rationale-based practice and commitment to mentoring staff (Cavanaugh & Huse, 2004).

Preceptor training should include a discussion on the role of the preceptor, learning styles, and role modeling the professional nursing role (Owens, et al., 2001).  Assessment of the skills and learning needs of others and learning to give feedback in a non-threatening manner is emphasized (VNIP, 2003).  Benefits of the new nurse residency, verbal and non-verbal communication with the new nurse resident, listening skills, and communication barriers need to be reinforced to potential preceptors.  Gilge, Klose, and Birger (2007) advocate the development of an environment that supports learning.

*Mentors.*  Mentors do not have a hands-on role with the new nurse residents.  The role of the mentor is to be an objective listening ear, a voice without bias, who possesses

the ability to provide insights into finding balance between work and life.  New graduate

nurses have found mentors provided valuable insights into how to adjust to shifting work

schedules, commuting to work, the graduates' fear of making mistakes, fear of not fitting

into the unit culture, and coping with living in a new city (Halfer, 2007).  Persaud (2008)

views the role of the mentor as fostering a nurturing relationship with the new graduate

nurse, assisting the new graduate nurse in becoming a professional, offering constructive

feedback, and helping them work through difficult situations.  Role modeling, teaching,

encouraging, counseling, and being a friend are all part of the role of the mentor (Mills &

Mullins (2008).  Nurturing and protecting graduates are key behaviors of mentors (Orsini,

2005).  Mentors also serve as sounding boards, assist in deciphering communications,

and provide an objective perspective and someone to turn to in times of stress (Beecroft

et al., 2006).

The selection of mentors is important to meeting the goals of residency.  Mentors

should possess good leadership skills, a professional demeanor, a commitment to

excellence, a track record of advancement, the ability to empower, respect of their peers,

and patience (Persaud, 2008).

As with preceptors, mentors require training.  The training should include a

discussion of the role of the mentor, a review of communication techniques, expected

activities the mentor and new nurse resident will share, and assisting the mentor in

determining a plan for the mentor-mentee relationship (Hayes & Gagan, 2005).

*Curriculum.*  The curriculum for the nurse residency varies.  Owens et al., (2001)

focused on the acquisition or enhancement of technical skills, as did Halfer (2007).

Becoming a member of the profession, increased confidence, and decreased orientation

time was stressed by Lindsey and Kleiner (2005) and Truman (2004), while others emphasized the improvement of critical thinking skills and clinical judgment (Altier and Krsek, 2006; Herdrich and Lindsey, 2006). Pine and Tart (2007) reported the importance of decreasing stress in the new RN. Additionally, Goode and Williams (2004) stressed development of soft skills such as recognizing abnormal physical and lab results, time management, prioritization, psychomotor skills and response to emergencies.

All the residency programs reviewed included the use of preceptors. The role of the preceptor in all the programs was similar—that of the 1:1 clinical partner who fosters the clinical growth of the new nurse residents. Owens et al. (2001) reported that one residency program failed to assign the resident and the assigned preceptor the same schedule and this negatively impacted the residents' perception of the residency.

Mentors were included in many of the residencies reviewed (Altier and Krsek, 2006; Beecroft, et al., 2001; Halfer, 2007; Halfer & Graf, 2006; Truman 2004). The role of the mentor was similar in each of the residencies reviewed, that of supportive role model who made themselves available to listen and to assist the new nurse resident.

Trained preceptors enhanced the experience of the residents (Altier & Krsek, 2006; Beecroft et al., 2001; Cavanaugh & Huse, 2004; Messmer et al., 2004; Owens et al., 2001; Williams et al., 2007). Owens et al., (2001) held a skills/physical assessment day to hone the technical and assessment skills of the resident. Other effective strategies included bi-weekly evaluations from the preceptor (Williams et al., 2007), utilization of a head-to-toe approach in physical assessment to assist the resident in organizing their thinking (Messmer et al., 2004), and interviews between preceptors and new nurse

residents to determine the resident's self-perceived their learning needs (Cavanaugh & Huse, 2004).

Strategies employed in the weekly classroom sessions included debriefing and self-care sessions (Beecroft et al., 2001; Truman, 2004). Other classroom activities include practice with lab/diagnostics interpretation, determination of emergent conditions and appropriate responses, priority setting, delegation, infection control, nutrition, age specific issues, communication with families, skin care, blood/blood product infusion, pharmacology, and stress management (Owens et al., 2001). Cavanaugh and Huse (2004), used classroom time to problem solve, prioritize, plan, manage time, enhance clinical judgment, and understand resource allocation. Truman (2004) reported the inclusion of classroom time for emergency management, pathophysiology and pharmacology.

Resident evaluations of residency programs have found classroom fatigue to be an issue with the nurse residents (Keller et al., 2006). Pine & Tart (2007) reported that the residents would have preferred less formal instruction and more interactive, spontaneous learning experiences and additional team work experiences.

*Length of residency programs.* The residencies varied in length from eight weeks (Owens et al., 2001) to 18 months (Halfer & Graf, 2006) but one year in length was most common (Altier & Krsek, 2006; Beecroft, et al., 2001; Pine & Tart, 2007). Truman (2004) described a six month residency, while Halfer (2007) described a variable residency based on the specialty area; medical/surgical was four months long, critical care and emergency department residencies were six months long, and the perioperative

area was nine months in length.  Mills and Mullins (2008) described a residency that lasted three years.

The main outcome of these residency programs was decreased turnover (Altier & Krsek, 2006; Beecroft et al., 2001; Cavanaugh & Huse, 2004; Owens et al., 2001; Strauss, 2009; Williams et al., 2007).  Other outcomes included improved critical thinking (Messmer et al., 2004; Williams et al., 2007) and improved technical skills (Beecroft et al., 2001; Williams et al., 2007).  Additionally, improvements were seen in clinical knowledge, confidence and feeling more comfortable in the role of the professional nurse (Messmer et al., 2004); interpersonal relationships (Williams et al., 2007); leadership abilities,  time management, and awareness of professional opportunities (Halfer & Graf, 2006).  Also reported were fewer errors, positive recruitment efforts (Cavanaugh & Huse, 2004), increased job satisfaction, and intent to remain (Grindel & Hagerstrom, 2009).  Persaud (2008) reported that some of the mentees in their study are now mentors because of their experiences in their residency.

*Costs of residency program.*  Costs associated with the residency program include salaries of the nurses/residents, the preceptors, materials, refreshments, facilitator cost, the cost to replace the & nurses on the unit while they attend the program, and the cost of the residency program (Pine & Tart, 2007).  The total cost of the program for 48 new nurse residents was $93,100 or a cost of $2,023.91 per new nurse resident.  The salaries of the residents were not included in the costs calculations.  The residency yielded a return on investment (ROI) of 84.7%, in contrast with the estimated $41,400 replacement cost of one nurse.  The turnover rate of new RNs dropped from 50% in 2004 to 13% in

2006 following the implementation of the residency program (Pine and Tart, 2007).

Orsini (2005) reported a drop in attrition on one unit from 22.6% to 7.7%.

Beecroft et al., (2001) also reported significant costs and benefits from an internship program. The total cost of the residency for 21 new RNs was $806,961.70 (including the salaries of the nurses/interns). The ROI of the internship was 67.3%. The replacement cost of one RN in this study varied from $40,000 to $100,000 which was defined as 75%-125% of an RN's annual salary. The turnover rate decreased from 46% to 13% after the residency was in place. One unanticipated benefit of the program was a decrease in recruitment costs because the hospital now attracts new graduate RNs due to the opportunity to participate in the formal residency.

*Summary*

Ample evidence exists that demonstrates the efficacy of a formal new RN residency. Studies have shown significant cost/benefits to the organization when this is in place. In addition, turnover rates of new RNs decline in institutions that require completion of a residency.

Chapter 3 Methodology

This chapter includes a description of the design, setting and sample for the project and the methods and procedures for the study. This is followed by a discussion of the feasibility and protection of human subjects.

Design

This project was an evidence-based practice change consisting of the implementation and evaluation of a sixteen-week nurse residency program for new RNs. This was a single-group cohort study using a before-and-after design.

Sample and Setting

The sample included the new nurse graduates who were beginning their first professional nursing practice in June of 2009 and who chose to participate and sign an informed consent. During the interview process, all new graduate nurses were given a letter written by the investigator that described the residency and assured the graduate nurse that consent to be a research participant was strictly voluntary and if they should decline to participate or chose to drop out at any time during the study, there would be no adverse effects on their employment at the site of the study.

The setting was a 770 bed not-for-profit hospital in the southeastern United States. This facility employs 750 RNs and typically hires 60 new nursing graduates per year. Their current turnover rate is 20% and is defined as any nurse who leaves the organization. Transfers within the organization are not considered turnover. The hospital

acknowledges spending two to four million dollars per year in recruitment and orientation activities.

Procedures

The sixteen week residency was designed to improve the nursing practice of new RNs. The goals of the residency were to: (a) facilitate the transition of new RN Residents to the role of the professional nurse; (b) enhance clinical judgment and clinical competence of the new RN residents; (c) enhance understanding of the role of evidence-based practice in improving patient outcomes; and (d) improve psychomotor skills. The residency included both clinical and classroom experiences. Residents had both a Mentor and a Preceptor to guide and support them through the residency. The hospital has approximately one hundred trained preceptors and each Resident was matched to one of the trained preceptors.

*Selection of Mentors*

Mentors were solicited from the organization through the use of the flyers and posters from a pool of approximately one hundred fifty nurses who had achieved the designation of stage four in the organization. Stage four nurses are at least Bachelor's prepared and often have graduate degrees in nursing and who meet other, hospital determined goals. The investigator met with interested RNs and explained the residency program with an emphasis on the unique role of the Mentor in the residency.

Mentors were RNs who did not work on the same unit as the new RN and many did not work in a clinical role themselves. They were the objective listening ear for the new RN resident to go to for guidance and emotional support. Mentors also served as role models for the new RN resident. The ideal mentor was a Master's prepared RN for

whom nursing has been a fulfilling career. The Mentors all possessed good communication skills, had a passion for the profession, and the ability to maintain the confidentiality of the Resident. The two primary functions of the Mentors were to be available to the Resident in person, by phone, or online and a willingness to meet with and listen to the Resident, providing guidance and support, in an environment of non-judgmental caring.

*Selection of Preceptors*

Preceptors were also solicited from the organization. Preceptors worked 1:1 with the Resident on a daily basis and oversaw the clinical portion of the residency, determined the specific learning needs of the Resident and guided them through the residency. The Preceptors served as role models for the Resident and were key to fostering an organizational climate that supported the Resident.

The ideal Preceptor was a Bachelor's or Master's prepared RN who possessed good communication skills, enthusiasm about nursing, enjoy teaching and capable of being supportive of the Resident. Preceptors were RNs with at least three years clinical experience, and functioned at the competent or proficient level as judged by their nursing supervisors.

*Matching New RNs with Mentors and Preceptors*

The investigator then paired the Resident with both a Mentor and a Preceptor based on the unit to which the Resident was assigned as well as identified areas of interest and personal and professional experiences.

*Preceptor/Mentor Orientation*

The investigator met with Residents, Preceptors, and Mentors as one group so each was familiar with the role of the other. This was a four-hour session during which a presentation on adult learning and specifics of the nurse residency program were given by the investigator. The Residents, Preceptors, and Mentors were given handouts outlining their roles in the residency, the goals of the residency, strategies to reach the goals, the schedule for the residency, dates and times for the weekly meetings, and contact information for the investigator (see Appendix C).

Survey Tool

Each Resident, Preceptor, and Mentor was provided with a survey at the beginning of the residency and the same survey at the end of the residency (see Appendix D). This tool sought to determine the perceptions of the participants on eighteen (18) areas of professional practice perceived to be areas of weakness in new graduate RNs based on the evidence found in the literature. The tool was developed by the primary investigator based on the review of the evidence that indicated key elements about which new nurses and/or their employers are concerned. The survey uses a 5 point Likert scale on each of the 18 topics. The topics included critical thinking skills, clinical judgment, clinical competence, able to utilize evidence in practice, possess conflict resolution and communication skills, adequate technical skills, able to delegate safely, prioritize care for a group of clients, manage time appropriately and prioritize care for a group of clients, identify and respond to emergencies, manage end of life issues, interpret lab and other diagnostics, able to practice autonomously, is able to function as a member of a team,

feels satisfied with their choice of a nursing career, intends to pursue higher education and sees the need to join a professional nursing organization.

<div align="center">Curriculum</div>

The curriculum for the nurse residency program included both classroom and clinical components for a total of 40 hours per week.  There was a total of 24 hours of classroom and 616 hours of clinical during the 16-week residency.

*Classroom*

Classroom activities consisted of 90 minute sessions over the 16-weeks of the residency (see Appendix E).  The classroom instruction was initially be provided by the investigator, but was later taught by clinical experts from the organization who volunteered to speak on the scheduled topics that were of interest to them.  The focus of these classroom sessions was educational, but they also provided a venue for the Residents to share experiences, decompress and bond with their fellow residents. Educational topics were based on the learning needs of the group.  All Residents in attendance participated in areas identified in the evidence as areas of weakness such as exercises to improve clinical judgment in specific patient scenarios, safe delegation and prioritization.  Diagnostic exams and their interpretation were discussed and improving communication skills received attention.

*Clinical*

 Clinical activities took place on the assigned units, with Residents working side-by-side with their assigned Preceptor.  Preceptors continually assessed the knowledge and competency of the Residents and worked with the investigator and the Mentor to develop Resident improved, the Preceptor played a more supervisory role.

Data Collection

Before the residency began, all preceptors and mentors were asked to complete the New Nurse Survey. The Residents completed the New Nurse Survey to determine their self-perception of their level of competence on hire into the institution. The Preceptors and Mentors completed the New Nurse Survey to determine their perception of the skills and abilities of new graduate RNs in general. The information gained from the completed tools served both as a basis for individualized teaching and as baseline data on the knowledge and skill level of the individual nurse resident. At the end of the residency, the Residents again completed the New Nurse Survey, providing an evaluation of their own clinical skills, judgment and abilities. Residents and Mentors also completed the New Nurse Survey, this time answering specifically about the competencies of their Preceptee/Mentee.

Each Resident had a unique identifier which was coded on all of the surveys. For example, if the nurse was 001, her/his pre-residency self-evaluation was coded 001-A; her/his post-residency survey was coded 001-B; her/his Preceptor's pre- post-residency survey was coded as 001-PA and 001-PB; and her/his Mentor's pre- post-residency surveys was coded as 001-MA and 001-MB. This allowed for analysis of data not only in the aggregate, but also to determine changes over time.

Feasibility

The only associated costs were in manpower and copying. The facility bore the cost of manpower, which was substantial. The hospital already utilized preceptors in their current orientation of new graduate nurses so this did not increase the workload on this group of nurses. The hospital has a clinical ladder and serving as a preceptor

provides the nurse another way to climb to the next step.  Copying costs and time

associated with interviewing and selecting preceptors/ mentors, teaching classes and

overseeing the process was borne by the investigator.  Now that the trial is completed, the

full cost of the residency will be borne by the organization.

<div style="text-align:center">Protection of Human Subjects</div>

Prior to the start of the project, permission was obtained from the Institutional

Review Boards (IRB) of both the University of North Florida and the hospital where the

residency took place.  The potential subjects were informed that the hospital currently

provides new nurse graduates with an orientation and the risks of involvement in this

residency would be the same as any new graduate nurse who becomes employed at the

hospital.  Benefits included possible enhancement of clinical skills/judgment and

acquisition of a professional nursing mentor.

Chapter 4: Results

This chapter includes information on the sample characteristics of the new nurse residents, the preceptors and the mentors. This is followed by a description of before and after results of the nurse residency program on perceptions of competencies of new nurses.

Sample

Of 14 new nurses hired in the facility during the project, 10 (71.43%) completed the informed consent and initial data collection, but only 9 became participating Residents. The tenth new graduate nurse did not feel she 'needed' the residency and never participated.  The new nurse Residents were then matched with Preceptors from the unit where they were assigned.  Mentors were assigned by the investigator, based on interviews and areas of common interest.  By design, none of the Mentors were associated with the assigned units of the Residents and Preceptors.

At the initial data collection there were ten (10) each; Residents, Preceptors, and Mentors. With the exception of age, the demographic characteristic of the Residents, Preceptors and Mentors were similar (see Table 4.1). Residents were significantly younger than the Preceptors and Mentors. With respect to educational preparation, the Residents and Preceptors were identical, while there were significantly more Mentors who held master's degrees. Experientially, the Mentors had worked in nursing significantly longer than the Preceptors ($p < .05$).

*Table 4.1   Sample Characteristics (n=10)*

| Characteristic | Residents | Preceptors | Mentors |
|---|---|---|---|
| Age | 28.11 | 44.88 | 50.50 |
| | (21 to 48) | (25 to 57) | (33 to 61) |
| Gender | | | |
|    Female | 9 | 9 | 9 |
|    Male | 1 | 1 | 1 |
| Race | | | |
|    Caucasian | 8 | 8 | 9 |
|    African-American | 2 | 2 | 1 |
| Highest Educational Preparation[1] | | | |
|    Associate Degree in Nursing | 9 | 9 | 1 |
|    Bachelor's Degree in Nursing | 1 | 1 | 2 |
|    Master's Degree in Nursing | | | 4 |
|    Other Master's Degree | | | 2 |
| Years of Experience as an RN | 0 to 12[2] | 18.6 (2 to 37) | 27.25 (7 to 40) |

[1]One of the Mentors did not answer this question
[2]One of the Residents had been an LPN for 12 years prior to attending nursing school

## Reliability of the Survey Instrument

Cronbach's Alpha was utilized to determine internal consistency of the researcher-developed tool used for the competency survey. The Cronbach's Alpha for the survey in the pre-residency period was .847 for the Residents, .698 for the Preceptors, .890 for the Mentors, and .899 for all three groups combined. The Cronbach's Alpha for the survey in the post-residency period was higher, at .916 for the Residents, .940 for the Preceptors, .964 for the Mentors, and .953 for all 3 groups combined.

## Pre-Residency Survey Results

The results of the pre-residency surveys are shown in Table 4.2, reflecting the pre-residency beliefs of the Residents about their own clinical skills and abilities and the perceptions of the Preceptors and Mentors of the skills and abilities of new nurses in general. The Residents scored themselves higher overall than the Preceptors and Mentors

*Table 4.2*        *Pre-Residency Perceived Competencies of New RNs by the Residents, Preceptors and Mentors*

| Survey Item: "I"/"New nurses"[1] | Mean Scores on a 1-5 Likert scale (higher = more agreement) | | |
| --- | --- | --- | --- |
| | Residents | Preceptors | Mentors |
| have the critical thinking necessary for safe nursing practice | 3.89 | 2.67 | 3.11 |
| have the clinical judgment necessary for safe nursing practice | 4.00 | 3.11 | 3.22 |
| have the clinical competence necessary for safe nursing practice | 4.00 | 3.11 | 3.22 |
| use evidence in daily nursing practice | 3.78 | 3.33 | 3.22 |
| have adequate conflict resolution skills | 4.44 | 2.89 | 2.44 |
| have adequate communication skills | 4.44 | 3.67 | 3.11 |
| have adequate technical skills | 4.22 | 3.22 | 3.22 |
| have the skills necessary to safely delegate | 3.89 | 2.67 | 2.33 |
| have the skills necessary to prioritize care for a group of clients | 3.89 | 2.56 | 2.78 |
| have the ability to manage time appropriately | 3.89 | 2.33 | 2.56 |
| have the ability to identify and respond to emergencies | 3.89 | 2.89 | 3.2 |
| are able to manage end of life issues | 3.67 | 2.33 | 2.78 |
| have the ability to interpret lab and other diagnostics | 3.78 | 4.00 | 3.67 |
| can participate in autonomous nursing practice | 3.67 | 2.89 | 3.11 |
| are satisfied with career choice in professional nursing | 4.56 | 4.00 | 3.44 |
| intend to pursue higher educational levels | 4.44 | 3.56 | 3.67 |
| join professional nursing organization | 2.56 | 2.78 | 3.00 |
| function as a member of a team | 4.56 | 4.22 | 4.11 |
| Total | 3.98 | 3.12 | 3.12 |

[1]Residents rated their own ability, Preceptors and Mentors rated their perception of the competency that new RNs in general possess

on every item except Preceptors scored new nurses higher than the Residents did themselves in the areas of the ability of new nurses to interpret lab and other diagnostics and the intent of new nurses to join a professional nursing organization.

## The Residency

The 16-week Residency began with a kickoff luncheon for the nine Residents, nine Preceptors, and nine Mentors.  Eight of nine Residents attended.  Three Preceptors, and all nine Mentors were present.  The Residents were introduced to their Mentors and Preceptors if present.  They were provided with time to chat and exchange contact information.  All participants were provided with the investigator's contact information. The purpose of the Residency was explained, and all questions were answered.  Each person was asked to complete the appropriate Pre-Residency Survey.  The investigator went to the clinical units to secure pre-residency surveys from the Residents and Preceptors who were unable to attend the kickoff luncheon.

The investigator made distribution lists of each group of participants: Residents, Preceptors, and Mentors.  Residents were sent reminder emails regarding the weekly educational offering, the topic, and the presenter. Preceptors were encouraged to contact the Investigator with any questions or concerns.  Mentors were sent reminder emails regarding their communications with their assigned Resident and what was needed in the Mentor journals.

Educational offerings occurred at each of the 16 weekly 90-minute meetings.  The topics of the discussions were based on the evidence in the

literature and what was perceived to be areas of weakness in the pre-residency surveys. The investigator was present for these meetings, but some Mentors asked to present on topics of special interest to them.  In those meetings, the investigator was an observer who contributed to the discussion following the presentation. The educational offering was followed by an informal discussion of how the Residents were feeling about their transition from student nurse to professional nursing practice and any issues they were facing.  The discussion on improving critical thinking correlated with Benner's novice to expert framework (Dunn, Otten, & Stephens, 2005), and  provided them some reassurance in their abilities.

As the residency progressed, the Residents moved from the high or honeymoon of their first professional nursing position to a struggle with the realities of nursing.  One Resident had difficulty dealing with the death of a patient who died following a resuscitation effort.  Some Residents voiced concerns about Preceptors who were hovering and other Residents complained of a Preceptor who was perceived to not be interested in their progress or issues.

Conflict resolution was a topic that provoked a lively discussion. Residents struggle with their role on the unit.  They do not feel part of the professional staff and yet are not part of the assistive staff either.  Assertive strategies were discussed to help them assume the professional role.

Attendance at the educational offerings varied widely.  At the beginning of the residency, attendance was six to eight, but it soon waned.  Residents were quickly moved from 12 hour day shifts to 12 hour night shifts (7pm-7am).  The investigator began offering noon and 5:30 pm meetings to make attendance more

convenient and attendance improved. Additionally, one Resident failed the

NCLEX-RN on the first attempt and one Resident resigned, leaving seven

Residents to complete the residency.

Each Resident was assigned a Preceptor by their Nurse Manager. The

Resident-Preceptor relationships varied. On some units, more than one nurse was

assigned to precept one Resident based on work schedules and Residents felt this

was a negative when they had a positive relationship with their initial Preceptor.

Some Residents were moved to the 7pm-7am shift and so 'lost' their Preceptor

and were assigned a different Preceptor. Some Residents reported positive,

supportive relationships with their Preceptors.

The Resident-Mentor relationship began at the kickoff luncheon. The

Residents were visibly uncomfortable conversing with the more seasoned and

accomplished nurses. The Mentors reached out to the Residents at this event and

shared contact information and made plans to communicate both formally and

informally. The strength of the Resident-Mentor relationship varied from very

little contact to frequent contact and from very structured contacts to exchanged

emails and text messages. One Resident expressed that she could not confide in

the assigned Mentor because of a lack of trust and another Resident perceived the

questions of the Mentor as "nosiness". Conversely, two Mentors became very

close to their assigned Residents and one Resident reported the Mentor was key to

their successful professional transition.

By the time the residency ended, the Residents were feeling more positive

about themselves and nursing with one exception. One Resident is working in a

specialty area with a large learning curve and she is impatient, feels incompetent and freely acknowledges this a new experience for her.  Her Preceptor has been very positive about her progress and this has reassured the Resident that the feelings of incompetence she is currently experiencing will pass.

## Post-Residency Survey Results

Because of the loss of two of the Residents as described above, only seven Residents, seven Preceptors, and seven Mentors completed the post-Residency survey (see Table 4.3).  As in the pre-residency survey, the Residents scored themselves higher overall than the Preceptors or Mentors did, but the scores of the Preceptors and Mentors were generally higher than the pre-residency survey. Three Residents did not complete the residency and so the sample began with ten Residents, Preceptors, and Mentors and ended with seven of each.   The Residents were assigned to a variety of units—from a cardiac step down unit, to labor & delivery, to the operating room.  Some areas had one Resident while another unit had three Residents.

## Pre- Post-Comparisons

There were no significant changes in perceived competency before and after the residency program for the Residents (see Table 4.4). There were two Preceptors who rated their Resident significantly higher post-residency than their initial perceptions of the average new nurse. This was true of the Mentor of one other Resident.  One Mentor rated her Resident significantly lower post-residency

*Table 4.3*      *Post-Residency Perceived Competencies of New RNs by the Residents, Preceptors and Mentors*

| Survey Item: "I"/"My Preceptee"/"My Mentee"[1] | Mean Scores on a 1-5 Likert scale (higher = more agreement) | | |
| --- | --- | --- | --- |
| | Residents | Preceptors | Mentors |
| have the critical thinking necessary for safe nursing practice | 4.29 | 3.29 | 3.57 |
| have the clinical judgment necessary for safe nursing practice | 4.29 | 3.29 | 3.57 |
| have the clinical competence necessary for safe nursing practice | 4.29 | 3.00 | 3.43 |
| use evidence in daily nursing practice | 3.43 | 3.43 | 2.71 |
| have adequate conflict resolution skills | 4.29 | 3.14 | 3.29 |
| have adequate communication skills | 4.29 | 3.71 | 3.14 |
| have adequate technical skills | 4.71 | 3.29 | 3.14 |
| have the skills necessary to safely delegate | 4.29 | 2.57 | 3.14 |
| have the skills necessary to prioritize care for a group of clients | 4.29 | 2.71 | 3.43 |
| have the ability to manage time appropriately | 4.29 | 2.86 | 3.00 |
| have the ability to identify and respond to emergencies | 4.00 | 2.57 | 3.29 |
| are able to manage end of life issues | 3.71 | 2.86 | 3.00 |
| have the ability to interpret lab and other diagnostics | 4.00 | 4.00 | 3.57 |
| can participate in autonomous nursing practice | 4.29 | 3.00 | 3.29 |
| are satisfied with career choice in professional nursing | 4.29 | 4.00 | 3.86 |
| intend to pursue higher educational levels | 4.00 | 4.14 | 3.57 |
| join professional nursing organization | 2.43 | 2.86 | 2.86 |
| function as a member of a team | 4.57 | 4.14 | 4.00 |
| Total | 4.13 | 3.27 | 3.33 |

[1]Residents rated their own ability, Preceptors and Mentors rated their perception of the competency their Preceptee/Mentee

than her initial perception of the average new nurse. There was a significant difference in the overall ratings of the Preceptor and the Resident, with the Preceptors rating the Resident lower than the Residents themselves (t = 2.69, p = 0.36).

<div align="center">Residents' Evaluation of the Experience</div>

At the post-residency celebration, the Residents were asked to talk about their experiences in the Residency.  One Resident felt that the most helpful piece of the residency was having a Mentor who worked in a different area of the hospital.  She further stated that this surprised her because pre-residency this did not make sense to her. She now believes that her Mentor has helped her transition and she might not have 'made it' without her support.  Some Residents had less contact with their Mentors, but all spoke positively about the concept of new graduate nurses having assigned Mentors.

Another Resident spoke of the opportunity to meet with people going through the same experiences, both positive and negative, feeling that no one understood what they were going through like another Resident.  This seemed especially important to those Residents who were the only new graduate nurse on a unit.

Residents voiced frustration with their inability to leave their units to attend the weekly meetings.  Some units encouraged Residents to attend and some units discouraged.  Other units seemed unaware of the Residency and the need to support Residents to attend.

The Residents differed in their perceptions of the length of the Residency.  Some felt sixteen weeks was too long.  Only one Resident gave a reason for the shorter Residency and this was because when the Residents began working other shifts it was too

*Table 4.4*

*Paired Difference in Total Score Averages on Competency Scale*

| | Paired Difference in Total Score Averages on Competency Scale | | | | | |
|---|---|---|---|---|---|---|
| Resident ID | Residents Before & After | Preceptors Before & After | Mentors Before & After | Preceptors & Residents Time 2 | Mentors & Residents Time 2 | Mentors & Preceptors Time 2 |
| 1 | -0.33 | 0.00 | -0.06 | -0.83* | -0.44 | -0.39 |
| 2 | 0.44 | 1.39* | 0.39 | 0.72 | -0.06 | 0.78 |
| 3 | 0.39 | -0.72 | 1.67* | -1.11* | 0.56 | -1.67* |
| 4 | 0.11 | -0.33 | 0.61 | -2.11* | -1.06* | -1.06* |
| 5 | -0.28 | -0.22 | -0.72 | -0.78* | -0.61 | -0.17 |
| 6 | 0.61 | 0.22 | -0.83* | -0.67 | -2.22* | 1.56* |
| 7 | 0.67 | 1.22* | 0.67 | -1.28* | -1.83* | 0.56 |
| Total | 0.15 | 0.15 | 0.21 | - 0.86* | -0.80 | 0.06 |

*Indicates the paired difference t-test was significant at the .05 level

difficult to attend. One Resident thought it was the correct length because that was the length of the hospital orientation. None of the Residents felt the Residency should be longer than sixteen weeks.

The only suggestion for improvement of the Residency was to have some online activities. Specifically, it was suggested to utilize a discussion board and then those who were not able to attend the weekly educational offerings could still participate. It would also provide a 24/7 venue for sharing.

<div align="center">Preceptors' and Mentor's Evaluation of the Residency</div>

The Preceptors did not view the Residency as very different from what they have been doing with preceptees in the hospital orientation; that of the 1:1 clinical orientor on the nursing unit. The differences were the expectation of completing the pre- and post-surveys and the Residents leaving the unit for the weekly education sessions.

The Mentors were very positive in their beliefs about the Residency. All thought it was a positive experience for the Residents. The Mentors who were most involved with their assigned Residents were the most positive. Many thanked the investigator for the opportunity to "give back" and to be "involved intimately in the development of the next generation of nurses". Two Mentors stated their intention to maintain their relationship with their assigned Mentees. One Mentor was surprised at how open the Resident was with her while another stated her Resident was not as vocal with her as expected. One Mentor whose Resident resigned and left the hospital expressed regret that the relationship was over and that she was not able to actively participate in the entire Residency.

Chapter 5: Discussion

This chapter provides a discussion of the findings of the effect of a new nurse residency program on perceived competencies of recently graduated registered nurses in a community hospital. Limitations and lessons learned in the process are discussed and implications for practice and future research are presented.

Perceived Competencies of the Residents

The current and predicted future nursing shortage compels the practice setting to find a way to successfully transition new graduate nurses to the practice setting. The evidence in the literature supports formal nurse residencies to bridge the gap between nursing education and professional nursing practice. New graduate nurses feel confident of their abilities and believe they are ready for professional nursing practice. The Preceptors and Mentors in this example disagree with this perception, indicating only a moderate level of clinical competency of new graduates.

*The Residents*

The residency program developed for this study improved the Residents' perception of their clinical skills and abilities although the improvement was not significant. This may be because their perceived competencies were relatively high prior to the residency.

Post-residency surveys completed by the Residents reflected lower scores than the pre-residency surveys in use of evidence in daily nursing practice, possessing adequate communication and conflict resolution skills, satisfaction with their career choice of

professional nursing, and the Residents' intent to pursue higher educational levels.  The
Residents scored themselves higher in all other areas.

*The Preceptors*

Preceptors scored the Residents lower on the post-residency survey than their pre-
residency perception of new nurses in general in several areas, including possessing the
clinical competence necessary for safe practice, the ability to safely delegate, the ability
to identify and respond to emergencies, and ability to function as a member of a team.
The post-residency score in the area of interpretation of lab and other diagnostics was
unchanged.  The scores in all other areas were higher than their pre-residency perception
of new nurses in general.

*The Mentors*

Post-residency, the Mentors scored the Residents higher than their pre-residency
perception of new nurses in genera in all areas with the following exceptions; use of
evidence in daily practice and intent to join a professional nursing organization.  The
Mentors scored the Residents significantly higher post-survey in their ability to delegate
and ability to prioritize care for a group of patients.

*Comparisons*

Overall, the contrast between the perceptions of the three groups, Residents,
Preceptors, and Mentors was striking.  Residents are very confident of their clinical skills
and abilities, perhaps unrealistically so.  There is a potential for unsafe practice because
the overconfident Resident will act without consultation with a Preceptor or other
experienced nurse and the outcome could be disastrous.  The Mentors in this study had
greater confidence in the clinical skills and abilities of the new nurses than the Preceptors

did. Why this is so is unknown, but it is troubling. If the perception of the Preceptors is correct, new nurses are not ready for independent practice; but Mentors, who are the administrative nurses and therefore are more removed from day to day clinical nursing, possess the authority to allow the independent practice of new nurses which could result in negative consequences for the patients entrusted to their care. It is likely that a Preceptor who does not believe a new nurse is ready for autonomous practice would not feel comfortable pointing this out to the Mentor who is a more seasoned nurse with an administrative role. It could also lead to new nurses who have negative experiences leaving the profession.

The Mentors scored the new nurses lower on the post-residency in the area of use of evidence in daily practice than they did in the pre-residency survey, but the Residents and Preceptors scored the Residents higher. Ferguson and Day (2007) pointed out that expecting new graduate nurses to use evidence on a daily basis was not realistic and this finding was supported in the residency. This was the topic of the second and third educational offerings and although the Residents were polite, it was clear they were not very interested. At that point in the residency, the Residents were discussing time management issues; searching for evidence was not part of their daily clinical practice. During the fifteenth week of the residency, a Resident volunteered an issue for which she was looking for evidence. It may be that later in the residency is a more appropriate time to introduce evidence based practice.

The majority of Mentors were interested and involved with their assigned Residents, but Mills and Mullins (2008) believe a formal certification program for nurses interested in mentoring would insure participation by nurses with a real interest in

mentoring. This would require internal marketing and a person designated as lead to move the mentors forward. As time passes, a compilation of resources could be developed.

Duchscher (2008) points out that new graduate nurses need consistency, predictability, stability, and familiarity for a minimum of four months. Further, it is unfair to expect new graduate nurses to orient students or other staff, work overtime, or move them to other shifts. Any of these practices has the potential to create an unsafe environment. The needs of the Residents changed as they progressed through the residency. As they gain experience and develop a comfort level, they need to be challenged by higher acuity experiences. This could be the time to introduce evidence-based practice.

Additionally, the site of this Residency starts a new cohort of employees each week and so the Residents did not have the same start date which meant they were in different stages of their hospital orientation. Within two weeks of the start of the Residency, some Residents were not working or working hours that made it very difficult to attend. The decision was made to offer the educational sessions twice, at noon and 5:30 pm in order to give Residents working 7:00pm-7:00am shifts the opportunity to attend. This improved attendance but the group was smaller and so the diversity of discussion and sharing of experiences was lessened.

Strauss (2009) stresses the need for the residency to include 'conversation time,' time provided to the Residents to share and support each other. This is essential to a successful residency. One Resident reported that the opportunity to share and support each other was one of the most enjoyable pieces of the Residency for them. A work

environment that empowers and supports the new graduate nurse is required in order for them to transition to professional nursing and become the nurse everyone desires them to become, according to Duchscher (2008). Nurses who feel empowered are emboldened to speak and move the profession forward to what is needed as healthcare evolves in the future. This is what the profession needs and to what the public is entitled.

<div align="center">Limitations of the Study</div>

The small sample size limits the generalizability of the results. A larger sample would provide more data and lead to more generalizable conclusions. The participating new graduates were all Associate Degree graduates, additional studies with groups composed of both Associate and Baccalaureate degree graduate nurses could yield different results. The majority of the evidence reviewed was based on Baccalaureate graduates. The residencies described in the literature varied in length from 6 weeks to 16 months. This 16- week residency could have yielded different results if it were longer. Also, if participation in a residency was a mandatory part of every new graduate hire with required attendance and support by Preceptors, there might be more positive outcomes. In this study, the investigator was not a hospital employee and so, even with the blessing of nursing administration, it was not taken as seriously as it could have been by the Preceptors, Mentors, or nursing units. One Resident who had been an active participant was lost to the study when she failed to pass the NCLEX-RN. Limiting participation to licensed nurses would preclude the loss of these new graduate nurses.

A major problem with the study was an inability for Residents to meet because of varying schedules. This was the result of the Residents beginning their jobs each week, not in a cohort. Some Residents started working the first day of the residency, while

others had already been working for several weeks and were moving to the 7pm-7am shift. A commitment from the employing hospital to keep the participants on the same schedule would make full participation more likely. The hospital would need to commit to providing a nurse to coordinate the residency and this should be their major job responsibility. This would make it possible for the coordinator to visit every unit frequently to observe, be available to answer questions and provide support, and prevent problems.

## Implications for Future Research

A larger sample size would yield stronger results. Additionally, this study took place in a community hospital so a similar study in a private hospital could add to the evidence. More studies with Associate Degree nursing graduates or studies with both Associate Degree and Baccalaureate degrees would provide additional data. The evidence discusses residencies of various lengths. Research into the ideal residency length would be helpful for nursing practice.

## Implications for Practice

The post-residency surveys reveal a striking difference between the perceptions of the new graduate nurses and experienced nurses in clinical practice with regard to the clinical competence of new graduate nurses. The reason for this difference is unknown but it is an important question and should be investigated. Also important is why administrative nurses have more positive beliefs about new graduate nurses than the nurses who work side by side with them. Since administrative nurses direct practice, it is important for them to have realistic expectations of new graduate nurses.

Support for formal residencies for new graduate nurses is becoming more

widespread. The National Council of State Boards of Nursing has proposed that in order to renew the initial license, all nurses must show proof of completion of a residency (Spector & Li, 2007). The American Nurses Credentialling Center, the organization that grants magnet status, supports a formal residency for new graduate nurses. There are also some proprietary residencies that can be purchased. The American Association of Colleges of Nursing now accredits residencies.

New nurses in their first professional nursing position should be required to actively participate in a formal residency. It needs to include not only the 1:1 Preceptor but also a Mentor who is available to provide support and clarity to the perceptions of the new graduate nurse. Educational offerings, topics of which would be determined by surveying the nurses in the organization, provide structure and fill in knowledge gaps.

An online component with a discussion board or chat room could provide an opportunity for participants to 'talk' outside of the scheduled educational offerings. A general chat room could be provided for all participants as well as chat rooms for the specific groups of participants; the residents, preceptors, and mentors. The hospital where the residency occurred had residents in different buildings significant distances apart, limiting the ability of participants to meet face to face.

Further investigation is warranted on the wide variance between the perceptions of the three groups of participants. The potential for negative patient outcomes is of serious concern.

The tool developed for the study had a strong Cronbach's alpha. It should be followed up, refined and then made available to support the research of others interested in this or similar topics.

Summary

In conclusion, the Residency supported the evidence found in the literature, although not significantly.  There was improvement in the clinical skills and abilities of the new graduate nurses who participated.  This is supported by the pre- and post-residency surveys completed by the participants.  It is time for employers to understand that, like graduates of medical schools, new graduate nurses are not ready for autonomous professional practice.  It is not productive to blame persons or institutions. Instead, it is time to accept the fact that new nurses need support as they transition from student to professional nurse and implement proven programs that bridge that provide the needed support.

Appendix A: Critical Analysis Table of Self-Perceptions of New RN Competence

| AUTHOR(S) | STRENGTHS | WEAKNESSES |
|---|---|---|
| Etheridge (2007) | • Want to learn<br>• Recognize their limitations<br>• Seek approval of experienced nurses<br>• Confidence develops over time<br>• Critical thinking | • No weaknesses mentioned |
| Heslop et al. (2001) | • Graduate nurses seek employment where there are opportunities for guidance and support<br>• Senior students aware of their lack of clinical experience | • No weaknesses mentioned |
| Lee-Hsieh et al. (2003) | • BSN Grads – Able to Plan/evaluate<br>• ADN Grads – Good technical skills<br>• Critical thinking ability ↑with experience | • No weaknesses mentioned |

Appendix B: Critical Analysis Table for Nurse Residency Programs

| AUTHOR(S) | SAMPLE | LENGTH | METHOD/GOALS | RESULTS |
|---|---|---|---|---|
| Williams et al. (2007) | 679 BSN grads | Variable | Methods:<br>• Each new RN assigned 2 co-preceptors<br>• Preceptors interviewed/trained<br>• Bi-weekly evals of new RNs<br>Goals:<br>• ↑ critical thinking<br>• ↑ interpersonal relationships<br>• ↑ technical skills | • All new RNs felt residency worthwhile<br>• Goals met |
| Halfer & Graf (2006) | 84 new BSN grads | 1 year | Goals:<br>• Leadership expectations<br>• Ability to manage demands of job<br>• Ability to get work done<br>• Awareness of professional opportunities<br>• Ability to identify work resources<br>• Access information to perform job | 3 mos  18 mos<br>↑3.25  3.71  + .46<br>↑3.21  3.57  + .36<br>↑3.32  3.75  + .43<br>↑3.04  3.48  + .44<br>↑3.36  3.68  + .32<br>↑3.30  3.63  + .33 |
| Messmer et al. (2004) | 12 nurses with less than 1 year experience | 6 weeks | Methods:<br>• Preceptors<br>• Focus – head to toe systems approach<br>Goals:<br>• ↓ turnover<br>• ↑ critical thinking<br>• ↑ knowledge/confidence<br>• ↑ comfort level | ↑ knowledge level<br>↓ critical thinking |

| AUTHOR(S) | SAMPLE | LENGTH | METHOD/GOALS | RESULTS |
|---|---|---|---|---|
| Cavanaugh & Huse (2004) | 27 RNs with less than 2 yrs RN experience | 3 – 5 months, depending on needs of mentees | Methods:<br>Cafarella's interactive model<br>• Co-preceptors (preceptor/mentor)<br>• Needs based on interviews<br>Goals:<br>↑ critical thinking<br>↑ interpersonal relationships<br>↑ technical skills | • Fewer errors<br>• Retention 93% @ 2 years<br>• + recruitment tool |
| Beecroft et al. (2001) | 50 BSN graduate nurses | 1 year | Methods:<br>• Guided clinical experience (716 hours)<br>• 1:1 preceptor<br>• 1:1 mentor<br>• Debriefing<br>• Self-care sessions<br>• 224.5 hours classrooms/skills lab<br>Goals:<br>• Facilitate transition to professional RN role<br>• Prepare competent new nurse<br>• Provide safe care<br>• ↑ commitment/retention | ↓ autonomy<br>↑ skills competency<br>Decreased turnover |

| AUTHOR(S) | SAMPLE | LENGTH | METHOD/GOALS | RESULTS |
|---|---|---|---|---|
| Altier & Krsek (2006) | 111 BSN graduates | 1 year | Methods:<br>• Preceptor guided experiences<br>• Resident facilitator<br>• Clinical course work<br>Goals:<br>• Transition from advanced beginner to competent professional nurse<br>• ↑ critical thinking<br>• ↑ ability to use data to promote patient safety | Levels of satisfaction of new RNs remained consistent<br>Decreased turnover |
| Owens et al. (2001) | 49 new RNs | 8 weeks | Methods:<br>• Preceptors<br>• Skills day/physical assessment<br>• Classroom Experiences:<br>    Interpretation of lab data, prioritization,<br>    response to emergencies<br>Goals:<br>• Retention of new grad RNs<br>• Enhance clinical performance | improved Retention<br>↓ RN vacancies |

Appendix C: Preceptor/Mentor (P/M) Training

Preceptor/Mentor (P/M) Training

There will be some commonalities in the role of both the mentor and the preceptor. The goal for both will be to facilitate the transition of the new RN resident into professional nursing practice, but they will pursue this goal in very different ways. The preceptor will be with the new RN resident on the unit each day—teaching, guiding, and supporting their transition. The mentor will be the support person in the background, unseen but always available to provide support and a non-judgmental, listening ear.

Topical outline
Reality Shock in the new RN resident:

- Honeymoon
  Excited, happy, unrealistic expectations, learning/developing skills
  P/M role-be realistic, introduce to colleagues, explain organizational processes
  When a goal is not reached, the next step in the process is

- Shock (moral outrage, rejection, fatigue, and perceptual distortion)
  Unit/hospital not a perfect place, colleagues have flaws, sees inconsistencies in talk and action of others, treated unkindly
  P/M role-Listen, allow to vent, provide support, be + role model

- Recovery
  Sees positive and negative in colleagues, organization, nursing
  P/M role-present reality but be positive about nursing and organization, encourage joining professional organization, pursuit of higher degree

- Resolution
  Watch for signs of negativity in attitude
  P/M role-be positive, remind resident of successes and how much growth has been shown, mentor role may intensify at this time, be +, share passion for profession, encourage and support, be there for them

Roles of preceptor:

| | |
|---|---|
| Teacher | Coach |
| Cheerleader | Socializer |
| Recordkeeper | Evaluator |
| Advocate | Role model |
| Facilitator | Guide |
| Safety net | |

Expectations of preceptor:

- Work collaboratively with Manager, educator, resident, other unit staff to provide the best experiences for the resident
- Organize learning experiences
- Advocate
- Introduce to unit/hospital colleagues
- Explain unit routines/indiosyncrasies
- Identify hospital resources
- Answer questions
- Problem solve

Increased responsibility indicators:

- Demonstrates ability to meet patient needs without reminders
- Takes previous experiences and apply to another patient situation
- Is aware of their limitations
- Not afraid to say "I don't know" appropriately
- Not afraid to say "I need help" appropriately
- Asks appropriate questions
- Is an appropriate self-starter
- Seeks out challenges

<u>Role of Mentor</u>

- Always available listening ear
- Non-judgmental
- Provider of emotional support
- Role model of nursing
    - Professionalism
    - Nursing as a career path
    - Encourage further education in nursing
    - Entre` to professional nursing organization

Investigator Contact Information:

Alice Nied        C 850.766.2265        O 850.201.6207

Home: thomasnied@comcast.net        O nieda@tcc.fl.edu

Appendix D: New Nurse Residency Survey

Please respond to the following statements, indicating the degree to which you agree or disagree with each statement. Circle the answer that best fits you at this point in time.

1.     I have the critical thinking skills necessary for safe nursing practice.

Strongly disagree             Disagree          Not sure          Agree          Strongly agree

2.     I have the clinical judgment necessary for safe nursing practice.

Strongly disagree             Disagree          Not sure          Agree          Strongly agree

3.     I have the clinical competence necessary for safe nursing practice.

Strongly disagree             Disagree          Not sure          Agree          Strongly agree

4.     I use evidence in my daily nursing practice.

Strongly disagree             Disagree          Not sure          Agree          Strongly agree

5.     I have adequate conflict resolution skills.

Strongly disagree             Disagree          Not sure          Agree          Strongly agree

6.     I have adequate communication skills.

Strongly disagree             Disagree          Not sure          Agree          Strongly agree

7.     I have adequate technical skills.

Strongly disagree             Disagree          Not sure          Agree          Strongly agree

8.     I have the skills necessary to safely delegate.

Strongly disagree             Disagree          Not sure          Agree          Strongly agree

9.     I have the skills necessary to prioritize care for a group of clients.

Strongly disagree             Disagree          Not sure          Agree          Strongly agree

10.     I have the ability to manage my time appropriately.

Strongly disagree             Disagree          Not sure          Agree          Strongly agree

11.     I have the ability to identify and respond to emergencies.

Strongly disagree             Disagree          Not sure          Agree          Strongly agree

12.     I have the ability necessary to manage end of life issues.

Strongly disagree             Disagree          Not sure          Agree          Strongly agree

13.  I have the ability to interpret lab and other diagnostics.

Strongly disagree          Disagree          Not sure          Agree          Strongly agree

14.  I can participate in autonomous nursing practice.

Strongly disagree          Disagree          Not sure          Agree          Strongly agree

15.  I am satisfied with my career choice in professional nursing.

Strongly disagree          Disagree          Not sure          Agree          Strongly agree

16.  I intend to pursue higher educational levels.

Strongly disagree          Disagree          Not sure          Agree          Strongly agree

17.  I am a member of a professional nursing organization.

Strongly disagree          Disagree          Not sure          Agree          Strongly agree

18.  I can function as a member of a team.

Strongly disagree          Disagree          Not sure          Agree          Strongly agree

Thank you for your cooperation
Alice Nied, MSN, RN, NEA, BC
DNP Student, UNF

Appendix E: New Nurse Residency Teaching Guide

Overview of topics:

- Delegation
- Prioritization
- Time management
- Physical assessment
- Lab/diagnostics interpretation
- Emergencies

    o Recognition
    o Response

- Communication

    o Nurse-colleague
    o Nurse-patient/family
    o Nurse-team members

- Evidence based practice
- Professionalism

    o Lifelong learning
    o Member of profession
    o Professional organizations

- Critical thinking/Clinical judgment

    o Emphasis throughout

Session Outlines

Each session will begin with the following:

- Welcome/refreshments
- Purpose of meeting
- Sharing/decompressing

Session 1:    Kickoff luncheon

              Residents, Preceptors, Mentors introduced to each other
              Goals of Residency, process explained, questions answered
              Complete pre-residency surveys

Session 2:    Evidence Based Practice (EBP)

Review of EBP
Role of EBP in +patient outcomes
Case studies: Residents present patient scenarios and impact of EBP

Session 3:    Critical Thinking

critical thinking exercises, correlate to their new experiences
Benner novice to expert

Session 4:    Delegation

Define terms
Review FL Nurse Practice Act/organizational guidelines
Discuss safe/unsafe delegations
Exercises

Session 5:    Prioritization/Time Management

Define terms
Review patient scenarios/case studies
Share strategies
Emphasis placed on reported areas of weakness
Discuss patient outcome

Session 6:    Physical assessment (in skills lab)

Review the entire process
Review focused assessment
Emphasize reported areas of weakness
Allow new nurse residents to practice

Session 7:    Lab/diagnostics interpretation

Definitions/abbreviations
Purpose(s)
Required preparations/contraindications

Session 8:    Emergencies

Types
Recognition
Organizational 'code' structure
Nursing role
Practice in lab

Session 9:    Communication

Types
        Verbal/non-verbal/body
        Professional

> Colleagues
> Patients/Families
> Provider

Session 10:    Conflict Resolution
> Define terms
> Role of conflict in patient care
> Patient advocacy
> Assertiveness in communication


Session 11:    Professionalism

> Lifelong learning
> Member of profession
> Community involvement
> Role of professional organizations
> Role modeling/Mentoring others


Session 12:    Lab/other diagnostic procedures

> Review most commonly prescribed blood tests
>> Purpose, patient preparation, nurse's role

> Review imaging/x-rays/other
>> Purpose, patient preparation, nurse's role

Session 13:    Physical Assessment

> Reviewed
> Residents practiced areas of weakness


Session 14:    End of life issues

> Durable power of attorneys
> Do not resuscitate
> Living wills


Session 15:    Technical skills

> Practice skills


Session 16:    Celebration!
> Completion of post-residency surveys
> Certificates of Completion given to all participants

References

Allmark, P. (1995). A classical view of the theory-practice gap in nursing. *Journal of Advanced Nursing, 22*(1), 18-23.

Altier, M.E., & Krsek, C.A. (2006). Effects of a 1-year residency program on job satisfaction and retention of new graduate nurses. *Journal for Nurses in Staff Development, 22*(2), 70-77.

American Association of Colleges of Nursing. (2009, February 26). *Despite surge of interest in nursing careers, new AACN data confirm that too few nurses are entering the healthcare workforce.* Retrieved August 8, 2009, from http://aacn.ache.org.

American Association of Colleges of Nursing. (2007, January 1). *Third successive year of increased enrollment in baccalaureate programs.* Retrieved March 21, 2008, from http://aacn.ache.org

Anders, R.L., Douglas, D.M., & Harrigan, R.C. (1995). Competencies of new registered nurses: A survey of deans and health care agencies in the state of Hawaii. *NursingConnections, 8*(3), 5-16.

Aranda, N. (2007). A brief history of nursing education. *EzineArticles.* Retrieved May 04, 2008 from http://ezinearticles.com/?A-Brief-History-of-Nursing-Education&id=476012.

Beecroft, P. C., Kunzman, L., & Krozek, C. (2001). RN internship: Outcomes of a one-year pilot program. *Journal of Nursing Administration, 31*(12), 575-582.

Beecroft, P.C., Santner, S., Lacy, M.L., Kunzman, L., & Dorey, F. (2006). New graduate nurses' perceptions of mentoring: Six-year programme evaluation. *Journal of Advanced Nursing, 55*(6), 736-747. DOI 10.1111/j.1365-2648.2006,03964.x.

Cavanaugh, D.A., & Huse, A.L. (2004). Surviving the nursing shortage: Developing a nursing orientation program to prepare and retain intensive care unit nurses. *The Journal of Continuing Education in Nursing, 35*(6), 251-256.

Conger, M.M. (1999). Evaluation of an educational strategy for teaching delegation decision making to nursing students. *Journal of Nursing Education, 38*(9), 419-422.

Diede, N., McNish, G., & Coose, C. (2000). Performance expectations of the associate degree nursing graduate within the first six months. *Journal of Nursing Education, 39*(7), 302-307.

Duchscher, J.B. (2008). A process of becoming: The stages of new nursing graduate professional role transition. *The Journal of Continuing Education in Nursing, 39*(10), 441-453.

Duchscher, J.B. & Myrick, F. (2008). The prevailing winds of oppression: Understanding the new graduate experience in acute care. *Nursing Forum, 43*(4), 191-206.

Dunn, K., Otten, C., & Stephens, E. (2005). Nursing experience and the care of dying patients. *Oncology Nursing Forum, 32*(1), 97-105. http://find.galegroup.com/nrcx/start.do?proId=NRC

Etheridge, S.A. (2007). Learning to think like a nurse: Stories from new nurse graduates. *The Journal of Continuing Education in Nursing, 38*(1)*,* 24-30.

Ferguson, L.M., & Day, R.A. (2007). Challenges for new nurses in evidence-based practice. *Journal of Nursing Management*, *15*(1), 107-113.

Gilge, F.L., Klose, P.M., & Birger, C.J. (2007). Critical clinical competencies in undergraduate, psychiatric-mental health nursing. *Journal of Nursing Education, 46*(11), 522-526.

Godinez, G., Schweiger, J., Gruver, J., & Ryan, P. (1999). Role transition from graduate to staff nurse: A qualitative analysis. *Journal for Nurses Staff Development, 15*(3)*,* 97-110.

Goode, C.J., & Williams, C.A. (2004). Post-baccalaureate nurse residency program. *Journal of Nursing Administration, 34*(2)*,* 71-77.

Graham, P., Hall, P., & Sigurdson, S. (2008). ICU survival guide. *Nursing Management, 39*(1), 41.

Grindel, C., & Hagerstrom, G. (2009). Nurses nurturing nurses: Outcomes and lessons learned. *MedSurg Nursing, 18*(3), 183-189.

Halfer, D. (2007). A magnetic strategy for new graduate nurses. *Nursing Economic$, 25*(1), 6-11.

Halfer, D. & Graf, E. (2006). Graduate nurse perceptions of the work experience. *Nursing Economic$, 24*(3), 150-155.

Halfer, D., Graf, E., & Sullivan, C. (2008), The organizational impact of a new graduate pediatric nurse mentoring program. *Nursing Economic$, 26*(4), 243-250.

Hayes, E.F., & Gagan, M.J. (2005). Approaches to mentoring: How to mentor and be mentored. *Journal of the American Academy of Nurse Practitioners, 17*(11)*,* 442-445.

Herdrich, B., & Lindsay, A. (2006). Nurse residency programs. *Journal for Nurses in Staff Development, 22*(2)*,* 55-62.

Heslop, L., McIntyre, M., & Ives, G. (2001). Undergraduate student nurses' expectations and their self-reported preparedness for the graduate year role. *Nursing and Allied Health Care Management Issues, 36*(5), 626-634.

Hodges, H.F., Keeley, A.C., & Troyan, P.J., (2008). Professional resilience in Baccalaureate-prepared acute care nurses. *Nursing Education Perspectives, 29*(2), 80-89.

Horan, K. (2009). Using the human patient simulator to foster critical thinking in critical situations. *Nursing Education Perspectives, 30*(1), 28-31.

Jones, D.C., & Sheridan, M.E. (1999). A case study approach: developing critical thinking skills in novice pediatric nurses. *The Journal of Continuing Education in Nursing, 30*(2)*,* 75-78.

Keller, J.L., Meekins, K., & Summers, B. (2006). Pearls and pitfalls of a new graduate academic residency program. *The Journal of Nursing Administration, 36*(12)*,* 589-598.

Lindsey, G., & Kleiner, B. (2005). Nurse residency program: an effective tool for recruitment and retention. *Journal of Health Care Finance, 31*(3)*,* 25-31.

Messmer, P.R., Jones, S. G., & Taylor, B. A. (2004). Enhancing knowledge and self-confidence of novice nurses: The "shadow-a-nurse" ICU program. *Nursing Education Perspectives, 25*(3)*,* 131-136.

Mills, J., & Mullins, A. (2008). The California nurse mentor project: Every nurse deserves a mentor. *Nursing Economic$, 26*(5), 31-316.

Morrell, K. (2005). Towards a typology of nursing turnover: The role of shocks in nurses' decisions to leave. *Nursing and Health Care Management and Policy, 49*(3)*,* 315-322.

National Organization for Associate Degree Nursing. (2007). *FactSheet* [Brochure]. Pensacola, FL: Author.

Newton, M.E. (1964). The associate degree program. *American Journal of Nursing, 64*(5)*,* 78-81.

O'Brien-Pallas, L., Duffield, C., & Hayes, L. (2006). Do we really understand how to retain nurses? *Journal of Nursing Management, 14*(14)*, 262-270.

Oermann, M.H. (1998). How to assess critical thinking in clinical practice. *Dimensions of Critical Care Nursing, 17*(6)*, 322-327.

Oermann, M.H., & Moffitt-Wolf, A. (1997). New graduates' perceptions of clinical practice. *Journal of Continuing Education in Nursing, 28*(1), 44-55.

Orsini, C.H. (2005). A nurse transition program for orthopaedics. *Orthopaedic Nursing, 24*(4), 240-245.

Owens, D.I., Turjanica, M.A., Scanion, M.W., Williamson, M., Sandhusen, A E., Hebert, C., et al. (2001). New graduate RN internship program: A collaborative approach for system-wide integration. *Journal for Nurses in Staff Development, 17*(3)*, 144-150.

Persaud, D. (2008). Mentoring the new graduate perioperative nurse: A valuable retention strategy. *AORN Journal, 87*(6), 1173-1179.

Pine, R., & Tart, K. (2007). Return on investment: Benefits and challenges of a baccalaureate nurse residency program. *Nursing Economic$, 25*(1)*, 13-18, 39.

Santucci, J. (2004). Facilitating the transition into nursing practice. *Journal for Nurses in Staff Development, 20*(6), 274-284.

Spector, N., & Li, S. (2007). A regulatory model on transitioning nurses from education to practice. *JONA's Healthcare Law, Ethics, and Regulation, 9*(1)*, 19-22.

Staib, S. (2003). Teaching and measuring critical thinking. *Journal of Nursing Education, 42*(11)*, 498-507.

Strauss, M.B. (2009). Easing the transition: A successful new graduate program. *The Journal of Continuing Education in Nursing, 40*(5), 216-220.

Thomka, L.A. (2001). Graduate nurses' experiences of interactions with professional nursing staff during transition to the professional role. *The Journal of Continuing Education in Nursing, 32*(1)*, 15-19.

Tourangeau, A.E., & Cranley, L.A. (2006). Nurse intention to remain employed: Understanding and strengthening determinants. *Nursing and Healthcare Management and Policy, 55*(4)*, 497-509.

Truman, K.M. (2004). Education enhances R&R in the ED. *Nursing Management, 35*(7), 45-48.

Turner, P. (2005). Critical thinking in nursing education and practice as defined in the literature. *Nursing Education Perspectives, 26*(5)*,* 272-277.

Vermont Nurses Internship Project (VNIP). (2003). Preceptor development. Retrieved May 07, 2008 from http://www.VNIP.org/preceptor.html.

Verdejo, T. (2002). Mentoring: A model method. *Nursing Management, 33*(8), 15-16.

Wagner, C.M. (2007). Organizational commitment as a predictor variable in nursing turnover research: Literature review. *Journal of Advanced Nursing, 60*(3)*,* 235-247.

Williams, C.A., Goode, C.J., Krsek, C., Bednash, G., & Lynn, M.R. (2007). Postbaccalauareate nurse residency 1-year outcomes. *Journal of Nursing Administration, 37*(7/8)*,* 357-365.

Woolley, A.S. (2004). A retrospective look at the entry dilemma. *Nursing Forum, 39*(3), 33-36.

Vita

Alice Mae (Fiedler) Nied was born in                    in      , but grew up in Gary, IN.  She graduated from St.Bernard's diploma School of Nursing in 1971 and her first professional nursing position was as a staff nurse on the Cardio-thoracic unit at Cook County Hospital.  She has worked in variety of specialty areas and in several locations including; med/surg, perioperative nursing, corrections, long term care and was a school nurse for two years.

Along the way, she completed her Bachelor's degree at Purdue University and her Master's in Nursing Administration from Indiana University, Indianapolis, IN.  Alice entered nursing education approximately twenty years ago, beginning as an instructor and is currently Director of Nursing at Tallahassee Community College in Tallahassee, FL. She is board certified by the American Nurses Credentialing Center in advanced nursing administration.