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Development of Couplet-Care Education

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Walden University

College of Health Sciences

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Annette Backus

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Walden University
2017

Abstract

Development of Couplet-Care Education

by

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MSN, Grand Valley State University, 1996

BSN, Northeastern University, 1980

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

November 2017

Abstract

The facility under study has had a traditional postpartum and nursery, with different nurses for the mother and baby. A decision was made to change the care model to couplet-care (CC). CC is an evidence-based care model that promotes newborn care at the mother's bedside. Establishing an education and implementation plan is important to the success of the transition. The purpose of this project was to develop an evidence-based education and implementation plan for CC implementation and to provide for staff barriers and pushback to change. The goals of the study were to identify an approach to implement evidence-based practice education that is efficient and sustainable. There is a paucity of literature available that describes how to plan and implement CC. However, Mercer's maternal role attainment provides ample evidence to support the nursing care model of CC. A survey was developed to determine the gaps in current knowledge of couplet-care. The survey was returned by 54% of the 67 staff nurses from the mother-baby unit. and revealed the need for definitions of CC, Family Centered Care, and the need to integrate role-playing into the education plan. Transformation theory is used to identify attitudes and biases to practice change that interfere with implementation. Reflective discussion was built into the education plan to assist with overcoming barriers to practice change. Using an evidence-based program plan for a nursing care model change may ease the transition of other mother-baby units to CC. CC provides an environment that supports healthy newborn attachment and subsequent healthy lifestyle.

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Section 1: Nature of the Project

Introduction

A facility that I am associated with has had a traditional postpartum and nursery, with different nurses for the mother and the baby. The announcement of new construction brought the news that the new mother-baby services would be a postpartum unit with a very small nursery. The decision was made by the administrators to change the care model to couplet-care (CC; J. Matthews, Administrator Women's and Children's Services, personal communication, August 10, 2015).

The CC model provides one nurse taking care of the mother and the baby or *couplet*. One nurse provides all care and education to one couplet. The current best practices support CC and keeping the mother and baby together in the same room so that infant care and education are completed at the mother's bedside (Bystrova, et al., 2009; Chubb and Allen, 2013; Chung et al., 2008; Curl, 2013; Dumas et al., 2013; Jaafar et al., 2012; Katz, 2012; Mercer, 2004; Phillips, 1999).

The facility delivers approximately 3,600 babies a year and has functioned as a traditional postpartum unit and separate nursery for 30 plus years. The nurses at this practicum site currently practice traditional mother and baby care (J. Matthews, personal communication, August 10, 2015). The traditional model of postpartum care and baby care separates the mother and infant by nurse and unit. This traditional care model fosters less time with the mother and more nursery time for the baby. CC supports all baby care being done at the mother's bedside (Bystrova et al., 2009; Chubb and Allen, 2013; Chung et al., 2008; Curl, 2013; Dumas et al., 2013; Jaafar et al., 2012; Katz, 2012;

Mercer, 2004; Phillips, 1999; Watters and Kistiansen, 1995; Wilkerson and Barrows, 1988).

The current nursing staff prefers to keep the traditional model of care, coupled with little knowledge translation on the benefits of CC presented in the literature. This resistance may represent the greatest barriers to the appropriate practice change proposed in this project. There have been several concerns presented to the unit management from staff who feel the change to CC would be detrimental to the patient care given in this facility. The first concern is with infant safety; the nurses believe there will be increased infant drops by sleepy parents and possibly increased episodes of unobserved infant choking or aspiration, both unsubstantiated in the literature. A second issue comes from the pediatricians presenting complaints about logistics in returning babies to the nursery for physical exams and the lack of equipment to complete care at the mother's bedside. Third, the staff fears losing their expertise in either the care of the mother or care of the baby when they have to care for both patients (J. Matthews, personal communication, August 10, 2015). The staff's resistance to changing to CC, as well as recognizing the significant contribution to optimal clinical outcomes for this population, represent a knowledge translation deficit.

Problem Statement

The problem encountered at this practicum site is the need for the transition from traditional mother and baby care to CC. The nursing staff continue to express their dissatisfaction with the proposed change in practice. The nurses' objections include the following unsubstantiated concerns and conditions: first, patient safety issues because of

babies residing in the mothers' rooms for longer periods of time, second, cross training and perceived loss of expertise, and third, demonstration of a general lack of knowledge regarding the advantages the evidence supports for this change in practice (A. Price, VP Women's and Children's Services, personal communication, Nov. 21, 2015). This project is designed to develop a process for successful implementation of evidence-based practice (EBP) change. Current literature outlines frequent problems with implementation and sustainability of EBP (Eccles, Grimshaw, Walker, Johnston, and Pitts, 2005).

Purpose Statement

The purpose of this project is to develop an evidence-based plan for implementing practice change. As a first step, a comprehensive and critical review of the literature regarding the practices of CC will substantiate the justification for knowledge translation implementation strategies. Second, it is necessary to identify perceived barriers among the current nursing staff that prevents them from embracing CC approaches that have been identified in the literature as best practice. Third, designing educational strategies to overcome these barriers will be an essential part of the change process. Perceived barriers of the staff often cause difficulties in implementation of EBP. These conflicts are never more apparent than when the planned changes challenge current practice (White and Dudley-Brown, 2012).

Nature of the Doctoral Project

Mercer's (2006) article "A review of nursing interventions to foster becoming a mother" was used as an exemplar guide to formulate the theoretical basis for a gap

analysis by identifying the knowledge deficits as well as barriers and challenges to change. The results of this analysis provided a plan for implementation that will support knowledgeable professional nurses in transitioning to CC. The change to CC requires an altered workflow process that provides for the care of the baby to be completed at the mother's bedside.

I used transformation theory (TT) to examine the nurses' beliefs and cultures. I employed this theory to identify and support the postpartum and nursery staff nurses' attitudes during this time by assisting them to accept the new practice. This process eases practice change. TT uses critical discussion to understand the nurses' perceived barriers to practice changes in the nursery and postpartum units; this is important to identify so plans can be made to overcome these impediments. The staff views on the current plan for transition and suggestions for improvement were also solicited. Acknowledging the concerns of staff can be used to redirect their fear into plans for success. Once the barriers to change are discovered and defined, progress can be made to determine how best to provide solutions to overcome these resistances, while respecting the staff fears and concerns (Grove, Burns, & Gray, 2013). The goal is for smooth acceptance of these best practice changes, including sustainability and persistence of quality improvement efforts designed to maintain optimum knowledge translation into practice based on the literature and contemporary guidelines.

Significance of the Project

Developing a plan for change based on evidence related to maternal role attainment (MRA) is the first step towards implementation of a sustainable nursing

practice change at this facility. Keeping mother and infant together provides a superior practice to support the MRA. CC also supports the healthy term infant through extrauterine transition, improves initiation of breastfeeding and increases mother-infant bonding. An environment that is supportive subsequently decreases stress, resulting in the reduction of complications and admission to higher levels of care. Admission to Neonatal Intensive Care units increases acuity of care, length of stay, and cost of healthcare (Bystrova et al., 2009, Chubb and Allen, 2007; Chung et al., 2008; Gabriel et al., 2009; Karlsen, 2012; Katz, 2012; Mercer, 2004; Phillips, 1999). A detailed compilation of barriers, concerns, and solutions can be adapted for use at other facilities to improve the CC transition like the results of the efforts of this project at this institution.

The assistant vice president provided many of the staff's concerns about patient safety, the barriers to providing care to the baby in the mother's room instead of the nursery, lack of equipment and resources, and the nurse perceptions of the reaction from physicians and patients. I used a needs assessment to provide input into the development of an education and implementation plan that is synthesized with the best evidence found in the literature of the development of a CC model for MRA. After a review of the existing literature, development of an education plan, and reasonable transition plan for the staff, there was a clear understanding of the rationale for this change (See Appendix A for Proposed Education Plan and Appendix B for Transition Time Line).

The newborn nursery nurses need to transition to care of the mother in the CC model, and the postpartum nurses must be able to care for the babies, both merging competences for care in the couplet or dyad model. This change in practice will increase

the time mother and infant are together and represents optimal approaches for birthing, infant bonding, and family transition. It also provides opportunities for improved parent education that will also enhance parent-infant bonding (Dumas, LaPage, Bysova, Matthieson, Nystron, and Widstrom, 2013). By providing evidence-based education, there should be improvement in all the barriers and concerns identified with the gap analysis. Success with using TT to critically reflect on the staff nurse's current habits and attitudes in planning for this transformation will support the theory as an important aspect of change implementation.

Summary

In Section 1, I discussed the current postpartum and nursery nurses' reluctance to change the model of practice that provides care for the mothers and their newborn infants. This section also included the significance of providing an environment that keeps the mother and baby together after delivery and while in the hospital. Evidence supports CC as the best practice for the care of mother and baby. Change in practice to an evidence-based CC will support a healthier lifestyle for mother and baby from birth. With the eventual completion of this project, there is an expectation to see improved outcomes that are based on mother-baby togetherness and an improvement in patient satisfaction scores

In Section 2, I present literature that supports moving infant care to the mother's bedside. In the discussion, I address MRA theory, CC, rooming-in, breastfeeding, historical changes to postpartum and infant care, and education approaches for transition

to CC. The introduction of EBP change is supported by the theory of MRA (Husmillo, 2013; Mercer, 2004).

Section 2: Background and Context

Introduction

The Joint Commission (TJC, 2015), Baby Friendly USA, and the World Health Organization (WHO, 2013) provided evidence that keeping the mother and baby together after birth is the best way to support extrauterine transition, breastfeeding, and bonding. Bonding is an exclusive, long-lasting emotional tie between mother and infant. It is the beginning of a life-long connection between the newborn and mother (Figueiredo, Costa, Pacheco, and Pais, 2009; Horta, 2013). When there is little to no separation of the mother and infant, the increased contact supports improved bonding. The mother-infant interaction observed when there is CC is more robust and leads to improved neuro and emotional development of the baby over time (Bystrova et al., 2009). MRA is best supported with CC (Mercer, 2004).

The purpose of this project was to evaluate the current transition plan and identify and address challenges and barriers the nurses perceive as associated with CC. I designed an evidence-based educational program to support the implementation of a change in nursing care for a smooth transition from traditional mother-infant care to CC. I explored the scholarly literature to determine the best-supported practice for the care of the mother and infant in the postpartum period. The evidence was used to support the need to change to CC and to substantiate the need for an educational program that will support this change. In Section 2, I review the literature about the historical changes that determined traditional maternal and postpartum care. Included in this literature review are Family Centered Care (FCC), CC, rooming-in, mother-infant bonding, and support

for breastfeeding. The education for staff required to change from traditional postpartum/nursery care into CC is also included. I reviewed Mercer's theory on MRA (2006) and Mezirow's TT (2000) as the basis for the implementation of this change in practice.

Concepts, Models, and Theories

Sustainability

Education on nursing practice change is not enough to guarantee or sustain change. There must be critical preparation and ongoing support in this process (Nananda, 2005). Implementation of EBP change is a slow process, and the reason for this is not understood well. Nurses bring to the table feelings, attitudes, and long held beliefs of their current practices. In the current practice setting, nurses have a fear of transitioning from familiar practices on which they have relied that have given them confidence and a sense of accomplishment in their current care delivery. There is also the fear of appearing inadequate while learning how the change affects their role and responsibilities. The fears, attitudes, values, and beliefs are the most difficult barriers to overcome when implementing EBP (Eccles, Grimshaw, Walker, Johnston, and Pitts, 2005; Maich, Ploeg, Jack, and Dobbins, 2009).

Without acknowledgment and support of values, beliefs, and attitude, change may happen, but sustainability falters. Practice that conflicts with the nurse's essential foundation of nursing practice can cause conflict and result in returning to the old practice (Maich, Ploeg, Jack, and Dobbins, 2009). Planning for implementation of EBP

requires engaging the attitude, beliefs, and behaviors. Strategies must be developed at the start of implementation planning.

TT provides clarification and approaches that enable changing attitudes, beliefs, and behaviors (Mezirow, 2000). Implementation of best practices based on knowledge translation from the literature requires a dynamic process to challenge and understand previous ways of thinking and address the strong emotional responses that accompany the challenge. TT provides a way to assess the negative responses to change and develop strategies to overcome the challenges that have become apparent. With critical reflection and discussion, the participants become aware of the attitudes and beliefs that frame the reason for not moving forward with change. Through this process, one gains knowledge that leads to a new perspective and the ability to accept change.

If the staff are having problems with acceptance of change, there needs to be a mechanism to resolve the fears and emotions that surface during the transformation. TT depends on “critical reflection and critical discourse” (Maich, Ploeg, Jack, and Dobbins, 2009, p. 28) to resolve them. Critical reflection and conversation are supported events that assist the nurses to review their attitudes, beliefs, and values while learning the new practice. The process requires trusting relationships with a facilitator, and as the process proceeds, attitudes and beliefs become more transparent. This transparency leads to perspective transformation or a new way of viewing life experiences. This practice provides secure feelings; it encourages nurses to critique, understand, and value the new learning. The EBP presented can then be incorporated professionally and individually integrated into their new practice.

Relevance to Nursing Practice

As described in the Essentials of Doctoral Education for Advanced Nursing Practice, Essential VII, Clinical Prevention and Population Health for Improving the Nation's Health identifies positive social change benefits for this project (American Association of Colleges of Nurses, 2006). The DNP graduate can support the integration of evidence-based healthy lifestyles from birth. CC is the evidence-based model that will be introduced into this facility. CC can aid in the development of a preventative and supportive culture of health in the population of mothers, infants, and families (Noseff, 2014).

Development of healthy lifestyles from birth is needed for the improvement of population health. Promoting nonseparation of mother and infant after birth supports a decrease in postpartum depression, improves bonding, and encourages relationship building (Department of Health and Human Services, 2010). Providing CC for mother and infant keeps the mother and infant together, promotes parent education, and is the best evidence available for the care of the mother and infant (Waller-Wise, 2012). According to Young (2013), healthcare staff has a responsibility to support healthy mother-infant bonding, and a very effective way to do this is through CC after delivery. The nurses will be able to develop an understanding of the importance of their role in MRA. Dissemination of the results of this project will add to available education for transition to CC.

Nursing practice based on existing beliefs provides security for the staff. Challenging these beliefs causes a response meant to preserve what they are familiar with

to maintain current balance. Professional nurses make plans to look at the evidence and to analyze and incorporate changes into practice. Those nurses not educated in EBP often need the guided approach of a more formal process such as TT to successfully develop a plan for process change.

Historical View of Maternal-Infant Care

Transition From Home Births to Hospital Births

Phillips (1999) reviewed how the traditional model of maternal-infant care evolved in the 1920s through 1940s. Phillips provided the most comprehensive review of the changes in maternity care since the beginning of the century when delivery of babies had the largest shift from home birth to hospital birth. A factor in this model of care was the introduction of the obstetrics as a medical specialty; birth was now defined as a pathologic medical process that needed to be controlled. Anesthesia, controlled labor, and obstetrician-assisted deliveries became a standard of care (Dick-Read, 1944). Rigid rules and regulations were published in the first volume of the American Journal of Obstetrics and Gynecology by DeLee (1927). DeLee emphasized that the physician must control the birth, and the nurse must control the environment. The adoption of this belief increased interventions during labor and delivery; these included episiotomies, manual placental deliveries, oxytocin induction, and forceps deliveries using general anesthesia. These interventions took control away from the mother.

From the 1920's through the 1950's the nurses were controlling the environment as the physician controlled the birth. With higher maternal and infant mortality, there was an increased concern regarding infants developing infections. Thus, the mothers

were kept on a postpartum unit, the babies were kept in a nursery. Nursing strictly limited visitation, the baby could only be in the mother's room with the mother for feedings, and the father was largely excluded. Most of the day, the baby was in the nursery to prevent infection. The length of stay was 7 to 10 days, in which the mother had limited contact with the infant (Apple, 1987).

By 1945, 80% of births were done in a hospital. During this time, formula became commercially available, it became one more reason the baby would stay in the nursery, and breastfeeding rates decreased. Babies could be fed formula in the nursery, and the mother could rest undisturbed, which increased the amount of time the baby was in the nursery. Ready-made formula gave the nurses more control and made their tasks more important, and the nurses felt more efficient (Apple, 1987).

The late 1940s through the 1950s was a period where the negative effects of separating the mother and baby after birth became understood. Attachment theory was developed by Bowlby (1953), a British psychiatrist, who was an expert on how the growth of love and bonding between a mother and an infant develops. Bowlby described the experience of “maternal deprivation” and the suffering caused to children who have delayed attachment to their mother. Even though well cared for physically, without the closeness to the mother, the baby did not begin to develop self-regulatory mechanisms (Bowlby, 1953). It was during this time that the term *rooming-in* was introduced. Rooming-in is a postpartum unit where the babies stay in the mother's room, and the mother cares for the infant and develops a routine that helps to establish attachment and bonding (Bowlby, 1953).

Transition to Family-Centered Maternal Care

Wertz and Wertz (1989) described the factors that began the change to the provision of maternity services. Hospitals were being pressured by consumers to change their practices and attitudes surrounding the care of the pregnant woman and her family. Family-centered maternity care (FCMC) was suggested as the method that would humanize the birth experience. FCCM is based on the needs of the mother, father, infant, and family (Wertz & Wertz, 1989). FCC was defined by the Institute for Family Centered Care (IFCC, as an approach to health care based on mutually beneficial partnerships between health professionals and families. Hospitals began to develop new practices such as birthing places away from the traditional maternal units or located out of the hospital, and the mothers and infants were kept together (Gramling, Hickman, and Bennett2004; Waller-Wise, 2012). FCC supports that the key to understanding what the mothers and families desire from their birth experience is good communication.

The evolution of obstetric healthcare has developed from a normal process of relatively healthy women to a hospitalized procedure with increasing technology and medicalization of childbirth. Consumer dissatisfaction and growing interest in mothers and their families taking control of their birthing experience have developed into a push for the experiences that FCC bring (Gramling, 2004; Institute of Family Centered Care, 2015). Therefore, making decisions as a team recognizes that the woman knows her body and her baby. She is aware of her unique situation and deserves respect regarding decisions made based on her education, culture, and preferences; this includes her baby as well. FCC maintains CC as the most appropriate care model for mother and infant; it

provides for both the mother and baby to be included in all interactions. The ability to provide for frequent and significant communication between nursing staff and the parents is paramount to care giving (Institute of Family Centered Care, 2015). CC assists the healthcare team to provide education for gaps in knowledge so that the patient can make informed choices and wisely participate in the process (Encenroad and Zwelling, 2000; Katz, 2012). Frequent specific education supports that the patient's involvement in decisions, which can reduce risk, improves outcomes and patient satisfaction (Jiminez, Klein, Hivon, and Mason, 2010) .

Introduction of Couplet-Care

By the mid 1970's perinatal areas began redesigning their units so that all care for the mother and infant was completed in the mother's room at the bedside. Many hospitals also removed the newborn nursery or made them into very small respite nurseries. The goal was to use the nursery for only short periods of time, mostly leaving the baby in the mother's room. Changing physical resources allowed for less moving and separation of family, especially separation of the mother and infant (Wertz & Wertz 1989).

A randomized controlled study by Bystrova et al. (2009) was conducted to determine differences in maternal-infant interactions when the mother and baby were kept together and when the baby was kept in the nursery, except for feeding times. Results from the study showed distinct differences in mother-infant interactions (Bystrova et al., 2009). These differences demonstrated early and prolonged mother-infant interaction after birth and during the hospitalization, improved infant self-

regulation and synchronicity with the mother, and improved appropriate maternal responses (Bystrova et al., 2009). Possible limitations of this research may be the self-selection of mothers to rooming-in, even though there was randomization (Bystrova et al., 2009). Mothers still retained choice, and this may have led to more positive results.

Dumas et al. (2013) performed a randomized controlled trial to determine if rooming-in and CC influenced mother-baby bonding. With 156 mother-infant dyads randomized at birth, the researchers tried to define differences between babies who roomed in with their mother and those who were brought out to visit their mothers only at regularly scheduled feedings times (Dumas et al., 2013). They found that mothers who roomed in with their babies could detect early feeding cues and feed the infant during natural wake states (Dumas et al., 2013). Meanwhile, mothers who saw their babies only on a feeding schedule showed a roughness when trying to arouse their babies to eat, showing a lack of bonding and ability to read infant cues (Dumas et al., 2013). Rooming-in within this context was not CC because the nurse and baby had different nurses. The custom at this facility was too tightly swaddle infants, so those in the control had even less contact with their mothers. There was no in between, the mother either had her baby all the time or the baby was brought out on a strict schedule. This could have influenced the marked differences (Dumas et al., 2013).

Dyson, McCormick, and Renfrew, (2008) conducted a randomized controlled trial where the control were babies who were kept in the nursery except for feeding times and the study babies roomed in with their mother. The purpose was to determine if on-demand feedings were improved by full rooming-in. These results demonstrated that

mothers were much quicker to identify their baby's early feeding cues when the baby stayed in the mother's room (Dyson et al., 2008). Early recognition improved breastfeeding rates (Dyson et al., 2008). There was more difficulty establishing breastfeeding when the infants were cared for in the nursery (Dyson et al., 2008). As with the Dumas (2013) study, there were drastic differences in the exposure of infant to mother and these could have been the result of the differences in breastfeeding rates. In reality, the amount of time the infant is with the mother varies greatly depending on the family's choices.

Jaafar, Lee and Ho, (2012) conducted a meta-analysis of 19 randomized controlled trials. These trials were an attempt to determine if keeping the mother and baby together would improve breastfeeding. Results in one study showed a small difference in breastfeeding at discharge (Jaafar et al., 2012). The average number of women discharged daily who were breastfeeding was 8.3 with CC and seven with traditional nursery care (Jaafar et al., 2012). In another study, the mothers with traditional care went home breastfeeding 45% of the time, and 86% of the rooming-in mothers left the hospital breastfeeding (Jaafar et al., 2012). No explanation could be made for the vast differences in results. What was more important is that the studies demonstrated greater maternal awareness of infant cues by keeping the mother and infant together. Keeping the mother and baby together improved bonding, evidenced by an enhanced ability for the mother to read infant cues accurately (Jaafar et al., 2012). CC supports improved breastfeeding results. CC with rooming-in shows an improvement in the mother and infants ability to develop their unique communication.

With the mother and infant together most of the time, it became apparent that having one nurse take care of both could improve care. CC care has become an essential part of family-centered maternal care; it simplifies communication between patient and provider. One nursing provider caring for the mother and infant can develop a deeper understanding of the mother, infant, and family dynamics. Nursing care in this manner promotes better communication to determine what the patient and family needs are (Jimenez et al., 2010). One nurse can deliver more appropriate individualized education to a family than two different nurses, who discuss only education of one of the patients and possibly causing confusion.

The advantages of CC, where one nurse cares for both mother and baby, include continuity of care, facilitation of breastfeeding, stronger bonding and attachment. Self-regulated interaction and sleep patterns of the mother and baby become synchronized. Staff benefits include better teaching opportunities, less conflict, and duplication of effort, an easier patient load, better communication, increased accountability, autonomy, and ultimately increased job satisfaction (Chubb and Allen, 2013; Chung et al., 2008; Crenshaw, 2007; Davis, Stichler, and Poeltler, 2012; Dyson, McCormick, and Renfrew, 2008; Klaus and Kennell, 1976; Olson and Smith, 1992; Phillips, 1998; Phillips, 2003). With these positive outcomes, CC has set the standard in the care of the postpartum care of the mother and infant. These studies all showed signs of inability to maintain the practice change. Nurses often took the babies to the nursery instead of supporting rooming-in. Other aspects of practice change also slowly reverted to traditional care such as infant bathing and physical exams in the nursery.

Background

With traditional mother and newborn care, babies are cared for in the nursery and are considered the patient of the nursery nurses and their mothers are patients of the postpartum nurses (Jaafar, 2009). A discussion with the nurse manager of the nursery provided background on the process flow in this facility. The babies leave labor and delivery 1-2 hours after birth and are admitted to the nursery. The babies stay in the nursery for 2-5 hours before they reunite with their parents. During the hospital stay, the babies are in the nursery 5-8 hours a day (C. Geary, personal communication, May 2014). The result is the separation of mother and baby, which may interfere with bonding and breastfeeding; this may also lead to parent dissatisfaction with care (DeClerq, Labbock, Sakala, and O'Hara, 2009). The ability to decrease the amount of separation time should improve outcomes.

The nursing director at the practicum site explained that having several large nurseries has increased separation of infant and mother, and encouraged the nurses to do infant care in the nursery. In practicing, traditional care, babies are placed in cohorts in the nursery for assessments, physician exams, screening exams, and labs during the day. The night shift nurses may often encourage the mother to leave the baby in the nursery for the night so the new mother can sleep, which sometimes leads up to 8 hours a day in the nursery. The nursery staff has relayed concerns that care for the baby is easier done in the nursery, and this is a long-standing practice at this facility. The nurses employed in this nursery and postpartum units are voicing concerns that practice and workflow cannot

change and that it will be too difficult to take care of babies in the mother's room (J. Matthews, personal communication, August 10, 2015).

Promoting CC after birth supports breastfeeding, mother-infant bonding, and transition to extrauterine life (Mercer, 2004; Waller-Wise, 2012). Nursing staff providing CC are more efficient in promoting the attainment of the maternal role during hospitalization when they are responsible for the care of the couplet compared to when they are providing care to only the mother or the infant. The opportunity for patient education is enhanced, and there would be a lower patient load. Nurses have also expressed greater satisfaction in caring for the couplets than just a group of mothers or infants (Bystrova et al., 2009). The improved outcomes from CC have led to its being considered the best practice for care of the mother and infant dyad.

Obstetricians (OB) report that parents are choosing other hospitals because the parents are upset about how long babies are sequestered in the nursery. These new parents would prefer unlimited access to their babies. Increasing OB and patient complaints make it a concern for the administrative team in providing a solution to improve patient satisfaction scores to attain the hospital's strategic plan (HDH, 2014c). This facility participates in the Hospital Consumer Assessment of Providers and Systems (HCAPS). HCAPS reports for the past three years have included parent comments showing disappointment with the amount of time the baby spends in the nursery while in the hospital. A consistent 31-33% of HCAPS patient satisfaction scores reflect dissatisfaction with the current model of care (HCAPS, 2013, 2014, 2015).

In this facility, the hospital administrators feel that changing to CC will also improve patient satisfaction scores, resulting in CC as an addition to the strategic plan for this facility. The strategic plan is to convert to CC with the completion of construction of a new mother-baby unit (HDH, 2015b).

Additionally, the transition to CC has both the nursery nurses and the postpartum nurses unprepared. Many of the nurses discuss leaving for other types of nursing. Several have been in their roles for 30 plus years and do not want to learn how to care for the other patient in the maternal-infant dyad. The staff nurses come up with many barriers to making the change to CC (J. Matthews, personal communication, August 10, 2015).

Janssen, Harris, Soolsma, Lein, and Seymour (2001) looked at the process of changing practice and stated that this response to change from staff nurses is not unusual. Nursing pushback to change continues even with reports that the evidence-based practice of CC has shown enhanced teaching opportunities, less duplication of effort, a lower patient load, improved communication, and potential for increased job satisfaction (Janssen et al., 2001). These are all important issues that the staff nurses must understand. Often the fear of change comes from the lack of understanding regarding EBP. With the emotional barriers, there is less chance of sustainability of this change in practice (Janssen et al. 2001).

Background and Context

This project is being completed in a 360-bed, full-service, acute care community hospital in the mid-Atlantic region. The Women's and Children's service delivers

approximately 3600 babies a year (HDH, 2015). The Chief Executive Officer (CEO) has announced that with the completion of the new Women's and Children's reconstruction, there will be only a very small respite nursery. The expectation is for the service to change the nursing model of care to CC on a mother-baby unit (W. Wagnon CEO, personal communication, December 14, 2014).

The current nursery employs 42 staff RNs, and the postpartum unit 38, with ages ranging from 20 to 60. Their experience ranges from recent hires to tenured employees of 35 years; some were here when the nursery first opened. The nursing staff is very task oriented and complete all their care with mother and baby separated. Educational levels of the staff vary from diploma nurses to BSN. With the diploma and ADN educated staff making up the majority. The expectation of changing practice to CC is causing them great distress (A. Price, VP Women's and Children's Services, personal communication, Nov. 21, 2015).

Definitions of Terms

The following definitions will be used to guide this project.

Care model: The statements and principles that describe how the hospital perceives its model of nursing care and how this determines positive patient outcomes (Hannon, 2009).

Couplet care: The care of a mother and infant in one room by one nurse (Waller-Wise, 2012).

Maternal role attainment theory: The process that leads a woman from childbirth through the maternal role identity (Mercer, 2004).

Mother-infant bonding: The bond that is formed between a child and its parent, the ongoing foundation in their lives to support interactions, as well as physical, psychological, and emotional development (Young, 2013).

Rooming-in: The process of keeping the baby in the mother's room continuously during the day and night (Crenshaw, 2007)

Skin to skin: Skin to skin care is performed with the baby, naked, placed directly on the mother's bare chest. This provides thermoregulation, decreased crying, energy conservation, respiratory stability, and stimulation for breastfeeding. (Phillips, 2013).

Traditional newborn care: Where the mother is taken care of in her room by a postpartum nurse and the baby is cared for in the nursery by a nursery nurse (Jafaar, 2012).

Transformation theory: A critical reflection of attitudes, behaviors, and beliefs during times of purposeful change. This provides those that are in the process of change the ability to be understood and validated so that and can use these understandings to guide further plans for change (Maich, 2009).

Role of the DNP Student

I have worked for the organization for 18 years as a perinatal CNS, providing education, consultation, specialty patient care, and research implementation in all perinatal areas. I have a leadership role in the facility but not a supervisory role. The student role in this project will be to analyze the current plan for gaps and determine the fears and concerns of the staff nurses, design education and an implementation plan to enhance the current plan for transition to CC. I have never worked as a nurse in a CC

model, so I have no experience in this education or training. Additionally, I have worked for many years as an advocate for FCC.

Assumptions and Limitations

Assumptions

Assumptions are statements taken for granted or considered true, even without scientific testing (Grove, Burns, & Gray, 2013). Assumptions associated with this project include:

1. A complete implementation plan based on current evidence can enhance and ease transition to couplet-care.
2. Mothers want their infants in the room with them.
3. Nurses want to be supportive of the mother-infant bonding process.
4. All care for the infant can be provided in the mother's room where the parents can witness the care.
5. The development of a mother-infant bond decreases stress for the mother and the infant.
7. Providing appropriate education to the nursing staff will aid them in being open to a new culture.

Limitations

Limitations are weaknesses or problems in project design that may decrease the generalizability of the findings (Grove, Burns & Gray, 2013). Possible limitations with this project include:

1. Current long-standing habits of the postpartum nurses and nursery nurses in this facility may result in findings that may not be reproducible in other facilities.
2. Maternal role attainment gap analysis may be biased as it will be completed by this student.

Summary

This section has supported the need to change practice to a CC environment. It highlights the need to change nursing approach to care by decreasing emphasis on the tasks and focusing on the family as a group. The nurses need to integrate care and education at the mother's bedside. It requires a new approach which means letting go of old habits and attitudes.

Section 3 will provide the development plans for education and evaluation using Maternal Role Attainment (MRA) and Transformation Theory (TT) to guide the development. MRA provides the meaning of why a change in practice is needed. It provides the passion for the change. TT is a means for the staff to accept changes and integrate them with their past experiences and beliefs. Together a comprehensive plan will be developed for change.

Section 3: Collection and Analysis of Evidence

Introduction

This quality improvement project is meant to support the transition from traditional mother-baby care to CC. It will provide education, implementation plans, and support that provide a clear basis for making the change to CC, as the nursing staff expresses their displeasure with the proposed practice change. The education will decrease the negative behaviors the nursery and postpartum nurses are using to delay implementation of CC.

In Section 3, I discuss the process for developing this DNP project. The literature review clearly defined the use of CC as the preferred method for maternal role attainment. CC provides the best environment for nursing practice that increases maternal exposure to the infant and supports breastfeeding and the mother's ability to learn infant cues. CC also provides the best opportunity for nurses to provide postpartum and infant education. Based on a staff survey I determined educational needs, planned the curriculum, and developed an implementation plan. To do this, I needed to gather information on the current practice and complete an analysis on the level of care that needs to be met to provide CC.

Practice-Focused Question

The purpose of this project is to evaluate the current educational needs and identify the challenges and barriers perceived by postpartum and nursery nurses related to the proposed transition to CC. After determining the needs, an evidence-based education and implementation plan was developed. Identifying perceived barriers among the

nursing staff that keeps them from embracing CC, designing education to overcome these barriers, and planning implementation for the education was an important part of the process. Perceived barriers of the staff often cause difficulties in the implementation of EBP. These conflicts are never more apparent than when the planned changes challenge current practice (White and Dudley-Brown, 2012).

Identification of these barriers and challenges was completed using a needs assessment based on Mercer's (2006) MRA to determine the successes, barriers, and an acceptable design for education. I then assumed the leadership role in the project, developed and facilitated the needs assessment, and designed the education. In this section, I explain the process by which the plan was developed, implemented, and evaluated. This process included

- Review of relevant evidence-based literature regarding MRA and CC.
- A gap analysis of current practice centered on Mercer's MRA (2006, See Appendix C).
- Development of educational plan (See Appendix A).
- Development of an implementation plan (see Appendix B).

Sources of Evidence

The evaluation of current educational needs was addressed by a survey of the staff nurses working in this mother-baby unit. Collection and analysis of the responses to the questions helped me establish the priorities for shaping the educational plan. The survey was based on the basic beliefs of the MRA theory (Mercer, 2006). The educational plan

is essential to the implementation and sustainability of the practice change to CC, which has been described in the literature as the best practice to support MRA.

Procedure

The MRA theory is based on the maximum exposure between the mother and infant, in addition to maximum observation by the nurse of the maternal-infant interactions and educational opportunities. Traditional nursing care is very task oriented, with these tasks setting the priorities for daily workflow. Orientation to task only events often sets up an environment where the nurse spends little time in any one mother's room as they need to continually go back and forth to complete tasks. A review of gaps in the basic practices of MRA theory and current nursing process was completed to highlight the education that will be required.

Implementation plans for the change to CC were developed using TT. Priority was given to presenting clear education on what CC is and the practice changes that would need to take place. Included will be the opportunities for small group meetings for critical reflection. Before any implementation plans are developed, the staff will have the ability to work through the beliefs and attitudes that focus their current practice and learn the evidence that will guide the new practice.

Education for Implementing Couplet Care

There is a scarcity of current empirical research and publications regarding nursing staff preparation and education for the transition to CC from traditional mother and infant nursing care. The majority of CC was established in the early 1990s in response to the Baby Friendly Initiative (Baby Friendly, USA, 2010; Feng, 1993; Grubbs

and Cottrell, 1996). The change from traditional perinatal care to CC presents unique challenges to staff who have become experts in one aspect of maternal child care (Feng, 1993; Grubbs and Cottrell, 1996; Janssen et al., 2005). The Association of Women's Health Obstetrics and Neonatal Nursing (Association of Women's Health Obstetrics and Neonatal Nursing, AWHONN) supports CC as the best way to care for the postpartum mother and infant. AWHONN (2015) provided many sources of education and orientation to either postpartum care or newborn care but did not provide education or instruction specific to CC.

There has been a resurgence of abstracts presented on the transition to CC at the Association of Women's Health Obstetrics and Neonatal Nursing Conference with abstracts published in the AWHONN publications. Only one of these presentations was published as a doctoral thesis by Josefson (2014) with a detailed rationale for planning for transition to CC. Education was derived for skin-to-skin care, breastfeeding, the concept of CC, staffing plans, and changes to policies. Additionally, this unit used traditional nursing care for mothers and babies and has always trained their staff to work in all perinatal areas; therefore, actual training in patient care was not needed. Because the staff had the skillset for dyad care, there was no actual plan for teaching the staff to take care of the mother and the infant at the same time (Josefson, 2014). The success of CC implementation was measured by clinical outcomes, family readiness for transitioning to parenting roles, patient satisfaction, nurse satisfaction, the number of mothers breastfeeding, infant weight loss at discharge, and transcutaneous bilirubin level at discharge (Josefson, 2014). There was no discussion of sustainability reported.

Pravikoff and Pierce, (2005) noted that in general, nurses are socialized to models of care based on their initial training and orientation to patient care however antithetical to EBP this may seem. If the planned change in care conflicts with the routines the nurses have become used to, then fear and stress of changing become apparent. Education on EBP must be provided so the nursing staff can understand the knowledge that indicates and recommends the transition into practice. Additionally, this should be understood as a professional responsibility as continuous professional improvement is mandated by profession standards as well as boards of nursing. This then sets the stage for careful preparations to implement these best practice changes.

Murphy and Kraft (1993) researched educational models for transition to CC and found none. This lack of evidence led to the use of educational literature, and I determined a competency-based training would be the best approach. To support this, Murphy and Kraft developed and validated a Perinatal Nurse Self-Efficacy scale to determine individualized competencies and targeted education for the nursing staff. An analysis of the tool demonstrated the ability of the tool to determine which area the nurse worked in and to identify areas where education and support would be needed (Murphy and Kraft, 1993). Theoretically, this would allow education both didactic and clinical to be specific to each nurse and improve the process for implementation. Again, there is no report of sustainability; however, this is a plausible approach based on learning theory.

Janssen et al. (2005) used Murphy and Kraft's (1993) Perinatal Nursing Self-Efficacy Survey to determine nursing competencies. Individual evaluation of the scores by the staff nurse and the unit educator was used to determine strengths and weaknesses

and make a plan for each nurse. After this determination, the staff were allowed to choose live classroom lectures or self-paced modules to support their identified individual learning objectives. Training was completed with preceptors and included self-evaluation and preceptor evaluation. At 6 months, success was measured with before and after perinatal self-efficacy scores (Janssen et al., 2005). Determining specific staff nurse competencies in the mother-infant field would be the most efficient way to determine what types of education are required as contributory to the basic education content. Multiple avenues for providing this education will help engage the staff in the education process.

Maternal Role Attainment

The MRA (Mercer, 1981) theory is defined as the interactional and developmental process that a woman goes through from the beginning of pregnancy to the time when she feels attached to her infant. The maternal role is not instinctive; it is a complicated process of psychosocial development and learning. Most women transition to this role without a problem, but many experience difficulties (Mercer, 1981). Many need more structured guidance in the process. MRA theory is a framework that may help determine what facilitates or hurts attaining success in the maternal role. The first year is the period where the new mother gains competency in infant care and expresses pleasure and gratification in her child (Mercer, 1981). The outcome of MRA can be affected positively by the short time the infant and mother are in the hospital in the postpartum period.

The MRA theory is a client-focused theory and can be used to adjust care to each mother's individual needs. It focuses on the process of becoming a mother instead of the physical facets of childbearing. MRA is separated into four steps: (a) anticipatory, the pregnancy, (b) formal, birth to 6 weeks, (c) informal, settling into normalcy, and (d) from 6 weeks to 6 months when there is the achievement of maternal identity (Mercer, 2004). MRA is the complex, emotional change of becoming a mother. The theory takes a complex process and simplifies the process into an easily understood and useful form, providing concrete actions that the nursing staff can use (Mercer & Walker, 2006).

Of the four stages of MRA, the most important stage for postpartum and nursery nurses is the second stage. The second stage is from birth to 6 weeks of life. Of this time, the nursery and postpartum nurses have only 2 to 4 days to assess for the start of MRA and provide support and education to the mother (Mercer, 2004). Mercer asserted that successful MRA is positively influenced by minimizing the time the mother and infant are separated by using CC, early skin-to-skin care, and early breastfeeding. Nurses have the most sustained and intensive relationship with the new mother, and by caring for the mother and baby in CC, they can better support the complex initial steps of MRA (Mercer, 1985). MRA theory and CC provides for a more efficient process for planning and providing individualized care and education.

While educational materials are helpful to the new mother, many educational pamphlets to read can become overwhelming. The dialogue between the mother and the nurse is a better way to identifying and understanding her concerns while using printed materials to reinforce the educational messages. By more frequent short periods of

education, observation, and appraisal, the nurse can provide specific feedback on the mother's grasp of new infant care and self-care skills. With hospital time so short, every interaction between mother and nurse needs to be optimized. CC has been identified as an excellent model for this type of interaction (Mercer, 2006).

Education for nursing must start with the purpose of supporting MRA with CC. The understanding of what MRA is and how it is developed is integral to the staff moving to CC. To just learn the care of the patient, they are not experienced in taking care of, only support patient care tasks. Learning MRA brings a new understanding to the staff as to why CC is important.

Transformation Theory

One of the biggest frustrations with the implementation of EBP is the aspect of sustainability. The inability to sustain practice change leads to limited progress in research utilization. The problem seems to be the best way to foster the acceptance of current evidence into nursing practice. TT uses critical reflection and discussion to explore attitudes, beliefs, and behaviors so that they are understood, validated, and can be used to guide further actions (Maich et al., 2010). Implementation of EBP requires a process that engages attitudes, beliefs, and behaviors that will aid in the adoption of new attitudes and beliefs that are needed to facilitate change, but these are often ignored. TT demands that one comes to knowledge through understanding purposes, values, and meanings rather than accepting uncritically what they have been told by others.. We must be aware of how we come to our knowledge and beliefs and what leads to our

perspective. TT brings a theory and strategy that can facilitate changing attitudes, beliefs, and behaviors (Mezirow, 2000).

An often-cited example of a nurse not accepting practice change because of beliefs and attitudes is the nurse who is not supporting exclusive breastfeeding efforts. For example, this nurse did not breastfeed her children and they are just fine. Therefore, she sees no need to improve breastfeeding rates, and she often ignores the policies associated with this and does not feel wrong for her actions. In fact, she is sure the policy is wrong and will not go out of her way to follow it. Everything is fine just like the nurse has been doing it for the past 30 years, so there is no need to change, and if the nurse waits long enough, it will go away. (Maich et al., 2010) It is these experiences that make up the beliefs and attitudes of staff who are not moving practice change (Maich et al., 2010).

These attitudes, beliefs, and behaviors stand in the way of better practice change implementation. Existing beliefs, behaviors, attitudes, and current practice provide security or habit of mind. These behaviors have become ingrained in daily practice and often seem like they can be done almost without thinking. If these beliefs, attitudes, and behaviors are questioned or challenged, they may cause unease and conflict. The core components of TT include self-examination of fear, anger, guilt, or shame (Mizerow, 2000). These components provide the critical assessment of assumptions and lastly the building of confidence in the new practice.

The key to implementing EBP is a plan that can incorporate local custom, belief, and attitudes. TT is a process to challenge and understand previous ways of doing,

thinking, behaving, and acting as well as to address strong emotional attitudes. Education and acceptance must precede implementation of the new practice. The leader of the transformation must be able to establish and maintain trust and be open, supportive, and value the changes that are being planned. Strategies include role play, simulations, role modeling, concept mapping, small group meetings, and most importantly, the opportunity for critical reflection and discussion (Maich et al., 2009). The use of TT should assist the staff in personal growth and empowerment.

TT leads to a new perspective of potential change or a new view of life experiences. This is done using critical reflection and critical discussion; critical reflection is necessary for transforming practice. Critical reflection is mindful thought, discussion, and learning. Mindful thought is a continuous creation of new perspectives, new information, and awareness of more than one perspective. (Mezirow, 2000) This makes people aware of how they come to their knowledge and what leads to their views. Most times, mindless thought is used and relies only on past experiences and takes for granted previous frames of reference (Mezirow, 2000).

Literature Search Strategy

The literature search was conducted electronically using the following databases: CINAHL, Medline, Thoreau, ProQuest, and the Cochrane Review. Articles older than 10 years were discarded unless the articles were landmark research publications. Terms used for the search were *maternal role attainment, historical changes and development of postpartum and infant care, , rooming-in, single room maternity care, FCC, mother-infant bonding, breastfeeding, initiation of breastfeeding, skin to skin care,*

implementation of CC, change theory, sustainability, and staff nurse education for transition to CC. To produce a larger volume of articles Boolean "and" and "or" were used between words. Standards of care developed by the Association of Women's Health, Obstetrics and Neonatal Nursing (2010) were also reviewed for the current standard of practice. An internet search also yielded information from the World Health Organization, the Joint Commission, and the United States Department of Health and Human Services.

An initial search provided over 200 articles published between 1981 and 2015. Review for relevance to the project resulted in 30 pertinent articles for family-centered CC, as well as 17 articles that use CC for support of infant transition, breastfeeding and mother-infant bonding. There were four articles on the historical progression of postpartum and infant care that required further review of historical textbooks from the early 1900's. These textbooks were acquired through an online search. Eight articles provide some evidence supporting educational planning for transitioning to CC. Four articles on MRA were selected. TT is addressed in four articles, and book excerpts.

Program Development

Evidence Generated for the Doctoral Project

The results of a CC knowledge survey were used to develop and enhance the educational strategy for transitioning to this new model of care. The purpose of the questionnaire is to identify areas where the current nursing staff requires additional knowledge on the purpose and process of CC to support MRA.

Participants

Survey Participants were recruited from the existing staff on the Mother Baby unit. Participation was voluntary, and consent was assumed if the volunteer signed on to Survey Monkey to complete the survey. Participation was highly encouraged by the CNO since the decision to move forward with CC has already been made. Efforts regarding facilitating the project will only enhance implementation and success of the institution's decision.

Procedures

The purpose of this survey was presented at a Mother-Baby unit staff meeting. This presentation was followed up with an email to the entire staff. All staff were given an article on CC/ Mother-Baby Care. This article by Waller-Wise (2012), "Mother-Baby Care - The best for patients, nurses, and hospitals" was copied and made available to all staff nurses. The article was accompanied with instructions for logging into Survey Monkey to complete the survey. All questions were Likert type (Appendix C). Demographic information will include educational level, age, years as a nurse, years in specialty, and years at this facility. The Survey Monkey was open for two weeks, and a secondary reminder email was sent after one week.

Protection of Information

Survey Monkey was used to manage the staff survey. This is an online application, and links to the survey were sent to the employee email address of each staff member. Reports do not include names or email addresses. Responses to this survey are confidential. The only person with access to the results is myself as project manager.

Analysis of Results

Basic analysis of demographics was completed. Frequencies were calculated using basic excel formulas. Monkey Survey responses can be viewed individually or as reports and can include any statistical significant difference between groups. Analysis of the answers to the survey was used to determine points of education that will need to be emphasized.

Development of Educational Curriculum

The educational curriculum needs to be based on evidence supported in the literature and the results of analysis of CC knowledge survey. Cross training to mother or infant care needs to be competency based and needs to be able to adjust based on these competencies (Murphy & Kraft, 1993). A preliminary outline of the education plan is available in Appendix C. As the results of the survey are reviewed changes can be made to the plan. The education should also be available in several modes; which includes small group work, didactic instruction, role play, and simulation.

Developing a Plan for Evaluation

The eventual evaluation of the success of this project will be on the outcomes. Clinical outcomes, family readiness for transitioning to parenting, changes to breastfeeding rates, improved patient surveys, and improvement in nurses' attitudes and acceptance of the new practice change. The amount of time the baby is in the mother's room improves and an increase in the time the nurse spends in the mother's room are also desired outcomes.

Ethical Considerations

All necessary paperwork was submitted to obtain approval from Walden University Internal Review Board (IRB) # 06-09-17-0481242 and the research committee of the facility where the project will be implemented. The purpose of this project will be introduced to the Mother-Baby unit staff and the survey will be disseminated.

Summary

The literature review in Section 3 has provided the historical information that chronicled the journey to what is now considered traditional mother-infant care and how we arrived at this nursing care model. Meeting the care of the mother and baby by two different nurses and the separation of mother and baby, by the baby, being cared for in the nursery has severe limitations. Best practice literature demonstrates how current EBP that support embracing FCC, specifically the concept of CC, is essential to optimum care.

Knowledge from the literature review on the concept of MRA and CC provides the crucial elements of why the change is essential. Support for the transition to CC is identified as best practice for many reasons including less stressful infant transition with stabilization of vital signs, breastfeeding, thermoregulation, and mother-infant bonding. These are the principal reasons for this model of care. FCCM is widely recognized, with many progressive hospitals adopting CC as the postpartum component of their delivery of care model. However, the facility where this project is being completed has only just realized that this best practice knowledge must be embraced.

Couplet-Care Education

There is a paucity of current literature on how to educate staff on the transition to mother-baby care or CC. There must be education on how to complete patient care, how to care for a mother-infant dyad efficiently, and what CC is. Change must start with a clear vision, understanding the obstacles to change, and a plan to provide education to the staff that overcomes the barriers and fears of change. Mercer's framework of becoming a mother provides the clarity and purpose for this vision. This theory assists the nurse in seeing the reasons for the change in practice. The framework provides for the cultural change required to embrace CC. MRA or becoming a mother, is a continual process, and the nursing staff must support this in the short hospital stay.

TT provides the basis for understanding staff behaviors and to make implementation plans that will aid the staff's integration of evidence into practice. This will support sustainability by aiding the staff in overcoming current bias and culture to accept that the change to CC is the best care for supporting MRA.

Section 4: Findings and Recommendations

Introduction

The purpose of this project was to develop an educational plan based on Mercer's (2006) MRA. A gap analysis based on Mercer's nursing interventions to foster MRA was used to determine how to proceed with the educational plan to correct a plan that is currently not progressing smoothly. The project plan is to design an evidence-based educational program to support the implementation of a change in nursing care that provides for a smooth transition from traditional mother-infant care to CC.

A literature review supplied information on MRA (Mercer, 2004) and the importance of CC in the process of nursing care for the days right after delivery of an infant. Further literature supported the nonseparation of the mother and infant to support breastfeeding, learn infant cues, and develop of confident infant care, and family bonding.

When researching why so many implementation plans fail, it was the TT that shed light on the beliefs and attitudes that the nursing staff carries with them. This theory aids in the development of a plan to reflect on these beliefs and learn how to accept and change. The integration of reflective discussion into the education plan will be an important aspect.

Findings and Implications

At this time, there are 73 nursing staff on mother-baby unit (MBU). Due to staff on maternity leave and Family Medical Leave, there were 67 invitations to take the survey sent to staff. The response to the survey was excellent. The survey was

completed by 54% of the staff nurses. Age and education level made the most impact on the answers given in the survey (see Table 1). The staff was made up of Associate Degree (AD) and Bachelor Degree (BSN) nursing education. Years of service and experience with mother-baby care did not show any impact on the answers. The more experienced the nurse, the longer she has been entrenched in the traditional mother-baby care practiced in this unit.

Table 1

Education and Age of Respondants

Age	# of respondents	Majority of education level	# with this education level
20-30	12	BSN	12
31-40	4	BSN	4
41-50	3	BSN	1
>50	16	AD	11

Treating the family as a whole was supported by 94% of the staff, and fostering family unity while maintaining physical safety was supported by 85.7% of the respondents. This result implied that the staff had a good grasp on why CC is important even when they do not know how to provide it. Only 77.1% believed that CC is FCC, with the majority of the dissenters being the AD staff, which suggests a lack of knowledge of what FCC is.

The response to the following questions shows that the staff has gaps in providing CC. A basic tenant of CC is that baby care is completed with the family and used for opportunistic mother-baby education (Mercer & Walker, 2006). In this survey, 88.56% of the nurses *never* or *only sometimes* did the bath with the family. References in the

literature indicated that traditional care is thought to be rigid and inflexible (Mercer & Walker, 2006). However, of the staff who completed the surveys, 51.4% did not believe that traditional care was rigid and inflexible, with 45.7% believing it is rigid and inflexible some of the time. There was no correlation to age or education. This presents a tendency to continue with the traditional model of care.

Results of time with patient was even between *satisfied* and *unsatisfied*. On the unsatisfied side, the weight was more on the *very unsatisfied*, while no one chose *very satisfied*. The majority of *very unsatisfied* were staff with a BSN education. Because of the traditional model of mother-baby care in this unit, less time with each patient has been the normal pattern for care. Those more experienced nurses were *very happy* with the amount of time they spend with patients. While those less experienced nurses with BSN degrees expect more time with their patients, they have been oriented by traditional care nurses and have not been taught how to do CC effectively. Literature attests to being able to spend more time with the patient when you are caring for only 3 couplets instead of 6 patients (Waller-Wise, 2012).

The questions about satisfaction with patient education and the quality of care that is being delivered had low scores at 44% and 52%. Once again this points to incomplete knowledge of how to deliver CC to the mother-baby population. This solidifies the importance of planning and implementing education carefully.

In summary, the staff has practiced a traditional model of mother-baby care for a long time, which makes changing practice behaviors difficult. While they understand some of the global theories regarding CC, they are not able to translate that theory into

CC practice. Well implemented CC increases the nurse's time with patients, improves patient education, improves staff satisfaction, and promotes improved mother-infant bonding (Mercer & Walker, 2006).

Successful implementation of CC will provide a positive impact on each member of the staff as they learn how to deliver FCC more effectively. They will find an efficient and satisfying method of assisting women in attaining their role as a mother, resulting in a superior start to achieving their positive maternal role. CC also supports the healthy term infant through extrauterine transition and increases initiation of breastfeeding and improves mother-infant bonding. This type of environment is supportive of mother and infant transition and subsequently decreases stress, resulting in the reduction of complications and admission to higher levels of care. CC should provide advantages to the hospital with improved HCAPS scores by enhancing patient satisfaction through patient education as the central tenant. There should also be an improvement in pain management and breastfeeding initiation.

Limitations

Limitations to this survey include untested questions. While the questions were developed based on Mercer and Walker's (2006) "review of interventions to support becoming a mother," there is no guarantee that these questions are absolute indicators for knowledge and acceptance of CC. Further work on this would be helpful to other units attempting to implement CC while they are doing gap analysis before implementation.

Since this project will not be fully implemented until a later date, it leaves an inability to evaluate the accuracy of the survey. Plans for evaluation of implementation

will be developed with the project. The success of the education will also not be able to be evaluated with the later implementation date.

Education Content and Implementation Plan

When developing an educational program, the learning theory for that development is important. There is much relevant literature on how to instruct adult learners. Knowles's (as cited in Boone et al., 2002) classic work was a foundation for many of the newer theories on adult learning. Knowles's adult learning theory is suitable to direct the learning program in this situation. Most notably, the adult learning theory incorporates Mezrow's TT (Laughlin, 2012), which was the theory selected to assist in the process of changing attitudes and beliefs in the nurses on the MBU. The adult learning theory is both transformative and programmatic (Laughlin, 2012).

According to adult learning theory, adults want their education to contain useful information and be problem centered. Adult learners need to know why they are required to learn the information, and they want to have immediate application of the information (Malik, 2016). Adult learning builds on prior experiences. To this end, when the learners have a difficult time incorporating new knowledge, there must be a process to overcome this. The inclusion of the TT aids in this process.

This suggests that the education program must clearly contain the purpose for the education. The content of the education should be pertinent and to the point, and the delivery of educational content of the education should provide for interaction with the learners. There should be time provided to explore current beliefs and attitudes that may

interfere with new practice acceptance. Finally, there should be a period for immediate application of new practice such as role playing or simulation.

Recommendation for Education

Results of the CC survey reflected that the nurses had the knowledge that the family should be viewed as a whole and that family unity and safety were important. The fact that they did not feel infant care being completed in the mother's room was important shows they lack knowledge of CC. Consistent with the literature, the staff should understand that when done properly, CC will improve the quality of care and time to spend with the patient, and provide ease in education (Mercer, 2006).

MRA is best achieved through CC (Mercer, 2006), with little to no separation of mother and infant. Optimally, education and care of infant should be accomplished in the mother's room. Immediate application of education is optimal for parents being consistent with the adult learner theory (Malik, 2016). All infant care done in front of the parents, or with their help, is an opportunity for education on infant care with immediate application of knowledge. Education should be initiated with each interaction with the patient. Patients learn and retain information more effectively when provided in smaller learning sessions and reinforced over time as opposed to one long educational period. All encounters with patients should be purposeful and include meaningful education and support.

Purposeful visits are important and enhance interactions. For example, an interaction designed to provide pain medication can be used to educate on pain self-assessment, pharmacologic and nonpharmacologic methods of pain relief, instruction on

pain medications, and when to administer and when to delay. Nutrition and hydration are other essential components to fostering optimal outcomes for both the mother and baby. A request for something to drink represents an opportunity to discuss the rationale regarding hydration, especially when breastfeeding to optimize breast milk volume as well as maternal optimal health (Magri and Hylton, 2013).

When education is given in one large block, it is usually poorly retained and reinforcement is almost negligible. To provide for all of these conditions, the education plan needs to provide a definition of CC. With CC, there is frequent exposure of the same nurse and family unit so education can be given in small bits and be reinforced by the person who has been providing it (Mercer, 2006).

An important part of changing practice includes changing attitudes. To do this, TT (Maich et al., 2009) is incorporated into the educational plan. This theory provides for reflective discussion and expression of attitudes and beliefs. By understanding current beliefs and what they are based on, there comes a self-awareness and better acceptance of the new practice.

Education Plan

An education plan will be developed for the MBU for the leadership team to implement. The goal of the education is to provide the nursing staff the information they will need to efficiently provide CC to the patients on the MBU. When the education is complete, the staff will be able to define CC and FCC. The nurses will be able to list nursing interventions that support CC and strategies for incorporating nursing care and

patient education efficiently. The participants will participate in reflective discussion and role playing episodes.

Table 2

Goal and Objectives for education

Goal:

To Provide the information needed to the nursing staff so they will be able to efficiently provide Couplet-Care to the patients on the Mother-Baby unit

Objectives:

1. Define Couplet-Care
2. Define Family Centered Care
3. List nursing interventions that support Couplet-Care
4. List strategies to incorporate nursing care and patient education
5. Participate in reflective discussion
6. Demonstrate providing infant care in mother's room

Education on what CC and FCC includes and what exactly they are. CC is the care of the mother and infant by the same nurse. This requires integrated care of the infant and the mother, which increases the amount of time the mother and infant are together, and improves patient education and coordination of care (Cottrell & Grubbs, 1994; Deschenes & Roy 1991; Mercer, 2006). CC is supported by and also supports FCC; the inclusion of the whole family in all parts of care.

As described by Mercer and Walker (2006), there are specific nursing interventions that foster becoming a mother. The most important aspect to impart to staff is that all nursing interventions must be interactive and reciprocal (Mercer and Walker, 2006). Each interaction should include small pieces of education and reinforcement of earlier education (Mercer and Walker, 2006). Care of the mother should always include

self-care education. All infant care is done in the mother's room and ideally should include the parents in performing the actual care to improve education (Mercer and Walker, 2006). Every care should be taken to avoid separation of the mother and the infant (Mercer and Walker, 2006). The separation that is not a maternal request should be no more than 1 out of 24 hours (Baby Friendly USA, 2010).

The key to completing the educational program is to have the staff participate in role playing activities. There is evidence that participant activity can effect change in practice (Davis et al., 2011). This will give them opportunities to practice the integration of care and education. Role playing allows adult learners to become engaged with the development of their learning (Lewis, Duggan, Chapman, Dee, Sellner, & Corman, 2013). It allows the learner to merge knowledge with practice. Education for the adult learner must contain less passive education and incorporate project-based learning, such as role-playing and simulation so learners are actively engaged.

Along with role-playing is the provision for reflective discussion. Reflective discussion is part of transformative learning theory (Maich et al., 2009; Mezirow, 2000). This process focuses on changing what the learner knows. Reflective discussion incorporated by the facilitator into the education program encourages the learner to look at his or her beliefs and attitudes. The TL includes life experiences, critical reflection, and the connection to the new knowledge being shared. By learning that what a nurse believes in may be in direct conflict with new practice, the nurse can understand why the new practice is a recommended better practice. Self-examination of situations that cause discomfort in adopting can lead to a new way of thinking about practice. This will help

to decrease the bias held onto by the nurses (Maich et al., 2009). The hope is that with the inclusion of reflective discussion, the staff will accept practice change.

Education Program Plan

The plan for providing education would be to develop 4-hour education blocks. These blocks would include didactic education on CC and FCC. Included in this will be nursing interventions that support CC. This education should be led by a facilitator who can engage the learners in interactive learning. The facilitator encourages questions and assist the learners to reflect on their current practice, to determine how it will need to change and what that practice change will mean to them.

The educational session will also include role playing. The learners will be able to apply the information they have received during this session to practice and reinforce learning. This process is important to the adult learner and helps to accept practice change.

Evaluation of education program by the learners is an important part of this process. The evaluation allows the educator to continue improving the development and implementation of this education program (Lewis, 2013). It means that the education will continue to be tailored to the needs and purpose of this project.

The completed education plan is available in Appendix C.

Implementation Plan

The plan for implementation of education involves the scheduling of small classes, each lasting 4 hours. There would be a limit of 8-10 staff nurses. There are 73 current staff members, this expands and contracts as staff are on leave and new staff is

hired. This means there will need to be at least 7-10 initial classes scheduled. Due to staffing and budgeting, this may require 8-10 weeks to accomplish. Education for new staff would be incorporated into their orientation.

Once 75% of the staff has completed the CC education, the practice change should begin to be implemented into the Mother Baby Unit. Assignments should be made on each shift that utilizes those staff who have completed their education as CC nurses. The assigned number of Couplets should start at two and after a week move to three, which is the recommended number for CC. At this pace, the actual implementation should take 4-6 weeks. The Gantt chart on the education plan is available in Appendix D.

Evaluation Plan

The evaluation of the implementation begins when the entire staff can take care of three couplets. Audits of the amount of time that any infant spends away from the mother that is not for a medical reason or her request will be reviewed. The maximum amount of time should be 1 out of 24 hours unless it is a maternal request or a medical reason. Breastfeeding rates should also show an increase (Mercer, 2006).

Patient satisfaction should be improved with CC, so regular review of the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAPS) scores should show increase. There should be an improvement in overall patient satisfaction. There should also be acceptable and improved scores on the following questions respect and courtesy from the nursing staff, that the nurses listened carefully to you, and that the nurses explained things in a way you could understand. There should be better pain control reflected in the scores and on discharge the patients should be better educated on

the information about symptoms and care that are required at home. The CC survey can be repeated to see if there are any changes for the better,

Strength and Limitations of the Project

Strengths

The strength of this study is its basis in Mercer's (2004) MRA. This theory has shown success in how nursing can assist in the mother's changing role in a limited period of time. Fortunately, the education of basic physiology and care of the mother and infant has already been completed, and the new education plan can be developed and implemented efficiently.

Limitations

The limitation is the knowledge from the literature that implementation of CC is problematic. With the education plan not being implemented until a later date, it means that the design cannot be evaluated for success. Without actual data from completion, there is no way to know what, if anything, needs to be adjusted. The hospital will need to do its evaluation of data and analyze the outcome data. An additional limitation will be the possible lack of a facilitator to support the reflective discussions.

Recommendations

The project proposal results will be evaluated so the study can be re-evaluated and the design can be strengthened as needed. The sample size needs to be large enough to be representative of all ages, races, and gender. Using a convenience sampling design may create researcher bias and may not constitute an accurate representation of the overall population (Terry, 2012). Finally, the evaluation of the results eventually obtained from

the research should be used to feed directly into another project and implementation of translation (White & Dudley-Brown, 2012).

Summary

Change is constant; new evidence changes nursing practice frequently. The development of effective, efficient programs for education are crucial. Planning and implementing education should be based on a solid theory of adult learning. In this case, Adult Learning Theory with Transformative Learning Theory will be the basis of the education plan.

Adult Learning Theory guides the plan for this education to include a clear purpose, interactive education, and an immediate ability to practice what has been learned. When there is reluctance in the staff to change behavior, as in this case, there must be something in the education plan that will help them with this. The inclusion of the Transformative Learning Theory will allow for the staff to express fear of change, the attitudes and beliefs that may keep them from accepting practice change, and the ability to reflectively come to accept the change that is expected.

The plans for implementation and evaluation will allow the facility to proceed with the education plan. They will be able to evaluate the success of the plan by the increase in HCAPS scores, increase in breastfeeding, and increase in the amount of the time the infant is staying in the room. The CC survey can also be repeated to see if there were any improvements.

Section 5: Dissemination Plan

As a DNP nursing professional and a nursing leader, it is important to share ways to implement EBP (Varnell, Haas, Duke and Hudson, 2008, White & Dudley-Brown, 2012). Results of this project will be provided to the women's hospital administrator. Then the plans for education, implementation, and evaluation will be provided to the administrator, MBU director and manager, and the designated educator. The facilities MBU educator will perform the implementation and evaluation of this project. This plan is important due to the difficult transition the unit has been experiencing. The staff will reap the benefit from the CC education that they will eventually receive.

Based on the lack of guidance in the literature on how to educate and implement CC, this project needs to be shared with the perinatal nursing population. This lack of guidance has been identified by other institutions (White & Dudley-Brown, 2012), so sharing this project's findings would have application beyond this one facility. Development of educational plans and methods based on established theory as well as plans for evaluation for success, will aid many other hospitals in making this transition. Submission for publication in an AWHONN journal or as a presentation at the annual conference would be a way to reach a large group of maternal-child nursing professionals. The results and plan in this project have the ability to assist others in their quest for implementation of CC.

Analysis of Self

Scholar

As a scholar, it is the translation of research into practice and the dissemination of new knowledge that actually defines success (Terry, 2012). This scholarly project has changed my awareness about research and the implications it can have on society. I also have a better awareness of the importance of EBP and the transformation of EBP into best practices for better patient care.

Practitioner

The DNP graduate is expected “to demonstrate refined assessment skills and base practice on the application of biophysical, psychosocial, behavioral, sociopolitical, cultural, economic, and nursing science as appropriate in their area of specialization” (American Association of Colleges of Nursing, 2006, p.16). This DNP project encouraged the discovery of literature that supports all of nursing practice. It also forced me to analyze the literature in ways that could be used to support changes in nursing practice that will improve the way care is delivered. As a practitioner, I have always expected to know why things are done. This project has reinforced that and helped to develop the skills needed for successful implementation.

Project Developer

This DNP project survived many changes both in the focus of the project and the climate of the MBU where the project would take place. The leadership and guidance received have imparted the importance and value of patience as well as belief in the process. It is important to understand the entire process and the different stages so the

planned program can achieve the desired results (Hodges & Videto, 2011). Planning for a program that calls for future implementation is difficult because outcomes will not be seen by the completion of this project. The plan has to be the best plan that can be made from the available information. This project, with the inclusion of transformation theory, has led to insight into why practice change is difficult.

Future Professional Development

I believe the participation in this DNP project will positively impact my role as a clinical nurse specialist and as a nursing leader. The ability to understand and use potentially better ways of improving practice change will be a help to me in the future. My future will involve better-supported practice change plans.

Summary

It is important to remember that the attainment of the maternal role is an important start to every newborn's life. The literature tells us that CC is the most effective model of nursing care to achieve the goal. With further information on how to accomplish the transition to CC, there will be more units making a successful, sustainable change in practice.

References

- American Association of Colleges of Nurses. (2006). *The essentials of doctoral education for advanced nursing practice*. Washington DC: Author.
- Apple, R. (1987). *Mothers and medicine: A social history of infant feeding, 1890-1950*. Madison, WI: University of Wisconsin Press.
- Association of Women's Health, Obstetrics, and Neonatal Nursing. (2015). Nursing Education education and resources. Retrieved from:
https://www.awhonn.org/awhonn/content.do?name=02_PracticeResources/02_PracticeResources_landing.htm
- Baby-Friendly USA. (2010). About us. Retrieved from
<http://www.babyfriendlyusa.org/about-u>
- Boone, J., Safrit, D., & Jones, J. (2002). *Developing programmatic adult education: Conceptual programming model*. Long Grove, IL: Wanland Press Inc.
- Bowlby, J. (1953). *Childcare and the growth of love*. London, UK: Penguin Books.
- Bystrova, K., Ivanova, V., Edhohg, M., Mathiesn, A., Arvidson, A., Rifkat, M., & Widshrom, A. (2009). Early contact versus separation: Effects on mother-infant interaction one year later. *Birth*, 36(2), 97-109. Doi:10.1111/j.1523-536X.2009.00307.x
- Chubb, S., & Allen, M. (2013). All aboard? Changing the culture of couplet care. *Journal of Obstetrics, Gynecology and Neonatal Nursing*, 42(S1). 46. Doi: 10.1111/1552-6909.12117
- Chung, M., Raman, G., Trikalinos, T., Lau, J., & Ip, S. (2008). Interventions in primary

care to promote breastfeeding: An evidence review for the U.S. Preventive Services Task Force. *Annals of Internal Medicine*, 149(8), 565-82. Retrieved from: <http://annals.org>

Cottrell, B., & Grubbs, L. (1994). Women's satisfaction with couplet care nursing compared to traditional postpartum care with rooming-in. *Research in Nursing and Health*, 17, 401- 409.

Crenshaw, J. (2007). Care Practice #6: No separation of mother and baby with unlimited opportunities for breastfeeding. *Journal of Perinatal Education*, 16(3) 39-43.
Doi: 10.1624/105812407X217147

Curl, M., & Lothian, J. (2013). Evidence-based maternity care: Can new dogs learn old tricks? *The Journal of Perinatal Education*, 22(4) 234-240. Doi:10.1891/1058-1243.22.4.234

Davis, S., & Giangreorio, N. (2011). Togetherness: All things are possible in a baby friendly world. *Journal of Obstetric, Gynecological & Neonatal Nursing*, 40, S50-1.

Davis, S., Stichler, J., & Poeltler, D. (2012). Increasing exclusive breastfeeding rates in the well-baby population. *Nursing for Women's Health*, 16(6), 460-70. doi: 10.1111/j.1751-486X.2012.01774.x

Declercq, E., Labbok, M., Sakala, G., & O'Hara, M. (2009). Hospital practices and women's likelihood of fulfilling their intention to exclusively breastfeed. *American Journal of Public Health*, 99(5), 929-935.
doi.10.2105/AJPH.2008.135236

- Delbanco, T., Berwick, D., Boufford, J., Edgman-Levitan, S., Ollenschläger, G., Plamping, D., & Rockefeller RG. (2001). Healthcare in a land called People Power: Nothing about me without me. *Health Expectations*, 4(3), 144-50.
- DeLee, J. (1927). *Obstetrics for nurses*. Philadelphia, PA: WB Saunders Co.
- Department of Health and Human Services. (2013). *Introducing Healthy People 2020*. Department of Health and Human Services.
<http://www.healthypeople.gov/2020/about/default.aspx>
- Deschênes, L., & Roy, J. (1991). Integrated mother-baby nursing care. *The Canadian Nurse*, 87(4), 38-42.
- Dick-Read, G. (1944). *Childbirth without fear*. New York, NY: Harper.
- Dumas, L., LePage, M., Byshova, K., Matthieson, A., Nystron, B., & Widstrom, A. (2013). Influence of skin to skin contact and rooming in on early mother/infant interaction: A randomized controlled trial. *Clinical Nursing Research* 22(3). doi: 10.1177/1054773812468316
- Dyson, L., McCormick, F., & Renfrew, M. (2008) Interventions for promoting the initiation of breastfeeding (Review). *The Cochrane Library*. 18(2)
doi:10.1002/14651858
- Eccles, M., Grimshaw, J., Walker, A., Johnston, M., & Pitts, N. (2005). Changing the behavior of healthcare professionals: The use of theory in promoting the uptake of research findings. *Journal of Clinical Epidemiology*, 58, 107-112.
- Ecenroad, D., & Zwelling, E. (2000). A journey to family-centered maternity care. *American Journal of Maternal/Child Nursing*, 25(4), 178-186.

- Feng, R. (1993). The nursing effectiveness of implementing the mother-baby dyad care. *Nursing Research*, 1(1), 71-82.
- Figueiredo, B., Costa, R., Pacheco, A., & Pais, Á., (2009). Mother-to-infant emotional involvement at birth. *Maternal & Child Health Journal*. 13 (4): 539-49. Doi: 10.1007/s1095-008-0312x
- Gabriel, M., Martin, L., Escoban, L., Villalba, E., Blanco, R. & Pol, T. (2009). Randomized controlled trial of early skin to skin contact: Effects on the mother and newborn. *Acta Paediatrica*. 99, 1630-1634. Doi: 10.1111/j.1651-2227.2009.01597.x
- Gramling, L., Hickman, K., & Bennett, S. (2004). What makes a good family-centered care? Partnership between women and their practitioners? A qualitative study. *Birth: Issues in Perinatal Care*, 31(1), 43-48.
- Grove, S., Burns, N., Gray, J. (2013). *The practice of nursing research: Appraisal synthesis and generation of evidence* (7th ed.). St. Louis, MO: Saunders Elsevier.
- Grubbs, L., & Cottrell, B. (1996). Nurses' attitudes and concerns about couplet care prior to and after implementation. *Nursing Management*, 27(1), 54-56.
- Grummer-Strawn, L., Shealy, K., Perrine, C., MacGowan, C., Grossniklaus, D., Scanlon, K., & Murphy, P. (2013). Maternity care practices that support breastfeeding: CDC efforts to encourage quality improvement. *Journal of women's Health*. 22(2), 107-12. Doi:10.1089/jwh.2012.4158
- Hannon, B. (2009). Define a professional model of care. *HCPPro*. Retrieved from: <http://www.hcpro.com/NRS-235200-3238/Ask-the-expert-Define-a-professional->

model-of-care.html

HCAPS (2013). Henrico Doctor's Hospital, Report on patient satisfaction. Press Ganey.

HCAPS (2014). Henrico Doctor's Hospital, Report on patient satisfaction. Press Ganey.

HCAPS (2015). Henrico Doctor's Hospital, Report on patient satisfaction. Press Ganey.

HDH. (2014a). *Newborn admission policy*. (Policy and Procedures). Henrico Doctors' Hospital. Richmond, VA.

HDH. (2014b). *Breastfeeding*. (Policy and Procedures). Henrico Doctors' Hospital. Richmond, VA.

HDH. (2014c, February 7). Meeting of the Department of Obstetrics and Gynecology. Henrico Doctors' Hospital. Richmond, VA.

HDH. (2015). Perinatal Scorecard. Henrico Doctor's Hospital. Richmond, VA.

HDH. (2015b). Henrico Doctor's Hospital 2015 Strategic Plan. Henrico Doctor's Hospital Richmond VA.

Hodges, B. C., & Videto, D. M. (2011). *Assessment and planning in health programs* (2nd ed.). Sudbury, MA: Jones & Bartlett Learning.

Horta, B. & Cesar, V. (2013). *Long term effect of breastfeeding. A systematic review*. World Health Organization.

Husmillo, M. (2013). Maternal role attainment theory. *International journal of Childbirth Education*, 28(2), 46-48.

Institute of Family Centered Care (2015). Family centered Care. Institute of Family Centered Care. Retrieved from: www.ipfcc.org

Jaafar, S., Lee, K., & Ho, J. (2012) Separate care for new mother and infant versus

- rooming-in for increasing the duration of breastfeeding. *Cochrane Database System Review*. 12(9), 50. Doi: 10.1002/14651858.CD006641.pub2
- Janssen, P., Harris, S., Soolsma, J., Klein, M., & Seymour, L. (2001). Single room maternity care: The nursing response. *Birth*, 28(3), 173-179.
- Janssen, P., Keen, L., Soolsma, J., Seymour, L., Harris, S., Klein, M., et al. (2005). Perinatal nursing education for single-room maternity care: An evaluation of a competency-based model. *Journal of Clinical Nursing*, 14, 95-101.
- Janssen, P., Klein, M., Harris, S., Soolsma, J., & Seymour, L. (2000). Single room maternity care and client satisfaction. *Birth*, 27(4), 235-243.
- Jimenez, V., Klein, M., Hivon, M., & Mason, C. (2010). A mirage of change: family-centered maternity care in practice. *Birth: Issues in Perinatal Care*. 37 (2): 160-7. Doi: 10.1111/j.1523-536X.2010.00396.x
- Josefson, K. (2014). Implementing couplet care: Moving towards an evidence-based model of care. (Doctoral Thesis) UMI Dissertation Publishing. Retrieved from Pro-Quest.
- Karlsen, K. (2012). The S.T.A.B.L.E. Program, Learner/ Provider Manual: Post-Resuscitation/ Pre-Transport Stabilization Care of Sick. *STABLE*. Park City, UT.
- Katz, B. (2012). New Focus on Family-Centered Maternity Care. *International Journal of Childbirth Education*. 27 (3): 99-102.
- Klaus, M., & Kennell, J. (1976). *Maternal-infant bonding: The impact of early separation or loss on family development*. St. Louis, MO: Mosby.

- Laughlin, D. (2012). The Midlife Learner. *Journal for Nurses in Staff Development*. 28(5), 238-242. Doi: 10.1097/NND.0b013e318269fec7
- Lewis, D., Duggan, M., Chapman, J., Dee, P., Sellner, K., & Gorman, S. (2013). Putting words into Action' project: using role play in skills training. *British Journal of Nursing*. 22(11), 638 - 643.
- Magri, E., & Hylton, K. (2013). Transforming a Care Delivery Model to Increase Breastfeeding. *MCN: the American Journal of Maternal Child Nursing*. 38(3). Doi: 10.1097/NMC.0b013e3182836af7
- Maich, N., Ploeg, J., Jack, S., & Dobbins, M. (2009). Transformative learning and research utilization in nursing practice: A missing link? *Worldviews on Evidence-Based Nursing*. 7(1): 25-35.
doi.org.ezp.waldenulibrary.org/10.1111/j.1741-6787.2009.00172.
- Malik, M. (2016). Assessment for a Professional Development Program on Adult Learning Theory. *Libraries and the Academy*. 16(1) Doi: <https://doi.org/10.1353/pla.2016.0007>
- Medicine.Net 2015. Definition of Neonatal Intensive Care Unit. Medicine.Net, 2015.
<http://www.medicinenet.com/script/main /art.asp? article key>
- Mercer, R. (1981). A theoretical framework for studying factors that impact on the maternal role. *Nursing Research*. 30(2), 73-77. Doi:10.1097/00006199-198103000-0003
- Mercer, R. (2004). Becoming a mother versus maternal role attainment. *Journal of Nursing Scholarship*, 36(3), 226-232.

- Mercer, R. (2006). Nursing support of the process of becoming a mother. *Journal of Obstetric, Gynecological & Neonatal Nursing*. 35(5), 372-83.
- Mercer, R. & Walker, L. (2006). A review of nursing interventions to foster becoming a mother. *Journal of Obstetric, gynecological & Neonatal Nursing*. 35(5), 649-51.
- Mezirow, J. (2000). Learning to think like an adult: Core concepts of transformation theory. In J, Mezirow & Associates (Eds.), *Learning as transformation: Critical perspectives on a theory in progress*. San Francisco, CA: Jossey-Bass.
- Murphy, C. & Kraft, L. (1993). Development and validation of the perinatal nursing self-efficacy scale. *Scholarly Inquiry for Nursing Practice: An International Journal*. 7(2), 95-106.
- Nananda, F. (2005). Challenges in translating research into practice. *Journal of women's Health*. 14(1), 87-95.
- Noseff, J. (2014). Theory usage and application paper: Maternal Role Attainment. *International Journal of childbirth education* 29(3). 58-61.
- Olson, M., & Smith, M. (1992). An evaluation of single-room maternity care. *The Health Care Supervisor*, 11(1), 43-49.
- Pravikoff, D., & Pierce, S. (2005). Evidence-based practice readiness study supported by academy informatics expert panel. *Nursing Outlook*, 53(10), 49-50
- Phillips, C. (1998). Why mother-baby care? *AWHONN Lifelines*, 2(1), 53-54.
- Phillips, C. (1999). Family-centered maternity care: Past, present, and future. *International Journal of Childbirth Education*, 14(4), 6-11.
- Phillips, C., & Fenwick, L. (2000). *Single-room maternity care*. Philadelphia, PA:

Lippincott.

Phillips, R. (2013). The sacred hour: Uninterrupted skin to skin contact immediately after birth. *Newborn & Infant Nursing Review*. 13(2013) 67-72. Doi:

<http://dx.doi.org/10.1053/j.nainr.2013.04.001>

Steensma, J. (1993). A plan for implementing mother-baby nursing. *Birth*. 20(3).

Terry, A. (2012). *Clinical Research for the Doctor of Nursing Practice*. Jones and

Bartlett, Sudbury, MA. United States Department of Health and Human Services.

The Joint Commission. (2015). Perinatal Core Measures. The Joint Commission.

Retrieved from: http://www.jointcommission.org/perinatal_care/

Varnell, K., Haas, B., Duke, G., & Hudson, K. (2008). Effect of education on attitudes

toward implementation of evidence-based practice. *Worldview of evidence-based nursing*. 5(8). 172-181.

Waller-Wise, R. (2012). Mother-baby care. The best for patients, nurses, and hospitals.

Nursing for Women's Health. 16(4). 273-78. Doi: 10.1111/j.1751-

486X.2012.01744.x

Watters, N., & Kristiansen, C. (1995). Two evaluations of combined mother-infant versus

separate postnatal nursing care. *Research in Nursing and Health*, 18(1), 17-26.

Wertz, R., & Wertz, D. (1989) *Lying-in: A history of childbirth in America*. Yale

University Press, New Haven, CN.

White, K., & Dudley-Brown, S. (2012). *Translation of evidence into nursing and health*

care practice. New York, NY: Springer.

Wilkerson, N., & Barrows, T. (1988). Synchronizing care with mother-baby rhythms.

American Journal of Maternal Child Nursing, 13(4), 264-269.

World Health Organization. (2013). WHO region of the Americas: United States of America statistics summary (2002-present).

<http://apps.who.int/gho/data/view.country.20800>

Young, R. (2013). The importance of bonding. *International Journal of Childbirth Education*. 28(3), 11-16.

White, K., & Dudley-Brown, S. (2012). *Translation of evidence into nursing and health care practice*. New York, NY: Springer Publishing Company, LLC.

Appendix A: Education Plan

Plan for Couplet-Care Education

The education plan will be arranged in 4 hour blocks. The size of the class will be limited at 8-10 staff nurses. Since earlier education focused on physiology and nursing care of the mother and infant, this educational offering will not include these topics.

Goal

To provide the information needed to the nursing staff so they will be able to efficiently provide Couplet-Care to the patients on the Mother-Baby unit.

Objectives

The participants will be able to:

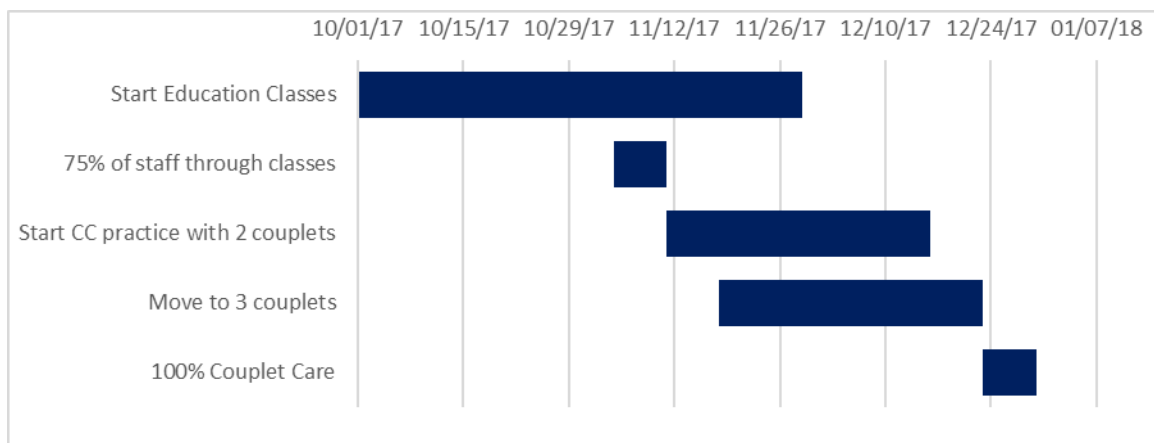
1. Define Couplet-Care
2. Define Family Centered Care
3. List nursing interventions that support Couplet-Care
4. List strategies to incorporate nursing care and patient education
5. Participate in reflective discussion
6. Demonstrate providing infant care in mother's room

Class Schedule

Welcome, Goals and Objectives

Hour 1	Definitions of Family Centered Care and Couplet-Care Interventions that support Couplet-Care Non-separation of mother and infant Infant care at mother's bedside Incorporating Education and nursing care in the same visit
Hour 2&3	Reflective discussion Attitudes and beliefs regarding: exclusive breastfeeding, exclusive rooming-in,
Hour 4	Role Playing and simulation

Appendix B: Transition Time Line



Appendix C: Survey Monkey – Couplet Care Knowledge

Couplet Care Knowledge

Demographic Data**Which group below includes your age?**20-30 31-40 41-50 > 50 **Which group includes the number of years you have been a Registered Nurse?**Less than 2years 2-5 years 5-10 years Greater than 10 years **How long have you worked in Mother-Baby care?**Less than 2years 2-5 years 5-10 years Greater than 10 years **How long have you worked on this Mother-Baby Unit?**Less than 2years 2-5 years 5-10 years Greater than 10 years **What is the highest nursing degree you have received?**Diploma Associate Degree in Nursing Bachelor of Science Degree in Nursing Graduate Level Nursing **Couplet Care Knowledge**

1. Do you use the initial baby bath to educate the parents?

Never Sometimes Always

2. The family is viewed as a whole unit.

Never Sometimes Always

3. Traditional postpartum and nursery care are rigid and inflexible.

Never Sometimes Always

4. Our care should foster family unity while maintaining physical safety.

Never Sometimes Always

5. How satisfied are you with the amount of time you spend with each of your patients?

Very Satisfied Satisfied Unsatisfied Very Unsatisfied

6. How satisfied are you with education provided to your patients?

Very Satisfied Satisfied Unsatisfied Very Unsatisfied

7. How satisfied are you with the quality of care you are able to deliver?

Very Satisfied Satisfied Unsatisfied Very Unsatisfied

8. Couplet Care is

The same as Rooming-in A method of Family Centered Care Single Room Maternity Care

9. Do you believe this unit is providing family-centered maternity care?

No Yes

Appendix D: Project Time Line

