THE EFFECTIVENESS OF THE NURSE DISCHARGE EDUCATOR ON POSTPARTUM WOMEN'S PERCEPTION OF READINESS FOR DISCHARGE

by

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ABSTRACT

LORRAINE WILSON. The effectiveness of the nurse discharge educator on postpartum women's perception of readiness for discharge.
(Under the direction of DR. ILANA CHERTOK)

Introduction: In preparation for hospital discharge, anticipatory discharge education is critical for postpartum women. Standard care is that the many nurses who care for postpartum women provide the education, which may contribute to inconsistent and insufficient education. The purpose of this project was to evaluate the effectiveness of a designated nurse providing discharge education to increase the postpartum women's perception of readiness for discharge.

Method: Evaluation of 60 postpartum women's readiness for discharge using the Readiness for Discharge Scale tool was conducted comparing 30 women who received standard care and 30 women who received education by a nurse discharge educator. The tool had four subscale categories of personal status, coping ability, knowledge, and expected support.

Results: Findings demonstrate that the nurse discharge educator facilitated a significant increase in knowledge ($p<0.00003$), coping ability ($p<0.00008$), and expected support ($p=0.00164$) subscales of women in the intervention group compared to the control group, while there was no significant change in personal status subscale using Mann-Whitney U tests.

Discussion: Findings of the scholarly project support the role of the nurse discharge educator in positively influencing knowledge, coping ability, and expected support among postpartum women promoting their perceived readiness for discharge. In keeping

with the theoretical framework regarding transition associated with the postpartum experience, the nurse discharge educator aids in the transition of these mothers to their new roles and to care for themselves and their newborns.

DEDICATION

I would like to dedicate this work to my father, the late Lawrence D. Wilson, Sr. I still hear your words of encouragement to continue my education.

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CHAPTER 1: INTRODUCTION

Background

Giving birth is a major life event. For many women, it is a time when they seek information to help them during the transition to parenthood (Grimes, Forster, & Newton, 2013). There are educational resources available for women to participate in prior to the birth of their newborn including prenatal classes and prenatal healthcare appointment. Following labor and delivery, the need for teaching and learning escalates. After regular prenatal contact with care providers throughout pregnancy, women may find the immediate period following hospital discharge to be one in which they feel unprepared and unsupported by healthcare providers. They grapple with physical and emotional symptoms, newborn caregiving, breastfeeding concerns, and lifestyle adjustments (Gazmararian, Dalmida, Merino, Blake, Thompson, & Gaydos, 2014; Howell, Mora, Chassin, & Leventhal, 2010; Martin, Horowitz, Balbierz, & Howell, 2014; Walker, Murphey, & Nichols, 2015). The new mother is experiencing acute physiological and psychological changes while having the task of caring for the newborn. She is expected to demonstrate knowledge and confidence in her ability to provide adequate care for herself and her newborn prior to discharge from the hospital (Buchko, Gutshall, & Jordan, 2012), which can be daunting.

Maternal-child nurses are responsible for providing the education to the new mothers prior to discharge. The amount of education that is mandated by government

and regulatory agencies and recommended by professional organizations for the postpartum mother may be overwhelming, and brief postpartum hospital stays leave insufficient time for nurses to address a new mother's learning needs effectively (Buchko et al., 2012). The postpartum period is a time for women to adjust to their new roles and responsibilities as well as their physiological and psychological alterations. The maternal-child nurse is responsible for providing comprehensive postpartum care. In addition to providing physical care of both mother and newborn, the maternal-child nurse is also tasked with educating new mothers how to care for themselves and their newborn and to document the effect their educational interventions have on health outcomes, including patient satisfaction with teaching (Wagner, Bear, & Davidson, 2011). Thus maternal-child nurses find themselves providing education to the mothers in a fragmented, unstructured, and inconsistent approach throughout the hospital stay.

When education is not understood or grasped by patients there are consequences. Lack of preparation for the postpartum period is associated with adverse maternal outcomes including postpartum depressive symptoms and anxiety (Martin et. al, 2013). Mothers may have lasting effects as well as the newborn. Distressing outcomes for the newborn and family may result when new mothers do not understand newborn care issues prior to discharge (Buchko et al., 2012). These newborn care issues may involve illness and safety risks. Limited evidence is available that addresses the health outcomes of in-hospital education; however, a study by Weiss and Lokken (2009) found that poor quality discharge education was associated with more newborn emergency room or urgent care visits.

Problem Statement

Postpartum transition of motherhood begins with birth. During the postpartum transition, mothers go through the different phases. According to Rubin, normal healthy new mothers are passive, dependent, and generally not ready to assume total care of themselves and their newborns for the first few days postpartum (Wrasper, 1996). Reva Rubin described two specific phases that mothers experience in the first week postpartum. Rubin describes the first three days as the "taking in" phase, a restorative time when nurturing and protective care is needed by the mother (Wrasper, 1996). As physiological and psychological changes occur within postpartum women's bodies, they need attention. On the third day, "taking hold" begins with the mother asserting her independence in caring for herself and her newborn (Wrasper, 1996). The focus shifts and the role changes as the mother takes hold to her new role. Becoming a mother requires a woman to redefine her sense of self through a structuring of goals, behaviors, and responsibilities (Fahey & Shenassa, 2013). Preparing for this role and its needs and expectations, often occurs while still at the hospital prior to discharge.

According to Howell et al.; (2010), roughly one in four women is unprepared for the postpartum transition. Considering the brief in hospital postpartum period, discharge education is often rushed, sporadic, and inconsistent as it is provided by multiple nurses and healthcare professionals. Researchers found that mothers believe that having more individual time with a nurse during their postpartum hospitalization would better prepare them for caring for themselves and their newborn at home (Buchko et al., 2012). The literature provides information regarding postpartum women's educational needs which will be addressed by the doctoral scholarly project.

Purpose of the Project

This scholarly project aimed to evaluate the implementation of a designated nurse discharge educator who will provide postpartum women with education in preparation for discharge. This evidence based project compared the levels of readiness for discharge perception in women who received individual education by the designated nurse discharge educator and those who received the standard care, defined as education by multiple nurses involved in their care throughout their hospital stay.

Significance of the Project

According to the National Vital Statistics Report during the year 2014, there were a total of 3,988,076 births registered in the United States (Hamilton, Martin, Osterman, Curtin, Matthews, 2014). The state of North Carolina had 120,975 annual births with Wake County reporting 12,635 births based on 2014 data from the North Carolina State Center for Health Statistics. WakeMed Hospital, the setting for this scholarly project, accounted for 5,340 births in 2014 which is forty-two percent of the county's births based on WakeMed Hospital Key Statistics. Prior to 2016, the hospital did not have a designated postpartum discharge education nurse which posed a risk of insufficient or inconsistent education for new mothers. Almost half of the county's postpartum population can be positively impacted by adequate discharge education offered by a discharge education nurse.

Clinical Question

In postpartum women (age 18 years and older) will discharge education provided by a designated nurse discharge educator increase postpartum women's perception of

readiness for hospital discharge compared to postpartum women who receive the standard care?

Project Objectives

The short-term objective was to evaluate the effectiveness of the nurse discharge educator on postpartum women's readiness for discharge and to increase the postpartum women's perception of readiness for discharge following the nurse discharge educator's intervention. The long-term objective was to create a standardized role of nurse discharge educator who will be involved in discharge education such as hosting education sessions with all postpartum women prior to hospital discharge.

CHAPTER 2: LITERATURE REVIEW

A systematic review of the literature was performed using the following keywords; postpartum women, discharge education, and postpartum education. Databases searched for articles published between 2009 through 2015 included PubMed, Medline, and The Cumulative Index to Nursing and Allied Health and EBSCOhost. Eight published studies were found from the four databases that met the inclusion criteria of focusing on postpartum women and discharge education (Appendix A). While the studies focused on postpartum discharge education, there were some differences between the studies regarding the methods, design, and participant sample.

Two studies discussed educational learning needs. Gazmararian et al., (2014) explored the educational needs of new mothers and identified opportunities to enhance healthcare providers' current educational efforts. The two-part methodology of 92 first time mothers and 20 healthcare professionals was utilized to qualitatively explore the topic of parenting information needs for new mothers. Interview information provided important insight regarding necessary content enhancement and improvement to help new mothers and their families during the early stages of parenthood.

Weiss, Fawcett, Aber, (2009) purpose was to describe women's physical, emotional, functional, and social adaptation, postpartum concerns, and learning needs during the first two weeks following cesarean birth and to identify relevant nursing interventions. Through quantitative and qualitative research, 233 women shared

postpartum concerns and learning needs. Women who delivery by cesarean birth experience additional challenges that should be included in postpartum health education during the early postpartum period.

Martin et al., (2014) explored postpartum women's experiences, identifying domains of the postpartum experience as perceived by 45 postpartum mothers and 15 clinicians. The four main themes identified were: 1) lack of women's knowledge about postpartum health and lack of preparation for the postpartum experience, lack of continuity of care, 2) absence of maternal care during early postpartum period, 3) disconnect between providers and postpartum mothers, and 4) suggestion for improvement. The themes were used to inform how postpartum care could enhance patient preparation for the postpartum period.

Grimes et al., (2013) explored the information sources used by women during pregnancy to meet their information needs regarding pregnancy, birth, and postpartum period. A cross-sectional mailed survey of all eligible postpartum women who birthed at a local hospital during a three month period was conducted. Women who used a midwife during pregnancy found discussion with their provider to be most useful as compared to women being seen by physicians who had found the internet to be more useful.

Taking different approach to postpartum care, one study investigated whether lack of preparation for the postpartum experience and physical health after uncomplicated childbirth were associated with early postpartum depressive symptoms (Howell et al., 2010). Telephone interviews of 720 women in the early postpartum period inquired into depressive symptoms, physical symptoms, and provider preparation for the postpartum experience. Patients who reported inadequate preparation prior to delivery were more

likely to report depressive symptoms compared with patients who reported adequate preparation, pointing to the important role that education plays in prevention of problems.

Two studies investigated education methods. Buchko et al., (2012) evaluated the implementation of an evidence based, streamlined, education process and nurse education to improve the quality and efficiency of postpartum education during hospitalization. A group of 50 new mothers were administered pretests and posttests to measure the quality of discharge teaching and the efficiency of the education process for registered nurses before and after implementation of the intervention. The researchers found that a comprehensive educational booklet and enhanced documentation improved efficiency in the patient education process for nurses.

Wagner et al., (2011) examined the relationship between new mothers' interaction with nurses using different teaching methods to provide postpartum discharge teaching and their satisfaction with nursing care. A quasi-experimental posttest design with two groups was used to examine satisfaction with different teaching methods. Findings indicated that providing individualized care, based on the expressed needs of the patient resulted in high satisfaction with postpartum discharge teaching.

Postpartum teaching strategies vary in style and quality of interaction between nurses and patients, but current teaching methods may be used on what works best for the nursing staff rather than patient preference or research findings (Wagner et al., 2011). Nurses need to take into consideration the individual patient preferences and values when designing and implementing a patient education program. Walker, Murphey, and Nichols (2015) presented studies of new mothers indicating women desire information about various topics related to promoting their health and well-being postpartum. Research has

shown that many women required more information about caring for their health during the postpartum period; specifically women have unmet informational needs related to their physical or emotional health (Martin et al., 2013; Walker et al., 2015). During the hospital stay, education provided to new mothers about self-care and newborn care can boost confidence levels and inform new mothers (Buchko et al., 2012), augmenting the new mothers' own knowledge and experience.

Because each mother's experiences and background are unique, her perceived learning needs may differ from the perceptions of her nurse (Wagner et al., 2011). Furthermore, mothers' postpartum learning needs and interests vary and are influenced by variables such as age, marital status, and parity (Wagner et al., 2011). Nurses should assess women's knowledge and experience to tailor the education and add information to postpartum women's knowledge. Adapting education to the individual needs of each woman takes skill and expertise. Many important learning needs may arise as prospective new mothers prepare for and adjust to their new role (Grimes et al., 2013). Knowing the highest needs of mothers can guide the education. Postpartum learning needs revealed an emphasis on differentiating learning needs during the early postpartum period, with a focus on information needed and desired during the postpartum hospital stay (Weiss, Fawcett, & Aber, 2009). The hospital stay is the beginning of the postpartum period wherein they can receive the foundation of their education from the nurses.

Postpartum women reported higher satisfaction with nursing care when they experienced a relationship with the nurse and were able to actively participate in their own care, including identification of individual needs and concerns (Wagner et al., 2011).

Listening to patients and allowing them control of the education session is important. The patient is ultimately responsible for participation in her own learning efforts, and decisional control of what she wants to learn should be hers (Wagner et al., 2011). This encourages new mothers to actively engage in the education which contributes to effective learning.

Nurses need to know what strategies facilitate an efficient postpartum educational process during the hospital stay (Buchko et al., 2012). There are evidence based findings suggesting effective methods of educating postpartum women. Researchers have found that mothers value one-on-one verbal instruction, written information, and time spent with a nurse (Buchko et al., 2012). Care for new mothers which incorporates these methods of education are reflected in the approach that includes one on one time with a nurse who explains and instructs on postpartum, provision of clear directions on maternal and newborn care, and balanced informed autonomy and mutual decision making about care. This method has been associated with reported high patient satisfaction (Wagner et al., 2011). Providing individualized health education in a way that is easy to understand and memorable to new mothers is essential to enhance health literacy (Buchko et al., 2012). The provision of competent and appropriate education for women regarding self-care and newborn care along with the development of mentoring relationships between nurses and new mothers are essential components of maternity care that contribute to positive maternal and newborn health outcomes (Wagner et al., 2011).

Conceptual Framework

The transitions theory created by Schumacher and Meleis (1994) was used to guide this scholarly project and the work of Marianne Weiss, the creator of the Readiness

for Discharge Scale. Schumacher and Meleis (1994) define a transition as a process of passage from one life phase, condition, or status to another during which changes in health status, role relations, expectations, or abilities create a period of vulnerability. Becoming a mother involves transition of health status and a new role while in an exposed state. Such changes may produce profound alterations in the lives of individuals and their significant others and have important implications for well-being and health (Schumacher & Meleis, 1994). The universal properties of the postpartum transition begin with the process of pregnancy, labor, and delivery, along with the change of the role identity of the new mother. The postpartum period is also characterized by psychosocial adaptations, including changes in maternal role, changes in family relationships, and alterations in self-perception and body image. These transitions coupled with the physical recovery from childbirth and the work required to meet the needs of a newborn make the transition a time of heightened vulnerability (Fahey & Shenassa, 2013). During the hospital stay, nurses offer a place with acceptable transition conditions. These conditions are meaning, expectations, level of knowledge/skill, environment, level of planning, and emotional/physical well-being. The nurse discharge educator aids in the transition of postpartum mothers.

Discharge education was selected as the nursing therapeutic process to be investigated as a predictor of discharge readiness through the use of a nurse discharge educator. Nurse discharge educators explain the definition of postpartum transition and its importance to new mothers. The expectations of their bodies and the newborn during the postpartum transition are discussed with mothers. Depending on the mother's experience with the postpartum period, nurse discharge educators increase mother's

knowledge and skill level. To prepare for the new environment with the newborn, nurse discharge educators assist mothers in planning for life at home. Emotional and physical well-being is pertinent for mothers to maintain as their body transition.

CHAPTER 3: METHODOLOGY

Project Design

The project design was a prospective evaluation of an intervention. The intervention group received postpartum education delivered by a designated nurse discharge educator in preparation for discharge while the control group received standard care. For the doctoral scholarly project, the questionnaire used was the same questionnaire used by Weiss & Lokken (2009) in their study. The purpose of the questionnaire was to identify predictors and outcomes of postpartum mothers' perceptions of their readiness for hospital discharge. The education content and delivery skills were noted to affect the quality of discharge teaching and were associated with readiness for discharge.

There was a participant agreement that participants read and reviewed prior to completion of the questionnaire (Appendix B). No identifying information was provided. During the first week of the intervention, a meeting was held with the management team and designated nurse discharge educators. They were given background information on the doctoral scholarly project, protocol, questionnaire, and training on use of the participant agreement form. WakeMed Hospital Institutional Review Board along with the University of North Carolina at Charlotte Institutional Review Board approved this doctoral scholarly project.

Participants

Sixty postpartum mothers participated in the project that met the inclusion criteria. Thirty participants were in the intervention group and thirty participants in the comparison group. The inclusion criteria were: newly postpartum mother, English speaker, who was at least 18 years of age, who gave birth to a healthy, singleton, term newborn, and did not experience any serious perinatal complications. The exclusion criteria were: non-postpartum mother, non-English Speaker, not at least 18 years of age, who gave birth to a newborn that was non-healthy, singleton or multiple, and did experience any serious perinatal complications.

Setting

The setting for this scholarly project was WakeMed Hospital, a 919 bed private not for profit health care system. The specific unit involved in this project is a 48 bed postpartum unit. This unit specializes in high risk pregnancies. On average, the hospital has about 5,340 annual births. The average number of daily discharges from the unit is 10 to 12 postpartum English speaking mothers.

Tools and Measures

The tool used for this project was the Readiness for Hospital Discharge Scale created by Dr. Marianne Weiss and team at Marquette University in 2005 (Appendix C). This tools measures a postpartum mother's perceptions of readiness for discharge from the hospital, which was used for postpartum women for the current project. The questionnaire contains a total of 22 Likert rating questions on a scale of 0 to 10. The questions fit into four subscale categories of personal status, coping ability, knowledge, and expected support. The personal status questions ask about physical ability to care for

their self and newborn, strength and energy level, and stress and emotional state. The knowledge questions ask about their knowledge of caring for their self and newborn, problems to look for, who to call and follow up, restrictions, and services and information. The coping ability questions ask about ability to perform self and newborn care, and demands of life. The expected support questions ask about emotional support and assistance with personal, newborn and household activities. Each subscale receives a total sum from the responses. The scoring of each subscale was specific (Appendix D). Personal status subscale consisted of eight questions with two of the questions reversed scored. Knowledge had seven questions in this subscale. There were three questions in the coping ability subscale and four questions in the expected support subscale. The Readiness for Hospital Discharge Scale has been tested for validity and reliability with psychometric properties (Appendix E), and strong reliability with a Cronbach's alpha of 0.90.

This scholarly project consisted of two types of data, continuous and dichotomous. For the continuous data such as age and parity, t-tests were used. A Mann-Whitney U; non-parametric test; was conducted for the ranked subscale variables. Cross tabulations were conducted were conducted on the dichotomous variables of mode of delivery, and maternal response to feeling ready to go home.

Intervention and Data Collection

This project was a prospective evaluation of an intervention using a questionnaire tool. The intervention for the doctoral scholarly project was a designated nurse discharge educator that completed the discharge education for 30 mothers. For the intervention group, the nurse discharge educator set an appointment to meet with each postpartum

woman. An individualized education plan was created for each woman based on her needs and discussion with the nurse discharge educator. The nurse discharge educator provided information and answered her questions. After the education session was complete, the postpartum women completed the Readiness for Hospital Discharge Scale prior to discharge. The comparison group was 30 postpartum women who received discharge education from various nurses throughout their stay at the hospital, as per standard care. Prior to discharge, a questionnaire was given to them to complete. Data collection occurred between February 2, 2016 and February 12, 2016. The first week was the completion of the intervention group and the second week was the comparison group. The groups were done in two different weeks to prevent spill-over bias. In addition to the questionnaire, the following demographic information was recorded: age, parity, and mode of delivery.

Translation and Impact on Practice

From the literature review, this type of intervention increases postpartum mothers' readiness for discharge and their satisfaction. The hypothesis of this project was that it would positively influence the practice of postpartum discharge education and postpartum women's perception of readiness for discharge. Postpartum women benefit from appropriate education regarding maternal and newborn care prior to discharge.

Fiscal Impact

One fiscal consideration is filling the position of nurse discharge educator. There is the possibility of a financial decrease with reimbursement if patients do not feel ready for discharge. The cost of discharge handbooks and materials is constant with or without the educator. The use of a nurse discharge educator seems like the best use of services

and the hospital was willing to accept the fiscal responsibility.

CHAPTER 4: RESULTS

Project Results

The purpose of this scholarly project was to evaluate the implementation of having a designated nurse discharge educator to provide postpartum women's discharge education to increase the patient's perception of readiness for discharge. There were 30 postpartum women in each group for a total of 60 participants. There was no significant characteristic differences between the groups (Table 1). The overall average age in control and intervention group was 31.02 years, the overall average parity was two children with 20% (n=12) of the women being primiparous, and 70% (n=42) of the women gave birth by vaginal delivery. In answer to the question about feeling ready to go home, 97% (n=29) of the women in the intervention group felt ready to go home and 100% (n=30) of the women in the control group felt ready.

The primary findings comparing the Readiness for Hospital Discharge subscale scores between the groups are presented in Table 2. The questionnaire responses were separated into four subscales, personal status, knowledge, coping ability, and expected support. The scoring was calculated for each of the subscales and presented in the table.

For the personal status subscale with alpha = 0.05 and the p-value for the Mann-Whitney U test result was 0.437. With this p-value over 0.05, we cannot reject the null hypothesis which stated that there was a difference between the median scores of the personal status from each group. The other three subscales showed significant

differences between the two groups on the Mann-Whitney U tests, with an alpha = 0.05. The knowledge subscale was significantly higher for the intervention group ($p = 0.00003$) so we reject the null hypothesis and accept the hypothesis that the median knowledge scores differ in each group. The coping ability subscale was significantly higher for the intervention group ($p = 0.00008$) so we reject the null hypothesis and accept the hypothesis that the median coping scores differ in each group. The expected support subscale was significantly higher for the intervention group ($p = 0.00164$) so we reject the null hypothesis and accept the hypothesis that the median expected support status scores differ in each group.

Discussion of Results

The findings of this scholarly project were statistically significant in showing the intervention group's perception of readiness for discharge was higher. The individual attention provided by the nurse discharge educator allowed for each mother's unique questions to be answered. A designated nurse discussing discharge education increased the women's perception of readiness for discharge, similar to the previous findings about discharge preparedness using individual teaching sessions. Wagner et al., (2011) demonstrated individualization and tailoring discharge teaching strategies by nurses supports the greater satisfaction with care when individual health needs are met.

Three of the four subscales showed higher results within the intervention group. Having a nurse discharge educator, positively affects a postpartum women's perception in knowledge, coping ability, expected support. The anticipated result was to show an increase in knowledge in preparation for discharge. By speaking with the nurse discharge educator, the women learned the normal postpartum side effects and responded positively

to coping ability. Discussions with mothers revealed that adequate preparation for the postpartum period requires that mothers have a more comprehensive description of what they might encounter physically and emotionally during their postpartum experiences (Martin et al., 2014). During the postpartum period, a woman faces the task of adjusting to these transitions and reestablishing balance, routines, and relationships (Fahey & Shenassa, 2013). The nurse discharge educator also taught the women about coping strategies to aid during the postpartum period and worked individually with each mother to create a personalized postpartum plan. The association between lack of preparation for the postpartum experience and postpartum outcomes (Howell et al., 2010).

The nurse discharge educator asked mothers about her expectations from support provided by others and suggested ways other people could support her. Weiss et al., (2009) identified learning needs that may reflect inadequate support networks. By discussing expectations from others, the nurse discharge educator helped the mother identify specific people who she expected to help her and identify additional resources. Fahey and Shenassa (2013) share positive coping habits include reaching out for support as a means to manage stress during the postpartum period. The nurse discharge educator discussed the need for support and ways to enlist others for physical and emotional assistance.

Personal status subscale was not influenced by the nurse discharge educator. This subscale addresses current pain level, stress and emotion, strength, and energy. The mere presence of the nurse discharge educator had little effect on these feelings among the participants in this project. Recovering from delivery is demanding on a mothers'

personal status. The education given by the nurse discharge educator informs new mothers process of recuperation, but does not change their current feelings.

The transitions theory is evident with the postpartum mothers as their roles and responsibilities evolve. Transition includes level of knowledge and skill, expectations, and emotional and physical well-being (Schumacher & Meleis, 1994). These align with the subscales of the questionnaire. Transitions have a profound health- related effects on postpartum women, which contribute to the need for nursing therapeutics designed to prevent negative consequences and enhance health outcomes (Schumacher & Meleis, 1994). The tailored and comprehensive education offered by the nurse discharge educator affords women a wide range of all topics for postpartum transition. Education is the primary modality for creating optimal conditions in preparation for transition (Schumacher & Meleis, 1994). The theory afforded a beneficial supervisory framework for research about transition and for patient assessment of readiness for discharge.

The nurse discharge educator provided new mothers with valuable education. Weiss and Lokken (2009) found that new mothers' ability to care for self, newborn, and family following discharge increased when they received quality discharge teaching. The personalized education prepared mothers for self and newborn care. High quality postpartum education during hospitalization is vital to new mothers' ability to care for self, newborn, and family (Buchko et al., 2012).

The Readiness for Discharge Tool has been used in various settings to include postpartum units, medical-surgical units, and pediatric units and was created by Weiss and her team (2006). The doctoral scholarly project and Weiss and Lokken (2009) used the tool to evaluate postpartum women's' readiness for discharge. Weiss and Lokken

(2009) found that new mothers feel ready for discharge when they feel physically capable, knowledgeable, confident in their ability to cope with caring for themselves, their newborns, and their families at home, and when they feel supported by those around them. The doctoral scholarly project saw postpartum women have an increased readiness for discharge in knowledge, coping ability, and expected support.

There were limitations to the study. The sample size for this project was small due to time constraints, although significance was still detected in the study findings. More demographic information such as gestational age, marital status, and cultural background would offer more comparison information.

Future research should be conducted with a larger and more diverse sample to have a more representative group of postpartum women. Additionally, the role of nurse discharge educator was shared by two nurses, although they were both educated regarding the role, educational needs, and postpartum women's expectations.

CHAPTER 5: PROJECT SIGNIFICANCE

The postpartum education delivered by the nurse discharge educator showed significantly higher readiness for discharge on the three subscales of knowledge, coping ability, and expected support compared to women who received standard care. The doctoral scholarly project augments the limited literature that has been published to date on the benefit of having a nurse discharge educator available for postpartum education to help women prepare for discharge from the hospital and transition to their new role. Findings of the project provided evidence of improvement in three of the four subscales of the Readiness for Discharge scale. New mothers feel ready for discharge when they feel physically capable, knowledgeable, confident in their ability to cope with caring for themselves, their newborns, and their families at home, and supported by those around them (Weiss & Lokken, 2009).

Transitions theory and the doctoral scholarly project support the role transition that postpartum women experience during their antenatal hospitalization. Nurses caring for women during this critical life transition have a duty to understand the health needs of women during this time period extend beyond physical recuperation form childbirth and to find ways to incorporate strategies into care that will help women build their individual skills to successfully meet those needs (Fahey & Shenassa, 2013). Nurse discharge educators are available to meet the individual health needs of each mother. In addition to the physiologic changes associated with the postpartum period, a woman undergoes

marked psychosocial changes as she transitions into a motherhood role, reestablishes relationships, and works to meet the physical and emotional needs of her newborn and other family members (Fahey & Shenassa, 2013). Knowledge, coping abilities, and expected support areas for postpartum mothers are heightened by the nurse discharge educator as shown by the doctoral scholarly project.

Sustainability

This doctoral scholarly project offers sustainability in the form of a current permanent nurse discharge educator position at the hospital with two nurses. The role of the nurse discharge educator will continue to promote patient education and to positively affect postpartum women' perception of readiness for discharge.

Recommendations

Findings of the doctoral scholarly project support the recommendation that postpartum women's discharge education should be provided by a trained and designated nurse educator to provide tailored and consistent care. Individualized attention and education afforded by the nurse discharge educator is crucial to new mothers' readiness for discharge and transition to their new role. Having the personal attention from the discharge educator prepared postpartum women for their personal needs rather than providing a generic standard care that may not meet patient learning needs. The recommendation for discharge education may be extended to other hospitalized patients.

The Readiness for Hospital Discharge Scale has been used with other hospitalized populations. Increasing the use of the tool to investigate how well are all patients prior to being discharged. Some unique populations that could directly benefit from the Readiness for Hospital Discharge Scale are pediatric patients, postsurgical patients, and

patients recently diagnosed with a new disease. The next step would be creating a nurse discharge educator role for those populations to prepare those patients for discharge through individual teaching sessions.

More research should be conducted on discharge education and needs of patients of different ethnic, educational, and sociodemographic backgrounds to determine the most effective approach to health education in preparation for hospital discharge, wherein patients transition to self-care in the community. The doctoral scholarly project along with current literature supports the effectiveness of the nurse discharge educator on postpartum women's perception of readiness for discharge.

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APPENDIX A: LEVELS OF EVIDENCE SYNTHESIS TABLE

X (copy symbol as needed)	1	2	3	4	5	6	7	8
Level I: Systematic review or meta-analysis								
Level II: Randomized controlled trial								
Level III: Controlled trial without randomization								
Level IV: Case-control or cohort study								
Level V: Systematic review of qualitative or descriptive studies		X	X	X	X		X	X
Level VI: Qualitative or descriptive study (includes evidence implementation projects)	X					X		
Level VII: Expert opinion or consensus								

LEGEND

1 - Buchko et al., (2012)
2 - Gazmararian et al., (2014)
3 - Grimes et al., (2014)
4 - Howell et al., (2010)
5 - Martin et al., (2014)
6 - Wagner et al., (2011)
7 - Weiss et al., (2009)
8 - Weiss & Lokken (2009)

APPENDIX B: PARTICIPANT AGREEMENT SHEET

WakeMed IRB

Study # 833821-1

Approval date: 12/22/2015 Init. *SK/vb*

Study Title: Readiness for Discharge and Effect of the Educators Intervention
Investigator: Lorraine Wilson, RN, MSN

Study Information Sheet

DESCRIPTION: You are invited to participate in a research study on readiness for hospital discharge of postpartum mothers. The purpose is to note the preparedness mothers feel when educated individually by a RN patient educator. You will be asked to complete a questionnaire 1 time prior to discharge.

TIME INVOLVEMENT: Your participation will take approximately 1 day.

RISKS AND BENEFITS: There are no risks associated with this study. The benefits which may reasonably be expected to result from this study are mothers feeling prepared and ready to be discharged from the hospital. We cannot and do not guarantee or promise that you will receive any benefits from this study. Your decision whether or not to participate in this study will not affect your medical care.

PAYMENTS: You will not receive anything as payment for your participation.
SUBJECT'S RIGHTS: If you have read this form and have decided to participate in this project. Please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. The alternative is not to participate. You have the right to refuse to answer particular questions. Your individual privacy will be maintained in all published and written data resulting from the study.
CONTACT INFORMATION:
Questions: If you have any questions, concerns or complaints about this research, its procedures, risks and benefits, contact the Research Investigator Lorraine Wilson at 919-271-9471.
Independent Contact: If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a participant, please contact the WakeMed Institutional Review Board (IRB) and request to speak to someone independent of the research Stephen Kicklighter, MD, Board Chair, at (919)-350-8795. You can also write to the WakeMed IRB, 3000 New Bern Avenue, Raleigh, NC 27610.
This copy of this participation form is for you to keep.
If you agree to participate in this research, please indicate this to your nurse and complete the attached questionnaire prior to your discharge from the hospital.

IRB Approval: 12/22/15
IRB Expiration: 12/21/16

Confidential to WakeMed IRB.
User is responsible for confirming use
of the current Issued Version prior to use.

APPENDIX C: READINESS FOR HOSPITAL DISCHARGE SCALE – NEW MOTHER FORM

Please check or circle your answer. Most of the responses are on a 10 point scale from 0 to 10. The words below the number indicate what the 0 or the 10 means. Pick the number between 0 and 10 that best describes how you feel.

1. As you think about your discharge from the hospital, do you believe you are ready to go home as planned?	YES NO
2. How physically **ready** are you to go home?	0 1 2 3 4 5 6 7 8 9 10 Not ready Totally ready
3. How would you describe your pain or discomfort today?	0 1 2 3 4 5 6 7 8 9 10 No pain Severe pain
4. How would you describe your **strength** today?	0 1 2 3 4 5 6 7 8 9 10 Weak Strong
5. How would you describe your **energy** today?	0 1 2 3 4 5 6 7 8 9 10 Low Energy High Energy
6. How much **stress** do you feel today?	0 1 2 3 4 5 6 7 8 9 10 None A Great Deal
7. How **emotionally** ready are you to go home today?	0 1 2 3 4 5 6 7 8 9 10 Not Ready Totally Ready
8. How would you describe your **physical ability** to care for yourself in the first few days after you go home?	0 1 2 3 4 5 6 7 8 9 10 Not Able Totally Able
9. How would you describe your **physical ability** to care for your baby in the first few days after you go home?	0 1 2 3 4 5 6 7 8 9 10 Not Able Totally Able
10. How much do you **know about caring for yourself** after you go home?	0 1 2 3 4 5 6 7 8 9 10 Know Nothing At Know All
11. How much do you **know about caring for your baby** after you go home?	0 1 2 3 4 5 6 7 8 9 10 Know Nothing At All Know All
12. How much do you **know about problems to watch for** after you go home?	0 1 2 3 4 5 6 7 8 9 10 Know Nothing At All Know All
13. How much do you **know about who and when to call** if you have problems after you go home?	0 1 2 3 4 5 6 7 8 9 10 Know Nothing At All Know All

14. How much do you **know about restrictions** (what you are allowed and not allowed to do) after you go home?	0 1 2 3 4 5 6 7 8 9 10 Know Nothing At All Know All
15. How much do you **know about the follow-up medical care** you and your baby need after you go home?	0 1 2 3 4 5 6 7 8 9 10 Know Nothing At All Know All
16. How much do you **know about services and information** available to you in your community after you go home?	0 1 2 3 4 5 6 7 8 9 10 Know Nothing At All Know All
17. How well will you be able to **handle the demands** of life at home?	0 1 2 3 4 5 6 7 8 9 10 Not At All Extremely Well
18. How well will you be able **to perform your personal care** (example, care of your stitches, incision, breast care, hygiene, bathing, toileting, eating)?	0 1 2 3 4 5 6 7 8 9 10 Not At All Extremely Well
19. How well will you be able to **perform baby care**?	0 1 2 3 4 5 6 7 8 9 10 Not At All Extremely Well
20. How much **emotional support** will you have after you go home?	0 1 2 3 4 5 6 7 8 9 10 None A Great Deal
21. How much **help** will you have with your **personal care** after you go home?	0 1 2 3 4 5 6 7 8 9 10 None A Great Deal
22. How much **help** will you have with **household activities** (for example, cooking, cleaning, shopping, babysitting) after you go home?	0 1 2 3 4 5 6 7 8 9 10 None A Great Deal
23. How much **help** will you have with **baby care** after you go home?	0 1 2 3 4 5 6 7 8 9 10 None A Great Deal

APPENDIX D: SCORING INFORMATION

Readiness for Hospital Discharge Scale – New Mother Form

The RHDS – New Mothers Form contains a total of 22 items plus a single dichotomous item (question 1) that is not part of the scale score.

Subscales

Personal Status – items 2 through 9
NOTE: ITEMS 3 (pain) AND 6 (stress) MUST BE REVERSE SCORED
Knowledge – items 10 through 16
Coping Ability – items 17 through 19
Expected Support – items 20 through 23

Scoring: Sum items in subscales and total scale to obtain scores. Divide by number of items in subscale or scale to obtain item means on a 0 to 10 scale.

APPENDIX E: PSYCHOMETRICS

Readiness for Hospital Discharge Scale – New Mother Form

Reliability and validity were established by combining responses of postpartum new mothers, adult medical surgical patients, and parents of hospitalized children. Each version of the instrument used wording specific to the patient population. The instrument containing 21 items with content in common across the 3 study groups was reliable and valid for the total sample. Results are in press:

Weiss, M.E. & Piacentine, L.B. (2006). Psychometric properties of the Readiness for Hospital Discharge Scale. *Journal of Nursing Measurement*, 14 (3), 163-180.

The RHDS – New Mothers Form contains a total of 22 items plus a single dichotomous item (question 1) that is not part of the scale score. In addition to the 21 common items one item was added to the Personal Status subscale.

Reliability (Cronbach's alpha) of the combined instrument and the new mothers form are presented below:

Scale/Subscale	RHDS Combined sample – 21 items N=356	RHDS postpartum mothers – 21 items N=122	RHDS –New Mothers form – 22 items (I item added in personal status subscale) N=122
Total Scale (items 2-23)	0.90	0.90	0.89
Personal Status subscale (items 2-9/10)	0.80	0.80	0.83
Knowledge subscale (items 11-16)	0.87	0.80	0.81
Coping Ability subscale (items 17-19)	0.85	0.86	0.86
Expected Support subscale (items 20-23)	0.85	0.87	0.87

Additional information about the scale:

	Postpartum n=122[#]
	21 items
Average inter-item correlation	
RHDS	0.30
RHDS Factor 1	0.40
RHDS Factor 2	0.45
RHDS Factor 3	0.71
RHDS Factor 4	0.63
Item means (SD)	
RHDS	8.4 (0.8)
RHDS Factor 1	7.7 (0.8)
RHDS Factor 2	8.7 (0.7)
RHDS Factor 3	8.6 (0.6)
RHDS Factor 4	8.7 (0.3)

Factor 1 - Personal Status subscale; Factor 2 – Knowledge subscale; Factor 3 – Coping Ability subscale; Factor 4 – Expected Support subscale

Reading level = 7.3 (Microsoft Word – Flesch-Kincaid Grade Level)

APPENDIX F: TABLES

TABLE 1: DEMOGRAPHICS

Table 1: Characteristics of the postpartum women who participated in the discharge education evaluation (n=60).

	Overall (n=60)	**Intervention (n=30)**	**Control (n=30)**	**P value**
Age (mean)	31.01 +/- 1.44	30.53 +/- 2.05	31.50 +/- 2.11	0.51
Parity (mode)	2.30 +/- 0.26	2.37 +/- 0.33	2.23 +/- 0.42	0.44
Mode of delivery (vaginal)	70% (n=42)	50% (n=9)	50% (n=9)	1.00
Feels ready to go home (yes)	98% (n=59)	97% (n=29)	100% (n=30)	1.00

TABLE 2: DIFFERENCE IN SUBSCALE SCORES

Table 2: Difference in Readiness for Hospital Discharge subscale scores between women in the intervention and control groups (n=60).

	Intervention (n=30)	**Control (n=30)**	**Mann Whitney p-value**
***Personal Status**	7.158 +/- 0.464	6.858 +/- 0.367	0.437
***Knowledge**	9.048 +/- 0.452	6.652 +/- 0.805	0.00003
***Coping ability**	8.978 +/- 0.488	7.178 +/- 0.652	0.00008
***Expected support**	9 +/- 0.475	7.692 +/- 0.64	0.00164

*confidence intervals using a .05 alpha