

PATIENT SATISFACTION WITH POSTPARTUM TEACHING  
METHODS USED BY NURSES

DISSERTATION

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by

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## Abstract

**Background:** Maternity nurses have a responsibility to provide extensive teaching to new mothers after they deliver their babies prior to discharge from the hospital. Since patient satisfaction is an important indicator of nursing care quality, it is incumbent upon nurses to know which method of discharge teaching enhances satisfaction.

**Purpose:** The purpose of this study was to determine the relationship between new mothers' interaction with nurses using different methods to provide postpartum discharge teaching and their satisfaction with nursing care. The relationship between new mothers' background variables and the level of their satisfaction with nurses' teaching methods was also explored.

**Theoretical Framework:** Cox's (1982, 2003) Interaction Model of Client Health Behavior (IMCHB) provided the framework for this study.

**Methods:** A quasi-experimental, post-test design was used to measure patient satisfaction with two different teaching methods (the traditional method and the demonstration//return demonstration method) used by nurses to provide postpartum education. After they received discharge instructions from their nurse using one of the two methods, new mothers who delivered in a hospital in northeast Florida completed a demographic questionnaire and the Modified Client Satisfaction Tool, which measured satisfaction with discharge teaching.

**Results:** The data showed there was no relationship between new mothers' background variables of age, marital status, and parity; their participation in postpartum discharge teaching by nurses; and satisfaction with nursing care. Results indicated that new

mothers who received the traditional method of discharge instruction provided by nurses were just as satisfied as those who received the demonstration/return demonstration method of discharge instructions provided by nurses.

**Conclusion:** Implementation of discharge teaching should be tailored to the individual's singularity and needs, using various methods to enhance delivery of postpartum health care teaching and their satisfaction with nursing care. Providing individualized care, based on the expressed needs of the patient, was demonstrated in this study to result in high satisfaction with nursing care with both methods of providing postpartum discharge teaching.

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I also wish to thank my dissertation committee for their assistance and guidance during the labor and birth of this research study. Dr. Hanlon provided the vision and insight for the teaching protocols for the intervention. Dr. Wludyka provided expertise and coached me through the statistical analysis and data interpretation. And Dr. Bear kept me on track when I tended to get distracted, pushed me when I wanted to give up, and instilled a love for research that I never would have realized, through her mentorship and passion for nursing research and professional excellence.

## DEDICATION

This dissertation is dedicated to my father,  
whose never-ending demonstration of love and courage  
gave me the strength to finish this project.

I love and miss you Dad.

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## CHAPTER ONE: INTRODUCTION

### Introduction

*“Clearly, the interpersonal process is the vehicle by which technical care is implemented and on which its success depends” (Donebedian, 1988, p. 1744).*

It is well documented that nurses’ interactions with patients can produce both positive and negative patient perceptions of health care quality, particularly regarding patient satisfaction with care (Wagner & Bear, 2009). As patient illness acuity and nurse-patient ratios increase, it is incumbent upon nurses to implement interventions that address and ensure quality patient care. It is therefore necessary to document outcomes of nursing interventions that impact patient satisfaction with care.

In the late 1990’s the Joint Commission for Accreditation of Hospital Organizations (JCHAO) solicited information regarding core measurement practices used by hospitals to assess quality of patient care. In 2001, the Quality Initiative was announced; it launched in 2002. One of the Initiative’s objectives was to standardize quality measures for hospitals including those used to collect empirical clinical data as well as self-reported patient satisfaction with care (JCHAO Performance Measurement Initiatives [JCHAO PMI], 2009). The federal government mandated that hospitals measure patient satisfaction with care in order to receive reimbursement for government-funded healthcare. Today, many private health insurance companies refuse to contract with facilities not accredited by the National Committee for Quality Assurance, which requires organizations to survey patients’ satisfaction with the experience of care (Otani & Kurz, 2004). Consequently, as patient satisfaction measures are now mandated in the commercial world of health care for reimbursement, hospitals are responsible for gathering this important data.

The American Nurses Association (ANA) developed the Nursing Safety and Quality Initiative in 1994, in response to the need for documentation of the relationship between nurse staffing and patient outcomes (Montalvo, 2007). Ten quality indicators were identified, including overall patient satisfaction and satisfaction with nursing care (Canavan, 1997). In order to make outcomes measurable, indicators and measurement scales were developed and continue to be refined and expanded by members of the Nursing Outcomes Classification Team. This team is composed of many nursing faculty and students at the University of Iowa and other nurses in a variety of clinical settings (Moorhead, Johnson, & Maas, 2004).

Measurement of patient satisfaction with nursing care, an important indicator of quality, continues to be of utmost importance to the discipline of nursing (Han, Connolly, & Canham, 2005; Kuosmanen, Hätönen, Jyrkinen, Katajisto, & Välimäki, 2006; Mrayyan, 2006; Schmidt, 2003). It is therefore a critical benchmark in the achievement and maintenance of a hospital's reputation for superior health care. Many patients choose a hospital facility based on recommendations from family and friends (Harriott, Williams, & Peterson, 2005). Satisfaction with care heavily influences this recommendation (Laschinger, Hall, Pederson, & Almost, 2005; Otani & Kurz, 2004) and most patients will return to that same facility for their own health care needs in the future (Elder et al., 2004; Laschinger et al., 2005). Cleary, Horsfall, & Hunt (2003) also found that patients who described satisfaction with their discharge teaching and overall nursing care were more likely to return to that same facility for other hospitalization needs. It is thus important to determine primary areas of nursing care that may provide high patient

satisfaction ratings. Certainly, postpartum nursing care should be part of such an investigation.

### *Postpartum Education Needs*

Perla (2002) reported that the provision of teaching about postpartum changes following delivery was an essential component of maternity nursing care. She found that patients expressed greater satisfaction when they received information about how to care for themselves during the postpartum period. Maternity nurses have a particularly pivotal role in delivering critical information, but this does not necessarily translate to knowing how to best address the postpartum education needs of all new mothers. In order to attain high levels of patient satisfaction, and to maintain a good name for the hospital maternity unit, however, this is exactly what these nurses are expected to do. That is why initial and ongoing interactions with this population are so important. Not only must nurses attend to the unique needs of each patient, they must also determine the parameters of needed health information and provide it in a manner the patient prefers.

Ideally, anticipatory guidance by health care professionals in postpartum educational topics should be initiated during the pregnancy. Hospitals, private and public organizations, and individual educators provide childbirth education and parenting classes to expecting parents prenatally. While many couples take advantage of these classes, they may find it difficult to focus on anything but the actual labor and delivery experience, thus missing important aspects of the class involving infant care and parenting skills (Hiser, 1987; Moore & Billings, 1993). This is consistent with Rubin's (1984) description of the maternal tasks of pregnancy. Rubin maintained that the pregnant woman, overwhelmed with the prospects of pregnancy, childbirth and



parenting, focuses on what needs to be done in the present, rather than looking to the future.

Rubin (1984) also characterized the phases of adjustment that women go through following the birth of their infants. The *taking-in phase*, spanning the first 24 hours post-delivery, is the period during which women, exhausted from the physical exertion of their delivery, are very self-focused. While interested in their newborn, they rely on others to take care of their own basic needs. The *taking-hold phase* begins on approximately the second postpartum day, and extends through two or more weeks postpartum. During this taking-hold phase, women learn to handle the physical discomforts and emotional aftermath of childbirth and can now focus on taking care of their newborn and learning competent mothering. They become “reachable and teachable,” eager to learn and ready to assume responsibility for their own and their newborn’s care. This readiness phase makes this an optimal time for nurses to teach mothers both self and infant care (Wong, Hockenberry, Perry, Lowdermilk, & Wilson, 2006). Although nurses institute teaching prior to this phase, the new mothers may forget most of this information (Rubin) and there is a very small window of time to educate them during the short stay in the hospital after delivery. Therefore, it is important to include information about self care and infant care during discharge teaching, and to review and reinforce previously discussed areas of education.

Postpartum women have unique nursing care and educational needs. The maternity nurse, who provides for the physical care of both mother and newborn, has an obligation to assist new mothers with postpartum learning needs. Education, health promotion and development of mentoring relationships between nurses and mothers are

essential components of maternity care and contribute to both maternal and infant health outcomes (Williams & Cooper, 1996). Teaching women what to expect and how to care for themselves and their newborns during the first six weeks postpartum are central learning needs during the hospital stay after delivery (Bowman, 2006, 2005; Sword & Watt, 2005).

Mothers' learning needs and interests vary, however, and are influenced by variables such as age, marital status and parity. Because each mother's experiences and background are unique, her perceived learning needs may differ from the perceptions of her nurse in this regard. Older women, for example, may attach more importance to learning about self-care than younger women (Birk, 1996). Single mothers may be more interested in self-care topics, such as exercise, than married mothers (Beger & Cook, 1996). While primiparas tend to be most concerned with learning to care for their infant, multiparas also express interest in newborn topics. All mothers, regardless of parity, value postpartum teaching (Bowman, 2005; Martin, 2005).

Thus, nurses caring for postpartum women in the hospital have a responsibility to provide extensive discharge teaching for these mothers. Hospital stays following childbirth have been shortened considerably in recent years, typically allowing mothers with uncomplicated vaginal births to stay in the hospital a maximum of 48 hours after delivery. Those with uncomplicated cesarean births typically stay for 96 hours after giving birth (Wong et al., 2006). This severely limits the amount of time nurses have to educate these women about how to care for themselves and their newborns. Certainly, it is unrealistic to expect that nurses can teach these women all they need to know about self and infant care in this amount of time (Beger & Cook, 1998).

### *Patient Satisfaction with Postpartum Education*

The marital status and parity of new mothers have been shown to impact new mothers' satisfaction with postpartum education. Single mothers expressed greater dissatisfaction with postpartum education provided by nurses than married mothers (Peterson & DiCenso, 2002; Peterson, Sword, Charles, & DiCenso, 2007). Married mothers rated the use of individual teaching by nurses as more effective than single mothers (Berger & Cook, 1996). Multiparas reported greater satisfaction with the postpartum education they received than primiparas (Martin, 2003). It is thus apparent that variables of patient singularity can influence patient satisfaction with nursing care, and nurses need to consider the unique characteristics of the patient throughout the postpartum teaching interaction.

### *Postpartum Teaching Strategies*

Postpartum discharge planning begins from the moment a patient is admitted to the hospital to deliver her baby. Maternity nurses assess her knowledge and identify areas of teaching appropriate for the woman, depending upon the method of infant feeding and the type of delivery. Teaching culminates in the review of general discharge instructions designed by the postpartum unit and those provided by the patient's providers (both obstetrical and neonatal). Nurses implement teaching regarding self and infant care throughout the mother's hospital stay.

Postpartum teaching strategies vary in style and quality of interaction between nurses and patients, but current teaching methods may be based on what works best for the nursing staff, rather than patient preference or research findings (Ruchala, 2000). Even so, the patient is ultimately responsible for participation in her own learning efforts,

and decisional control of what she wants to learn should be hers. And as the nurse interacts with the patient in a supportive manner, the patient is more likely to be motivated to participate in the learning process and achieve greater satisfaction with her nursing care (Cox, 1982).

The dynamic relationship between patients and nurses while interacting during postpartum education can influence patient satisfaction with nursing care. In the traditional approach to postpartum teaching, the primary nurse will discuss various discharge topics throughout the hospital stay as time permits, and will go over all written instructions regarding self and infant care with the mother on her day of discharge. In this approach, the interaction is tailored to the nurse's need to disseminate specific information rather than considering the uniqueness of the patient's situation and specific needs. Some facilities offer a formal discharge class, which women are encouraged to attend on their day of discharge, promoting group interaction with each other and the nurse/teacher. Again, this approach to teaching is nurse-driven rather than patient-driven. Other facilities provide teaching videos for mothers to view during their hospitalization, which gives them the choice to decide whether to watch them or not. Still others conduct one-to-one demonstration/return demonstration (in which the mother demonstrates what has just been taught) of various self and newborn care skills. While this style requires a significant time commitment for the nurse, it is tailored to the unique needs of the individual mothers when they are allowed to choose the skills they wish to practice. Not only can this approach help determine what kinds of health information will be most crucial for the mother to have and her preferred method of learning it, it can facilitate satisfaction with care.

Giving the mother decisional control over the topics in which she is most interested in learning about can increase her perceptions of self-efficacy, self-determination, and her motivation to participate in the learning process. When the nurse structures the teaching intervention to the uniqueness of the patient, the potential for bringing about greater satisfaction with care exists. Providing the additional teaching with the demonstration/return demonstration method allows the patient decisional control over her discharge teaching, implements teaching in the style preferred, and can thus enhance patient satisfaction.

#### Problem Statement

Providing competent and positive experiences while educating patients regarding self and infant care during the hospital stay following childbirth is essential for the well-being of the patient and satisfaction with nursing care (Laschinger et al., 2005). It is important for nurses to document the effect their educational interventions have on health outcomes, including patient satisfaction with teaching (Oermann, 2003). The problem is that while a considerable amount of research has been conducted to determine the learning needs and concerns of postpartum women, in order to provide these new mothers with the information they need and desire, little is known about patient satisfaction with postpartum education and even less about satisfaction with the method used by nurses to provide this information.

Providing patients with meaningful health information, giving them decisional control over the health information topics and demonstrating professional –technical competency in teaching have been identified as key attributes of patient satisfaction with nursing care (Wagner & Bear, 2009). To date however, the relationship between nurses’

teaching interventions and patient satisfaction with nursing care remains unknown. This indicates an important gap in nursing knowledge, and a need for research in this area. Empirical research may provide data to substantiate nursing practice resulting in patient satisfaction based on evidence rather than anecdotal report.

### Purpose of the Study

The purpose of this study is to determine the relationship between new mothers' interaction with nurses using different methods to provide postpartum discharge teaching and their satisfaction with nursing care. The relationship between new mothers' background variables and the level of their satisfaction with nurses' teaching methods will also be explored.

### Definitions of Key Terms

#### *Patient Singularity*

*Theoretical definition.* Patient singularity is the “unique intrapersonal and contextual configuration of the individual” (Cox, 2003, p. E93). The elements comprising this configuration include background variables (demographic characteristics, social influence, previous health care experience and environmental resources) and dynamic variables (intrinsic motivation, cognitive appraisal and affective response). Dynamic variables were not addressed in this study.

*Operational definition.* The background variables of patient singularity were measured using a researcher designed demographic questionnaire that consists of ten items. Demographic characteristics included age, ethnicity, marital status, number of years of education completed, family income, and method of delivery, (vaginal or cesarean). Social support is determined through the indication of whom the patient relies

on to help her make health care decisions. Previous health care experience is determined by identification of parity (whether the woman is a first-time mother or has delivered other babies previously) and a description of previous experiences with other hospitalizations, if any. Environmental resources consist of the method of payment for this hospitalization.

### *Patient-Nurse Interaction*

*Theoretical definition.* For the purpose of this study, *patient-nurse interaction* is generally defined as the process that occurs between patient and nurse during provision of health information. This interaction is specifically defined with respect to factors of affective support, provision of health information, decisional control and professional/technical competencies. These factors are reciprocal within the patient-nurse relationship, and rely on using interventions tailored to the singularity of the patient, and will influence the health outcome (Cox, 1982). The patient-nurse interaction in this study is the interaction that occurs when the nurse imparts postpartum discharge instructions to the new mother.

*Operational definition.* This study employed two different teaching methods by nurses to provide postpartum discharge teaching to new mothers. One is the traditional method and the other is the demonstration-return demonstration method. These different approaches are explained in greater detail in Chapter 3.

### *Patient Satisfaction*

*Theoretical definition.* Patient satisfaction is “the patient’s opinion of the care received from nursing staff” (Hinshaw & Atwood, 1981, p. 170). It is further defined by

Donabedian (1988) as “an expression of a patient’s judgment on the quality of care in all its aspects, but particularly as concerns the interpersonal process” (p. 1746).

*Operational definition.* Patient satisfaction was measured with the Modified Client Satisfaction Tool (Bear & Wagner, 2008). This tool has been modified from its original purpose to measure patient satisfaction with nurse practitioner care in a senior health clinic to now measure mothers’ satisfaction with the method used by nurses to implement discharge teaching.

### Research Questions and Hypotheses

#### *Research Question*

What is the relationship between new mothers’ background variables of age, marital status, and parity; their participation in postpartum discharge teaching by nurses; and satisfaction with nursing care?

#### *Hypothesis*

New mothers who receive the demonstration/return demonstration method of postpartum discharge teaching by nurses will report higher satisfaction than new mothers who receive the traditional method of postpartum discharge teaching by nurses, controlling for the new mother’s background variables of age, marital status and parity.

### Theoretical Framework

Contemporary nurse researchers are moving away from using grand theories that are abstract and broad in scope when framing their studies and increasingly using middle range theories (Peterson & Bredow, 2004). Middle range theories allow nurse scientists to focus on a narrower segment of the human experience, by analyzing particular situations with a limited number of variables that can be measured directly. Middle range



explanatory theories are relatively concrete and allow the researcher to explore the relationship between the concepts of the theory, and how they affect the discipline (Colley, 2003).

Cox's (1982, 2003) Interaction Model of Client Health Behavior (IMCHB) is a middle range theory that provides a framework for nurses to analyze the uniqueness of the patient, the patient/nurse relationship, and their combined influence in determining the health outcomes of patient care. (*Client* is equated with *patient* in this paper.) The degree to which the nurse fits his/her care to meet the unique needs of the patient directly relates to patient health outcomes. One of the key outcomes of patient care addressed in Cox's model is satisfaction with care.

Before developing the IMCHB, Cox examined theoretical models from disciplines outside of nursing. Sociologists depicted a patient's use of health care services as dependent upon predisposing factors of sociological influences, such as family traditions and cultural mores, demographic factors, economic factors, physical needs, and individual or familial discretion. Cognitive psychology primarily explained patient motivation to participate in health behaviors as the patient's perception of susceptibility to a disease or seriousness of the disease. Patients weighed the benefits of participating in health behaviors against the barriers. These health belief variables acted as the mediators between patient behaviors and the environment. Cognitive psychology also viewed patients as a system, regulating their relationship to the environment based on information from internal sources such as symptoms or past medical experiences, or external sources such as family, friends, medical professionals or media outlets. The

patient/system processes the information from these sources to determine the perception of their health status and subsequent health behavior (Cox, 1982).

Cox summarized the contributions of these models as providing variables relevant to patient health behaviors. They furnished a basis to test patient characteristics in relation to their compliance, or noncompliance, in health behaviors. However, the models did not address the nursing worldview of nursing care and interventions. Thus a gap existed in building nursing knowledge to guide professionals in choosing appropriate interventions in instances of noncompliance in order to assist patients with health behaviors.

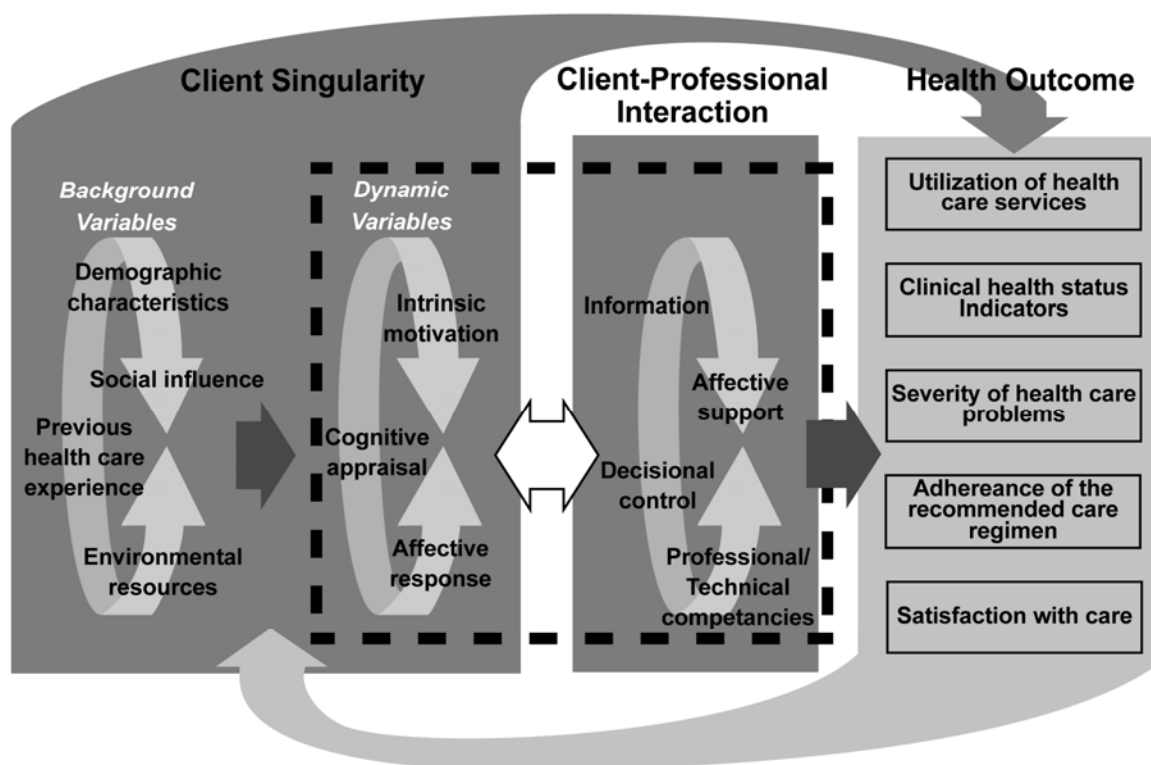
Cox pointed out limitations to the models she studied, and enumerated the outmoded elements she found. The sociological perspective focused on social influences over personal and cognitive health decisions and behaviors. The family and community, rather than the individual, determined health behaviors. The psychology framework emphasized the patient's cognitions and expectations, separating them from social or affective influences. These disciplines subscribed to the traditional disease model based on biological causes, and failed to encompass lifestyle choices and behaviors. They assumed compliance by the patient, rather than personal choice, and did not account for patient individuality. Additionally, none of these paradigms explicitly addressed the patient-professional relationship or the role it plays in influencing patient health behavior.

Nurse researchers have long been interested in patient health behaviors and the interaction between the patient and the nurse. Cox found that while the nursing literature reported a reciprocal relationship between them, the theoretical models in place did not address specific predictors of the patient-professional interaction. Based on the previous

work of nurse authors, Cox identified the areas of patient-professional interaction used in her interaction model.

The IMCHB contributes to nursing knowledge in several significant ways. It provides a framework for nurses to document the process of their interventions for patients both inside and outside the realm of acute care by including primary prevention and health promotion. The model emphasizes a patient-centered, holistic model of care, describing the uniqueness of the patient, and provides a method to document the outcomes based on individualized, holistic care. It proposes that as the health provider tailors interventions and interactions to the uniqueness of the patient, the potential for a positive health outcome increases. Ultimately, the health outcome leads nurses to determine the interventions that most appropriately enact positive health behaviors and the process to implement them (Cox, 1982).

Cox (1982) describes the model as a framework based on three major elements that are nonrecursive, as they influence each other in a multidirectional causal flow (Figure 1). The variables within these elements interact to bring about relationships among the elements and health care behavior.



**Figure 1. Interaction Model of Client Health Behavior**

Note: From “A Model of Health Behavior to Guide Studies of Childhood Cancer Survivors,” by C. L. Cox, 2003, *Oncology Nursing Forum*, 30, p. E93. Copyright 2003 by the Oncology Nursing Society.

#### *Element of Patient Singularity*

The element of patient singularity, defined as the configuration of the patient’s unique personal and environmental characteristics, encompasses four elements: 1) background variables, 2) intrinsic motivation, 3) cognitive appraisal and 4) affective response. *Background variables* embody demographic characteristics, social influence, previous health care experience and environmental resources. Included in background variables are the elements of age, marital status, and parity, which have been demonstrated to determine new mother’s perceived individual learning needs. These elements should be taken into account when tailoring interventions specific to patients, as

they may influence the outcome satisfaction with care. *Intrinsic motivation* is the patient's experience of feeling competent and self-determining. Affect, human need and choice influence this motivation. *Cognitive appraisal* refers to patients' interpretation of their own state of health, their action within that perception of reality, whether or not it is truly reality, and their ensuing choice of health behaviors. *Affective response* is the emotional arousal occurring simultaneously with the cognitive activity of the chosen health behavior.

#### *Element of Patient-Professional Interaction*

The second element, patient-professional interaction, identifies the relationship between the patient and the professional (Cox, 1982). This element consists of affective support, health information, decisional control, and professional/technical competencies. *Affective support* attends to the patient's emotional arousal, and the need for professionals to support or subdue the level of arousal. Throughout the interaction, the nurse should encourage and support the new mother in her efforts to learn self and infant care information. Providing too much or too little support can result in dissatisfaction with care. Therefore, it is paramount that the nurse "considers the patient's need for affective support in keeping with the patient's singularity" (Cox, 1982, p. 52).

*Health information* is the knowledge revealed to patients regarding their health condition and options to manage the health threat. Typically the nurse provides the information required by the particular nursing unit. However, individual patient's needs are not addressed within this traditional nursing model. In order to achieve satisfaction with nursing care, the nurse needs to incorporate individual health needs when considering the topics to teach the new mothers.

*Decisional control*, the patients' ability to participate in making health care decisions (Cox, 2003), increases patients' sense of self-efficacy and allows them to choose their health behaviors based on the consequences of their decisions. Nurses providing postpartum patient education need to take into account the patient's individual choice for her educational needs regarding her own and her infant's care. Empowering new mothers to choose the information they want to learn more extensively and to practice new skills with the nurses' guidance may enhance mothers' self-efficacy and positively affect satisfaction with care.

*Professional-technical competencies* address the need for professionals to provide technical skills to aid new mothers, possibly resulting in a lower level of decisional control by the patient. As the need for technical skills is addressed, patients use their own abilities to increase decisional control and self-determinism. The traditional approach to meeting educational needs of postpartum women does not take into account patient preference or the opportunity for women to practice their own competency with self and infant care skills.

#### *Element of Health Outcome*

*Health outcome* is the final element of the model. It contains five variables that measure different outcomes resulting from the health behavior or health state of the patient. As recommended by Cox (1982), studies using this model typically have only one outcome of interest (Bear & Bowers, 1998; Bryant & Graham, 2002; Troumbley, & Lenz, 1992). For this study the outcome was satisfaction with care.

Patient satisfaction with nursing care is a complex concept, difficult to narrow and define, but attributes and antecedents have been used to clarify this concept in the

literature. Key attributes have been identified within the context of patient-nurse interaction (Wagner & Bear, 2009). Patients are satisfied with care when they perceive nurses as caring and supportive (Elder et al., 2004; González-Valentín, Padín-López, & Ramón-Garrido, 2005). The more health information and education nurses provide, the higher the level of satisfaction (Raper, 1996). Patients also reported less satisfaction with nursing care when they were not involved in making decisions about their own health care (Cleary et al., 2003). Finally, patient satisfaction with nursing care was found to be positively influenced by nurses' level of technical skill and ability (Merkouris, Papathanassoglou, & Lemonidou, 2004).

Antecedents of patient satisfaction include the background variables of age, marital status and education; social influences of family and friends; previous healthcare experience; and environmental resources. Overall, it was determined that consideration of these variables is vital to patient satisfaction and the provision of individualized nursing care promoted positive patient outcomes (Wagner & Bear, 2009).

Cox's Interaction Model of Client Health Behavior (IMCHB) provided the framework for this study (1983, 2003). The model guided the research by identifying "the uniqueness of the patient and the nurse-patient relationship and interactions that result in patient satisfaction with nursing care" (Wagner & Bear, 2009, p. 699). Select background variables were identified and the effect these variables have on satisfaction with the two different discharge teaching methods were examined. Furthermore, the effect that two different teaching methods used by nurses while interacting with patients during discharge teaching had on the health outcome, patient satisfaction with nursing care was analyzed.

### Assumptions and Limitations of the Study

According to Cox (2003), patients are capable of making informed, independent, and competent choices about their health care and should be given maximum control over their health behavior. This includes making choices about the health information they wish to receive and the manner in which they receive it. One assumption of this study was that participants in the experimental group would be allowed to choose topics they were most interested in learning about during individual instruction (prior to reviewing the traditional written instructions with their primary nurse) and given the option to practice the new skills taught by the nurse.

The length of time needed to teach what each mother wants and needs to know differs. However, the demonstration/return demonstration intervention was confined to 30 minutes of individualized teaching and could represent a limitation. The mother's ability to participate in this individualized teaching, including the mother's level of discomfort following her delivery or the presence of visitors, may affect her perception of satisfaction with the intervention. Additionally, degree of influence on patient satisfaction may be due to receiving traditional written discharge instructions in addition to an individualized intervention.

The nurse's interaction with the patient and the interventions used can support or discourage positive health behavior. The second assumption of this study was that the nurses providing the demonstration/return demonstration method of postpartum discharge teaching would do so in a professional manner, displaying support for the individual interactive learning needs of the patients.



### Significance of the Study

One of the goals of conducting research within the discipline of nursing is to build the body of nursing knowledge. As nursing knowledge expands, the foundation for the practice of nursing becomes increasingly more evidenced based. The purpose of this study was to determine whether the method used by nurses to provide postpartum education influences satisfaction with nursing care. As this has not been studied previously, results are expected to help fill this gap in knowledge. Nurses strive to provide patient care that promotes the best patient outcomes. Identification of the nursing interventions resulting in high satisfaction with care is therefore of value to the discipline. Determining which method of postpartum discharge teaching results in higher patient satisfaction is of significance not only to nursing practice, but to nursing education, research and public policy.

### *Implications for Nursing Education*

The American Association of Colleges of Nursing (2008) has identified patient education and nurses' ability to demonstrate effective communication skills while educating patients essential curricular components of a baccalaureate nursing program. Stewart (2003) emphasized that "research supports the need and benefits of patient education" (p. 8). Thus, nurse educators need to prepare students to assume, among their many roles, that of patient educator, including discharge instructions for patients prior to leaving the hospital (Wagner, Bear, & Sander, 2009). Recently, Jamison (2008) stressed that "optimal patient teaching and discharge planning cannot be understated" (p. 4) in order to promote health behaviors beneficial to patients. Learning how to best implement

discharge teaching in a manner that provides the greatest patient satisfaction is thus a skill that could benefit both patients and nurses, including student nurses.

### *Implications for Nursing Practice*

According to the American Nurses Association (2004) one of the Standards of Practice is to provide health teaching for patients, and to seek feedback about the effectiveness of teaching strategies used. Nurses working on maternity units are required to provide discharge instructions about self and infant care to new mothers prior to their departure home. To comply with this practice standard, it is imperative for maternity nurses to not only prepare new mothers to care for themselves and their newborns, but to evaluate both educational effectiveness and teaching methods used. This research aimed to identify a method of teaching that would result in greatest patient satisfaction.

The American Nurses Credentialing Center (ANCC) developed the Magnet Recognition Program in the 1990s to identify those health care facilities that achieved nursing excellence in providing quality patient care and attracting and retaining the nurses in their organization (ANCC, 2008). Today, many hospitals are interested in achieving Magnet Recognition Status as evidence to health care consumers of the quality of nursing care they can expect to receive from them. To attain this prestigious status, organizations are evaluated according to the principles contained within the five components of the newly designed Magnet Model. One of these is “Exemplary Professional Practice” in which nurses implement interventions identified in the foundational Magnet Force “Nurses as Teachers.” This Force of Magnetism states that “There is a patient education program that meets the diverse needs of patients in all of the care settings of the organization” (ANCC, 2008). Maternity nurses’ discharge teaching

fills a primary need for new mothers. As such, these nurses need to know which skills individual mothers want to learn and which skills they need to learn, and the teaching methods that garner the greatest patient satisfaction.

#### *Implications for Nursing Research*

Women's satisfaction with postpartum discharge teaching is an important topic for research, as little is known in this area. The North American Nursing Diagnosis Association International approved "deficient knowledge" as one of the nursing diagnoses for use in practice today (Ackley & Ladwig, 2008). Olinzock and Bloom (2008) identified various teaching methods as nursing interventions for this diagnosis based on evidence in the literature. However, patient satisfaction with these teaching methods is not addressed, representing a gap in nursing knowledge. Research in this important dimension of nursing care may not only help build nursing knowledge but improve nursing practice in the area of postpartum teaching, in a manner that can enhance patient satisfaction.

#### *Implications for Public Policy*

Current regulations require hospitals to make patient satisfaction surveys available to the public in order to secure financial reimbursement from governmental sources. This study had the potential to increase the level of new mother's satisfaction with nursing care through the provision of individualized discharge teaching. Higher levels of satisfaction may influence existing and potential patients' choice of medical facility for future health care needs. Delivering individualized patient education can provide additional help and support to new mothers and increase patient satisfaction with nursing care.

Health literacy is a public policy issue linked to a person's health status (Elwood, 2009). When patients understand the health information provided by nurses, they become empowered to make informed health care decisions, and are more likely to adhere to behaviors that promote health (Jennings, Thompson, & Roberts, 2002). Thus, this study will provide an individualized discharge teaching intervention allowing new mothers to observe and practice health care behaviors for both themselves and their newborn with their nurse. A benefit of this experimental intervention could be an improvement in health literacy for the mothers involved in the study.

### Scope and Limitations of the Study

#### *Scope of the Study*

This study employed a quasi-experimental between subjects design. The setting was the maternity unit in one hospital in northeast Florida, and patients (2 groups) from that unit were recruited by convenience. Inclusion criteria for this study were as follows: (a) 18 years of age or older, (b) delivered a baby by either uncomplicated vaginal or cesarean delivery, (c) have been rooming-in but expect to be discharged home that day, and (d) able to speak, read, and understand English. Group 1 mothers ( $n = 88$ ) received the traditional teaching method on their scheduled day of discharge. At the completion of this teaching session, they completed a demographic survey and a Modified Client Satisfaction Tool. The second group of 35 participants (discrepancy in the group sizes will be discussed in Chapter 4) comprised the experimental group (Group 2) who received the experimental intervention. They received up to 30 minutes of individualized, one-to-one instruction with a specially trained registered nurse, including demonstration/return demonstration of all the topics they were most interested in learning

about, plus the written instructions. Upon completion of this teaching session, participants completed a demographic survey and a Modified Client Satisfaction Tool. Data collected from the questionnaires were analyzed using a Mann-Whitney test, to determine the relationship between the method of discharge teaching and patient satisfaction. Descriptive statistics described the samples.

### *Limitations*

Participants were limited to the population of women delivering during the study time period in one hospital in Northeast Florida. The inclusion criteria excluded patients younger than 18, who experienced a complicated vaginal or cesarean delivery, had a baby whose medical condition prohibited rooming-in, and those who did not speak, read, and understand English.

### Threats to External Validity

There are several threats to the external validity of this study. Participants were gleaned from a convenience sample of postpartum women who delivered in a maternity unit in a hospital in northeast Florida. All women who delivered in this facility and met inclusion criteria were given the opportunity to participate until 88 usable surveys were collected for the control group (Group 1) and 35 usable surveys were collected for the experimental group (Group 2) (discrepancy in the group sizes will be discussed in Chapter 4), in order to achieve a moderate effect (control group) or large effect (experimental group). Since this was a self-selected sample from an accessible population, rather than a random sample representative of the entire population of postpartum women, generalizability of the results will be limited. Group 1 and 2 participated in the study at different times; the sample for each group was thus taken from

different pools of the population, posing a risk for sampling bias. Additionally, mothers who were satisfied with their discharge teaching may be more willing to participate in the study and fill out the surveys. Finally, the possibility of a Hawthorne effect existed. New mothers may respond more positively regarding their satisfaction with nursing care due to the additional personal attention they received from the nurse, rather than in response to the nursing intervention when implementing the demonstration/return demonstration method of postpartum teaching.

#### Threats to Internal Validity

This study employed a quasi-experimental design, so the danger of selection bias posed a threat to internal validity. A preexisting difference in the way new mothers respond to the satisfaction survey may present itself between Group 1 and 2, if the groups are nonequivalent. Participants in the two groups may have demographic differences; therefore those patients responding to the satisfaction survey after receiving the experimental intervention may answer based on their own unique characteristics. The literature has demonstrated a relationship between patient satisfaction and marital status, age and parity. Therefore, the effect of these covariates was expected to be controlled in order to remove their bias in answering the research question.

Another threat to the internal validity for this study is history, since this study was conducted at two different times. External events may have occurred during the intervention that did not occur during the pilot study, influencing survey responses.

### Chapter Summary

This chapter demonstrated the importance of providing individualized nursing care when interacting with patients in order to influence satisfaction with nursing care. The purpose of this study was to determine the relationship between new mothers' interaction with nurses using different methods to provide postpartum discharge teaching and their satisfaction with nursing care. The relationship between new mothers' background variables and the level of their satisfaction with nurses' teaching methods will also be explored. Cox's Interaction Model of Client Health Behavior (1982, 2003) was used as a conceptual framework to guide the research study. Select background variables were identified and the effect these variables had on satisfaction with the two different teaching methods were examined. The effect that two different teaching methods used by nurses while interacting with the patients during discharge teaching had on the health outcome, patient satisfaction with nursing care, was also analyzed.

## CHAPTER TWO: REVIEW OF THE LITERATURE

### Introduction

The purpose of this study was to determine the relationship between new mothers' interaction with nurses using different methods to provide postpartum discharge teaching and their satisfaction with nursing care. The relationship between new mothers' background variables and the level of their satisfaction with nurses' teaching methods was also explored. This chapter will present a review of the current literature.

This review of the literature was drawn from a sample gleaned from the electronic databases of Cumulative Index of Nursing and Allied Health Literature (CINAHL), ProQuest Nursing and Allied Health, and MEDLINE. The key words "patient satisfaction," "postpartum care" and "postpartum teaching" were used to define the search parameters. Articles were limited to those published from 1998 to 2007, written in English, published in peer reviewed journals and available electronically. After carefully perusing the abstracts and excerpts, those studies that addressed the elements of patient singularity and patient-nurse relationships were selected for this literature review. Three empirical studies examined the influence of background variables on patient satisfaction with postpartum nursing care. Six studies (3 quantitative and 3 qualitative) examined the nurse-patient relationship during the postpartum period and the interactions influencing patient satisfaction. Finally, a search was conducted in the aforementioned electronic databases for studies that used the IMCHB as a conceptual framework to measure patient satisfaction with nursing care. Two studies were found and will be described at the end of the literature review.



## Literature Review

### *Patient Singularity and Satisfaction*

Peterson & DiCenso (2002) examined the perceived difference between single adolescent mothers' and married adult mothers' level of satisfaction with inpatient postpartum nursing care using a matched-cohort survey design. Eighty unmarried adolescent mothers, between the ages of 15 and 19, and 80 married adult mothers, between the ages of 22 and 39, were matched according to parity, delivery mode, infant health status, and method of infant feeding.

The instrument used for this study was the Experiences of Nursing Care Scale of the Newcastle Satisfaction with Nursing Scales (NSNS) questionnaire, which measures patients' experiences with nursing care (26 items using a seven-point Likert scale) and satisfaction with nursing care (19 items using a five-point Likert scale) received during a single hospitalization. Trained interviewers, who were not responsible for any of the patients' care, conducted the interviews, using the NSNS.

Once the questionnaires were completed, the responses were recoded and given an Experience Scale score and a Satisfaction Scale score. A score of 100% on the Experience Scale indicated the best possible care, and a score of 100% on the Satisfaction Scale indicated the highest level of satisfaction. A score of zero indicated poor care or no satisfaction.

Psychometric testing showed good construct validity and test-retest reliability for this tool. Although it was originally developed for use with medical-surgical patients, it has demonstrated validity with postpartum patients and their relationships with their nurses. The NSNS measured nurses' attentiveness, availability, reassurance, openness,

professionalism, knowledge, provision of information and individual treatment (Peterson & DiCenso, 2002).

Data were analyzed using independent t-tests to determine the difference in satisfaction between the two groups. The results indicated a significant difference in satisfaction with nursing care between the unmarried adolescents and the married adults. Unmarried adolescent mothers (71.2%,  $SD = 20.6$ ) were significantly less satisfied ( $p = 0.04$ ) with postpartum nursing care than married adult mothers (77.5%,  $SD = 18.0$ ). However, the unmarried adolescent mothers most often answered questions negatively regarding the availability of nurses, and it was posited that perhaps part of their dissatisfaction was due to poor communication by nurses. A strength of this study was in matching both groups of mothers according to similar nursing care needs, in order to compare their levels of satisfaction. The power for this study was set at 80% ( $n = 80$  per group); therefore, the sample size was adequate to detect clinically significant differences.

A study conducted in Victoria, Australia employed a survey design to investigate new mothers' views and experiences of the postpartum care they received in the hospital during the first 2-3 days following childbirth (Brown, Davey, & Bruinsma, 2005). All women who gave birth in a public/private hospital or at home in Victoria, Australia, within a two-week period in September, 1999 were mailed a survey five to six months after birth, to rate their postnatal care. Sixty-seven percent of the women returned the surveys, for a total of 1,616 surveys. The age of participants ranged from 16 to 46, with a mean of 30.8 years. Most of the women were married (81%), with parity represented by primiparas (44%) and multiparas (56%).

The survey was constructed from previous Victorian Surveys of Recent Mothers in order to compare results of the current survey to past surveys. Validity and reliability of the instrument were not reported. The women were asked to rate overall postnatal care, using a scale with five responses: “very good,” “good,” “mixed,” “poor,” and “very poor.” The women were also asked to rate postpartum caregivers’ sensitivity, responsiveness and availability of caregivers, access and helpfulness of support and education regarding self and infant care, and the length of time spent in the hospital.

The dependent variable of the women’s overall rating of postnatal care was divided into one of two categories: “very good” or “all other responses” with the assumption that a rating other than “very good” indicated some dissatisfaction. Data were analyzed using Chi-square statistics to assess associations between the variables. The results showed that younger mothers were less satisfied with their postnatal care ( $\chi^2 = 15.3$ ,  $df = 4$ ,  $p = 0.004$ ) while married women were more satisfied with their postnatal care ( $\chi^2 = 15.38$ ,  $df = 3$ ,  $p = 0.002$ ). Although multiparas were more satisfied with their postnatal care than primiparas, the difference was not significant ( $\chi^2 = 2.11$ ,  $df = 1$ ,  $p = 0.2$ ). The stated factors that influenced women’s rating of postpartum care were the degree of sensitivity and understanding provided by the caregivers, helpfulness of education and whether assistance was offered.

The primary strength of this study was the large sample size, although power analysis was not identified. Study weaknesses included the omission of reliability and validity measures; the fact that participants delivered in hospitals or homes in a single area in Australia, thus limiting generalizability; compression of ordinal data into two

categories, to use Chi-square analysis, which may have precluded important results; and use of non-parametric statistics.

Kapzawni (2006) conducted a study using a structured interview design to assess patients' level of satisfaction with postnatal nursing care. The sample was a purposive, convenience sample of 100 postpartum women, who delivered in a hospital in New Dehli, India. Ages of mothers were reported as 23% under the age of 20, 73% between 21-30 years of age, and 4% over the age of 30. Parity was evenly divided, between primiparas (51%) and multiparas (49%). Marital status was not identified in this study.

Each participant was interviewed at the bedside by the investigator, on the third postpartum day or later. The structured interview technique was used to stimulate greater insight about the postnatal experience for participants and to allow those who were illiterate, had language difficulties or possessed limited intelligence to participate in the study. Content validity of this researcher-constructed survey was established by medical and nursing experts in the field of obstetrics and reliability was also tested (Cronbach's  $\alpha = 0.930$ ). The survey contained 47 items exploring satisfaction in nine areas of postnatal care. These areas included comfort and safety, treatment, psychological support, diet, procedures, reception in the ward, hygiene, care of newborn and health teaching. Scoring was based on three responses: satisfied (3), partially satisfied (2), and dissatisfied (1). A score of 141 indicated the greatest satisfaction, and 47 indicated the greatest dissatisfaction.

Data were analyzed using Chi-square statistics. Collapsing the data into categories may have resulted in a loss of information, and this represents a study weakness. Parity was significantly related to satisfaction with postnatal care ( $\chi^2 = 7.40$ ,  $df = 2$ ,  $p = 0.05$ ),

with multiparous women reporting more satisfaction than primiparas. Findings of the postnatal survey showed no significant relationship between satisfaction with postnatal care and income level or education (statistics not published), and results were not reported regarding the correlation between postnatal satisfaction and age. The area of postnatal care that received the highest level of satisfaction from the new mothers was *comfort and safety* (89.17%). Findings further revealed that satisfaction with *health teaching* ranked lowest of all postnatal care areas rated by the postpartum women (41.86%). This indicates a need for scrutiny of the current practices used in discharge teaching increased education by nurses who work with this population.

Several areas of weakness were identified in this study. Power analysis was not addressed in this study and it may be that the sample size was too small to provide statistical significance. The study was also geographically limited to postpartum women in one city in India. More statistical results may have been useful for providing additional information and thus a better understanding of the study's outcome. The presence of the investigator conducting the survey face-to-face may have also influenced how some of the participants answered the questions.

#### *Patient-Nurse Interaction During the Postpartum Period*

*Qualitative Studies.* Hildingsson & Thomas (2007) conducted a qualitative study to determine what is important to prenatal women during pregnancy and birth, including the care provided by nurse-midwives after birth. The approach used for this study was not identified. The sample was recruited from all Swedish-speaking women who received prenatal care in maternity clinics in Sweden, during three separate weeks between the years 1999 and 2000. The researchers developed a questionnaire that elicited

sociodemographic data, medical and obstetrical history and expectations regarding prenatal care and impending birth (e.g., “*If you like, you can write down what’s important to you during pregnancy and childbirth and what the health care system can do to fulfil your desires*”) (p. 127).

Eight hundred and twenty-seven women responded. Demographic data were not specifically identified by the authors, except to state that most women were more likely 35 years of age or older, and had a college or university education. Parity was divided between multiparas (62%) and primiparas (38%). The mean gestational age was 15.6 weeks ( $SD = 3.4$ ).

Inductive content analysis of the responses was accomplished by three separate researchers, and initial categories were identified. SPSS software was used to develop the categories that were later sorted into themes. Categories were checked for inter-coder reliability, and total agreement was reached with 83% of the statements. Questions regarding the postpartum period revealed topics related to support and help for the mother and her family.

Four themes were identified: desirable characteristics of a midwife, prenatal care during pregnancy, care during labor and birth, and care after birth. The theme “health related content and information” emerged from the responses, with multiple women expressing a need for more information about the physical and mental changes of the postpartum period, childcare, and breastfeeding. One mother stated, “*I had great needs for support when breastfeeding my previous baby...more discussion about breastfeeding problems!*” (p. 132).

This study was identified by the researchers as qualitative, but it more closely fits the description of an open-ended questionnaire survey. This approach allowed for rich and comprehensive responses to the questions, rather than restricting answers to only the options given and elicited a range of concerns spanning prenatal to postpartum periods. It may be that concerns and interests change once mothers deliver their babies. However, more multiparous women participated in this study than primiparas. They had already experienced childbirth, so they were knowledgeable about the postpartum period and identified how their postnatal concerns could be better addressed.

While the study specifically addressed nurse-midwifery care, concerns of these mothers can be extended to include care given by maternity nurses. The researchers concluded that providing a more individualized approach to keeping the mothers informed and involved in their care would likely increase these mothers' satisfaction with their childbirth experience. An extension of this study to include new mothers' responses after childbirth would be helpful. Interviewing a larger demographic population would also add valuable data to this study.

Peterson, Sword, Charles, & DiCenso (2007) conducted a qualitative study using a phenomenological approach to describe both satisfactory and unsatisfactory experiences of adolescents with their postpartum care. The purposive sample included interviews with adolescent mothers between the ages of 16 and 19, who delivered in one of three hospitals in Ontario, Canada. Interviews continued until saturation was reached with mothers who were both satisfied and unsatisfied with their postpartum nursing care.

Fourteen mothers were included in the study. Most were first-time mothers ( $n = 13$ ), and all were unmarried. The interviews took place 1-8 weeks after birth. Most

of the interviews were conducted at two community drop-in programs ( $n = 11$ ) open to women aged 25 years or younger, who were pregnant or who had an infant younger than six months of age. The others were interviewed in their apartments ( $n = 2$ ) or in a group home ( $n = 1$ ).

Participants answered open-ended questions that were broad in scope and designed to garner detailed descriptions of their postpartum nursing care. Additionally, 16 closed-ended questions were asked to obtain descriptive data. The answers were audio-taped, transcribed, and analyzed using the Stevick-Colaizzi-Keen method.

Four themes emerged related to satisfactory nursing care: friendliness, patience, respect, and understanding of individual needs. Satisfactory nursing care was related to being responsive to stated or unstated needs. One mother described the thoroughness of nursing instruction in providing for her individual needs: *“She [nurse] gave me like any advice that I needed even though I have a child already she still went through everything just to be sure”* (p. 206).

Four themes emerged related to unsatisfactory nursing care: too serious, rushed, judgmental, and not understanding of individualized needs. Adolescents reported satisfaction with nursing care when they experienced a relationship with the nurse and were able to actively participate in their own care including identification of individual needs and concerns. When this relationship was not established, nursing care was perceived as less than satisfactory. Although this study was limited to adolescents delivering in a Canadian hospital, it certainly emphasizes the need to establish a relationship with new mothers and to offer them a choice of information regarding self and infant care in order to obtain satisfaction with nursing care.



In another qualitative study, George (2005) interviewed new mothers to understand the reality of their experience during the postpartum period after discharge from the hospital. To participate in this study, criteria included low-risk, first time mothers, who delivered in an urban sub-acute facility, between the ages of 18 and 44, spoke English, experienced an uncomplicated vaginal delivery and had no chronic medical conditions. Demographics for the sample were ten Caucasian mothers, between the ages of 18-35 ( $M = 25.5$  years), one of whom was single, and all educated at the high school level, with nine completing at least some postsecondary education.

The interviews took place within a four week period after the mothers were discharged from the hospital, in the mothers' homes. The mothers were asked open-ended, semi-structured questions, based on a review of the literature, to examine how they dealt with their postpartum experience. The interviews were taperecorded, and later transcribed, with field notes providing additional information.

The data were analyzed using grounded theory methods. George found that mothers reported a lack of preparedness for the postpartum period, including a feeling of overwhelming responsibility and a knowledge deficit regarding self and infant care. Participants reported that they *"needed answers to questions about themselves and their babies, but their questions often went unanswered"* (p. 254). The mothers still had questions about infant feeding and other infant care concerns, and felt they needed more information about their own self care needs. Some mothers felt overwhelmed by the amount of information provided, and one mother stated she received *"too much information, from too many sources"* (p. 254).

Results of this study indicate a need for further education, or individualized education, for new mothers to address their unique needs in postpartum education. A description of the scope of the questions asked however, which may have clarified some of the responses, was not included. This study was further limited by participants who were first-time Caucasian mothers, and future studies, including mothers of other ethnicities, and those who had experienced childbirth previously, may enrich the knowledge gained from this study.

*Quantitative Studies.* In an effort to determine mothers' judgments about the quantity and quality of their postpartum teaching after childbirth, Martin (2005) conducted a descriptive study with 27 new mothers who delivered in a hospital, in Southern Arizona. The research questions for this study was 1) whether postpartum women perceived they received discharge teaching regarding self and infant care, 2) the teaching they received was useful to them, 3) whether they were satisfied that the teaching they received was sufficient to meet their needs, and 4) which content areas were not adequately addressed.

Prior to discharge from the hospital, the mothers watched a video that focused on infant care and breastfeeding. Twenty-seven mothers participated in the study. The participants were then surveyed via telephone one to two weeks after delivery. These participants had a mean age of 27.6 years, and were evenly divided by parity (primiparas,  $n = 14$  [52%] and multiparas,  $n = 13$  [48%]). The ethnicity of the sample consisted of 15 Caucasians, eight Hispanic Americans, three African Americans, and one Asian American. Five of the participants had less than a high school diploma (18.5%), five had a high school diploma (18.5%), 2 had a vocational or technical degree (7%), eight had

some college education (30%), five had a bachelor's degree (18.5%) and two had a graduate degree (7%). Marital status was not identified in this study.

During the telephone interview, mothers were asked to answer questions from the investigator developed survey regarding the provision of postpartum education, the usefulness of the postpartum education, areas where they felt they needed more information, and their satisfaction with the discharge teaching provided. Validity and reliability of the instrument was not reported.

Descriptive statistics were used to analyze the data for this study. Although all of the women watched a discharge video while in the hospital, 14.8% reported they received no postpartum education, 66.7% reported they received education regarding self care, and 70.4% reported they received infant care education. It may be that mothers reporting "no education received" did not consider the discharge video a form of education.

When asked about the usefulness of the postpartum education, 95.6% of the mothers who answered this question responded that the information they received was useful. The mothers also reported that they felt they wanted more information about self-care (46.1%) and infant care (38.5%).

When asked whether they were satisfied with the teaching provided in the hospital, most were very satisfied or satisfied (78%). However, the level of satisfaction was influenced by the number of previous births. Among the women who gave birth two or more times previously, 100% reported satisfaction with the postpartum education, while only 71% of the mothers giving birth for the first time reported satisfaction with the education provided. This seems to indicate a relationship between parity and satisfaction

with postpartum teaching. However, this study did not identify any statistical analysis for significance, and therefore may only represent anecdotal information.

The researcher concluded from this study that providing postpartum education in person was preferred over using a video or handout. Additionally, asking what the patient wanted to learn about self or infant care would improve postpartum education. This study was conducted with a small sample, and may not have the power for statistical significance. Further, it was limited to one facility in one specific area of the country, thereby limiting the generalizability. More sophisticated statistics, such as correlations, most likely could have provided more information about the relationship between demographic characteristics and satisfaction with discharge teaching.

Dana and Wambach (2003) conducted a descriptive study to evaluate patient satisfaction with an early discharge home visit program in a Midwest academic medical center. Between 1995 and 2001, healthy mothers who were discharged early (delivered vaginally and went home in less than 48 hours; delivered by cesarean section and went home in less than 96 hours) were given the opportunity to receive a home visit from an advanced practice nurse. One thousand eight hundred and forty women agreed to have a home visit, 1-2 weeks after discharge. Demographic data were not gathered for this study. They received physical and psychosocial assessments of both themselves and their infants during these home visits. Postpartum education, encompassing both maternal and newborn care identified by both the mothers and the visiting nurse, was included in the 60-90 minute visit.

At the completion of the visit, a questionnaire and envelope were left for the new mothers to complete and return. The questionnaire used was the University of Kansas

Hospital Authority (KU Med) Maternal/Child home Care Program Patient Satisfaction Questionnaire. This questionnaire was a modified version of the Missouri Visiting Nurses Association's tool, developed for the Prudential Insurance Early Discharge Postpartum Home Visit Program, which was not tested for validity and reliability. The modified tool showed adequate internal consistency (Cronbach's  $\alpha = 0.86$ ).

Fourteen items were assessed on the instrument, including the skill, knowledge and friendliness of the nurse, individualization of care, clarity of educational instructions, autonomy and mutual care planning, communication quality of the nurse and physician, comfort and convenience of the visit and overall satisfaction with the early discharge home visit program. These items were scored on a 4-point Likert scale, 4 = very happy/strongly agree and 1 = very unhappy or strongly disagree. The scale also included a "does not apply" option. The total scores on the scale ranged from 14-56, with a score of 14 indicating the least satisfaction and 56 indicating greatest satisfaction.

A total of 440 mothers returned the questionnaires. Descriptive statistics indicated overall satisfaction with the program ( $M = 3.95$ ,  $SD = .27$ ). The mothers also indicated high satisfaction with working one-on-one to address needs ( $M = 3.93$ ,  $SD = .27$ ), clear directions on maternal self-care ( $M = 3.89$ ,  $SD = .35$ ), clear directions on infant care ( $M = 3.91$ ,  $SD = .30$ ) and allowing autonomy and mutual decision making ( $M = 3.89$ ,  $SD = .35$ ). The researchers reported that the results of all variables were negatively skewed, so non-parametric Spearman's rho bivariate correlations were performed on the variables. Of note, infant care teaching ( $r = .49$ ,  $p < .01$ ) and autonomy and mutual decision making ( $r = .40$ ,  $p < .01$ ) were indicated a moderate correlation with overall satisfaction.

Demographic statistics were not obtained in this study; therefore important data related to satisfaction based on those variables was omitted. The sample size was large and results may have had statistical significance, but power analysis was not addressed. Since this sample was drawn from one specific population, the generalizability of results was also limited.

Harriott, Williams, & Peterson (2005) conducted a descriptive study with mothers in a military hospital to discover how they evaluated maternity care with respect to the following: trust and confidence in their health care providers, decision-making about their care, and how they were treated. The study included women who delivered in one of 44 military facilities in the United States between the dates of January 11, 2002 and February 22, 2002. Mothers between the ages of 18 and 44 years, who experienced an uncomplicated vaginal or cesarean delivery, stayed longer than one day in the hospital, and had been discharged home were included in the study.

From the total of 12,864 women who delivered during that time period, an Inpatient Childbirth Satisfaction Survey was mailed to a stratified random sample of 6,650 eligible women. This survey, developed by the Picker Institute, assessed satisfaction based on eight dimensions: respect for patient preferences, coordination of care, information and education, attention to physical comfort, emotional support, involvement of family and friends, continuity and transition, and courtesy and availability of staff. The dimension of respect for patient preference was modified to further clarify the amount of autonomy and control they were allowed to make regarding their own care. This was reflected in the question “Did you have enough to say about your treatment?” (p. 6). Items on the survey were assessed with a 3, 4, or 5-point Likert scale. Anything

rated as less than the best possible response was determined to be a “problem.” The Likert scales were then collapsed to a two point scale, representing “problem” or “no problem.” The survey included demographic data. Validity and reliability of the instrument were not identified in this study. Results were compared with an average of scores from numerous facilities in the United States that used the same Inpatient Satisfaction Survey to determine satisfaction with childbirth.

A total of 2,124 of the completed surveys were included in the study, after analysis for congruence with the inclusion criteria. Data were analyzed using descriptive statistics. The age of the participants was 18-24 ( $n = 812$ , 39.5%), 25-34 ( $n = 1,083$ , 50.99%), and 35-44 ( $n = 229$ , 10.78%). Most of the women were married ( $n = 1,967$ , 92.61%). Parity was reported as having previous childbirth experience ( $n = 957$ , 45.06%) or not ( $n = 1,134$ , 53.39%).

Among the women that answered the questions regarding the dimension “information and education” ( $n = 1,021$ ) the majority indicated “no problem” (72.10%), while 23.90% indicated a less than best possible response. For the dimension “respect for patient preference,” of 1,612 women who answered the questions, 83.10% indicated “no problem” and 16.90% indicating a less than best possible response. Thus, while a majority of women expressed the greatest satisfaction with information and education, and respect for patient preference in their care decisions, a sizeable number did not perceive their care as optimal in these areas. Again, this indicates a need for serious scrutiny of current traditional postpartum education methods, coupled with acknowledgement of the important role patient preference should play in this process to foster greatest patient satisfaction with postpartum care.

This study, as in previously reviewed studies, collapsed data into two categories and used Chi-square analysis, which may have resulted in a loss of information. Higher level statistical analysis could have provided more information regarding the relationship between demographic characteristics of the sample and satisfaction with education and patient preference. This study was further limited to only those women that delivered in a military hospital, and the mothers' perception of the amount of control they have in a military environment may differ from those delivering in a civilian hospital.

*Patient Satisfaction with Nursing Care Using the IMCHB*

Bear & Bowers (1998) conducted a descriptive correlational study to establish the validity and reliability of the newly developed Client Satisfaction Tool (CST) and to measure patient satisfaction with nurse practitioner care at a senior health clinic in Osceola County, Florida. All patients who received health care at least two weeks prior to the period of data collection, October 28, 1996 through December 5, 1996, were eligible to participate. Most of the data collection occurred during a telephone interview conducted by a person who was not involved in providing health care at the clinic. Face-to-face interviews occurred at the senior center when the participant was there for a purpose other than health care. Each participant was interviewed two times, one week apart, with the same survey instrument to establish test-retest reliability of the tool.

Data were collected using the CST, which was developed based on the elements of the *client-professional interaction* contained within the IMCHB. These elements include affective support, health information, decisional control and professional/technical competencies. Along with these, the CST contains dimensions of



*accessibility* and *overall quality of care*. Each of these six dimensions is represented by two items, for a total of 12 items on the tool.

Responses are recorded on a 5-point Likert scale, with (5) representing strongly agree and (1) representing strongly disagree. The range of responses is 12-60, with 60 representing the highest satisfaction. Items describing frequency use of the clinic and perceived health changes were also included to test for construct validity. Content validity was established with the review of the 12 items by nurse practitioners working at the senior health clinic, graduate students, and faculty members at the local university.

A convenience sample of 38 patients participated in this study, with 32 patients completing the survey at both collection times. Descriptive data were collected separately from the CST using the Client Data Collection Tool (Bear, Brunell, & Covelli, 1997) in order to obtain information about patients who attended the senior health clinic ( $n = 39$ ). Demographic characteristics included gender (female = 74.4%; male = 25.6%), ethnicity (White, non-Hispanic = 17.9%; White Hispanic = 56.4%; Black, non-Hispanic = 15.4%; Black Hispanic = 7.7%; and other = 2.6%), and education (grades 1-8 = 21.2%; grades 9-11 = 56.4%; high school = 15.2%; over 12 = 21.2%).

Descriptive statistics were used to analyze the satisfaction scores and results indicated overall satisfaction was high. Responses ranged from 31 to 60 ( $M = 51.84$  at Time 1;  $M = 52.06$  at Time 2). Responses to individual items on all six dimensions also indicated high satisfaction, ranging from 4.13 to 4.47 at Time 1 and 4.16 to 4.50 at Time 2. Reliability with this instrument demonstrated high internal consistency (Cronbach's  $\alpha = 0.956$ ), indicating that the CST operationalized satisfaction with nurse practitioner care. This study used the IMCHB to demonstrate the influence of the patient-

nurse interaction while providing primary care health services to senior adults on satisfaction with care.

The strength of this study was the rigor applied in testing the CST for construct and content validity. This tool may be used to measure patient satisfaction with nursing care with other populations, while implementing interventions within the element of the Client-Professional Interaction. However, this study was limited to a small sample of patients who used a single senior health care clinic; therefore, the satisfaction results cannot be generalized.

Bryant & Graham (2002) conducted a descriptive study to describe patient satisfaction with care provided by advanced practice nurses (APNs) in the Wright State University Project. The purpose of this study was to evaluate the health outcome of satisfaction with the interaction process between the APNs and patients, using the IMCHB as the theoretical framework guiding this study. APNs who treated patients in private/group practices, or community health/public clinics in Ohio were asked to distribute a questionnaire to all patients they saw, on two days (not necessarily consecutive) between July 26 and August 14, 1999. When the APN saw a minor the parent or accompanying adult was asked to complete the survey. Adolescents not accompanied by an adult were asked to independently complete the survey. The specialties of the 36 APNs included family nurse practitioners, adult nurse practitioners, pediatric nurse practitioners, certified nurse-midwives, one women's health nurse practitioner, and three certified in other areas.

The survey used was the Client Satisfaction Tool (CST), based on the IMCHB, developed by Bear and Bowers (1998). This 12-item tool measures client satisfaction

with nurse-managed clinic services. The instrument was validated with the conceptual components of the IMCHB, and reliability was established (Cronbach's alpha = 0.956). The tool was modified for this study. Two items regarding patient accessibility were removed and the words "nurse practitioner" was inserted into the remaining items. Two open-ended questions were added, one that asked participants to describe the APN and the other to comment on the care received. Reliability was established for the modified survey (Cronbach's alpha = 0.935). Summing the scores of the remaining ten items produces a range from 10-50, with the highest score of 50 indicating the highest level of satisfaction. A total of 506 patients answered the survey completely and were included in the study.

Descriptive statistics were used to analyze the data. Satisfaction with APN care was high ( $n = 270$ , 53.4%). Data was negatively skewed toward high satisfaction, with the intra-quartile range 45-50 ( $CI = 95\%$ ) and the scores averaged between 46.8 and 47.5 points. Answers to the open-ended questions describing the APN and the health care received were positive.

This study could have been strengthened if demographic data were collected, which would have provided valuable information regarding the influence of patient singularity on patient satisfaction. Convenience sampling was used and may not be representative of the population, limiting generalizability. The study was further confounded by the different practice specialties of the APNs. Patients seeing an APN in one specialty area may have had different health care needs than those seeing an APN in another specialty, with differing levels of acuity. This could have strongly influenced how satisfaction was perceived.

## Discussion

Empirical studies in the first section of this chapter identified elements of demographic data within patient singularity that impact patient satisfaction with nursing care. Of note, older postpartum women were more satisfied with nursing care than younger postpartum women. Married postpartum women expressed greater satisfaction with care than single mothers. Multiparous mothers were more satisfied with nursing care than primiparas. These results identify variables that influence patient satisfaction. Thus, they should be controlled when studying the effect of nursing interventions on patient satisfaction with postpartum nursing care.

The second section discussed studies examining patient-nurse interactions in the postpartum period. These studies indicated that women wanted their nurses to provide more information about how to care for themselves and their newborns after childbirth, in order to be prepared for their role as a new mother. These women preferred individualized teaching that involved them in decisional choices about information to be learned, over other teaching methods.

Studies were primarily descriptive; thus descriptive statistics were used to analyze the data. Clearly a need exists for more rigorous statistical analysis to determine patient satisfaction with postpartum teaching methods. Many studies lacked inclusion of demographic data that could have provided important information, and indicates a gap in this area. In addition, a gap in the literature remains regarding the relationship between different postpartum teaching methods and patient satisfaction with nursing care.

## Chapter Summary

This chapter presented a review of the literature regarding elements of patient singularity that influence patient satisfaction with postpartum nursing care. Six studies, both qualitative and quantitative, were also reviewed and critiqued, regarding patient satisfaction with the mother-nurse interaction during the postpartum experience, including the interaction involving postpartum discharge teaching. A summary of these studies is included in Appendix A. The literature review concluded with a summary of two studies that used the IMCHB to measure patient satisfaction with nursing care. This review revealed gaps in the literature, regarding satisfaction with postpartum care and the use of different teaching methods by nurses. The purpose of this study was to determine the relationship between new mothers' interaction with nurses using different methods to provide postpartum discharge teaching and their satisfaction with nursing care. The relationship between new mothers' background variables and the level of their satisfaction with nurses' teaching methods was also explored. The methodology of this study will be explained in Chapter Three.

## CHAPTER THREE: METHODS

### Introduction

The purpose of this study was to determine the relationship between new mothers' interaction with nurses using different methods to provide postpartum discharge teaching and their satisfaction with nursing care. The relationship between new mothers' background variables and the level of their satisfaction with nurses' teaching methods was also explored. In Chapter 3 the study design, setting, sample, including inclusion/exclusion criteria, ethical considerations, data collection procedures, instruments to be used, and proposed data analysis will be presented.

### Design

This research study employed a quasi-experimental, posttest only design. Experimental design is a powerful method to test a hypothesis regarding causal relationships between specific interventions and outcomes (Polit & Beck, 2004). Like experimental studies, quasi-experimental studies manipulate an independent variable through an intervention to test the relationship between variables to provide cause and effect evidence (Polit & Beck). However, while experimental designs studies randomize participants to the treatment groups, quasi-experimental designs do not employ randomization.

The independent variable in this study was the patient teaching method used by nurses to provide postpartum discharge instructions within the element of patient-nurse interaction. Two different teaching methods were used. The first method, the traditional method of providing postpartum discharge instructions, was implemented during a pilot study conducted from September 15, 2008 to February 25, 2009. In this pilot, nurses

used the hospital's traditional method of providing postpartum discharge instructions to a convenience sample of new mothers (this group will function as the comparison group in the proposed study). Mothers' satisfaction with this method of postpartum discharge teaching was assessed with a posttest questionnaire, the Modified Client Satisfaction Tool (Bear & Wagner, 2008). The pilot study also established the reliability of this modified tool. Data and results from the pilot portion of the study will be presented in Chapter 4.

The second teaching method (intervention) employed the demonstration/return demonstration method of providing postpartum discharge instructions. A second convenience sample of new mothers chose all the topics they wished to learn more about and received individualized postpartum teaching from nurses using demonstration/return demonstration to provide the discharge instructions. This intervention study commenced July 15, 2009. The relationship between the manipulation of the independent variable (patient teaching method) and the dependent variable, satisfaction with nursing care, were evaluated with the Modified Client Satisfaction Tool (CST).

Since no randomization of samples occurred in this study, controlling for any significant differences between the two groups that may influence patient satisfaction will be necessary. In the literature, the variables of age, marital status and parity have been identified as influences on satisfaction with postpartum nursing care (Brown, Davey, & Bruinsma, 2005; Kapzawni, 2006; Peterson & DiCenso, 2002). These variables were measured with a demographic survey. Any differences in these variables between the two groups were projected to be controlled for using Analysis of Covariance (ANCOVA) statistics, thereby removing their bias (Field, 2005). Additional patient singularity characteristics of ethnicity, education, income, type of delivery, social influence, previous

health care experience, and environmental resources were used to describe the sample. The data were not normally distributed; thus chi-square, Mann-Whitney and Kendall's tau tests determined if there were additional differences in those variables between the two groups, and they were projected to be included in the ANCOVA analysis.

### Setting

The setting for this study was a hospital in northeast Florida with a maternity unit that delivers approximately 100 low-risk obstetrical patients each month. The population served by this nursing unit was composed of predominately white, middle-class women who are insured, with either private or government provided insurance. The maternity unit is a combined labor/delivery/postpartum unit, and includes a Level 1 (low-risk) newborn nursery. Women whose pregnancy is less than 36 weeks gestation are transferred, whenever possible, to one of two medical centers with a neonatal intensive care unit for delivery, located within 50 miles of this facility. Mothers admitted to the hospital to deliver move to a postpartum room on the same floor once the baby is born. Newborns are transferred to the nursery, for examination by the pediatrician after new mothers have time to breastfeed and/or bond with their infants after birth. Once the babies are examined and bathed, they room-in with the mother during the day, according to the mother's preference. Postpartum women were cared for by nurses assigned to the mother-baby unit. Occasionally labor and delivery nurses, cross-trained as mother-baby nurses, cared for these mothers when the labor census is low.

### Sample

This sample included two groups of participants. Sample size was determined a priori, using G\*power 3.01.10, the newest version of a flexible statistical analysis



program developed by Erdfelder, Faul and Buchner in 1996. G\*power uses power analysis to compute sample sizes for the most common statistical tests. In order to achieve a medium effect with a power of .95, the sample size for two independent groups, using independent t-tests, if data are normally distributed, to compare means, is 88 participants per group (176 total participants). However, after inputting data for the first 28 participants of the intervention phase of the study, it was realized that responses on each of the items on the Modified Client Satisfaction Tool were yielding little variation to the responses on each of the items inputted for the pilot phase. The observed effect of the method of teaching on satisfaction scores was very small ( $r = 0.01$ ). It was decided that continuing data collection would not yield enough variation to make a significant difference in the results, except in extreme instances. Sample size was recalculated with G\*power, and in order to achieve a large effect with a power of .95, the sample size needed for two independent groups using t-tests to compare means was 35. Data collection ceased once 35 usable surveys were collected. Therefore, a total of 88 usable surveys were collected for the pilot group and 35 usable surveys were collected for the intervention group.

#### *Inclusion Criteria*

Inclusion criteria for this study were as follows: patients 18 years of age or older who delivered a baby at this hospital, had an uncomplicated vaginal or cesarean delivery, had a healthy baby rooming-in, expected to be discharged home that day, and spoke, read, and understood English.

### *Exclusion Criteria*

Exclusion criteria for this study were as follows: patients younger than 18 who delivered a baby at this hospital, experienced a complicated vaginal or cesarean delivery, had a baby whose medical condition prohibited rooming-in, did not expect to be discharged home that day, and/or did not speak, read, and understand English.

### *Ethical Considerations*

Prior to implementation, permission to conduct a pilot study was obtained from the Institutional Review Board (IRB) of the hospital where the study took place, Barry University, where this author is pursuing a PhD degree, and the University of North Florida (UNF), where this author is employed. Permission was obtained from the IRBs of the hospital where the study took place and Barry University, prior to conducting the intervention portion of this study. The interim chairman of the IRB for UNF determined that UNF did not need to review the proposal for the intervention portion of this study since the study did not involve any university personnel (other than the researcher who was pursuing a PhD at another university) or resources.

All participants in this study were adults, aged 18 or older. The participants were anonymous and their responses to the questionnaires confidential. Demographic data were collected on a separate questionnaire included with the modified Client Satisfaction Tool (CST) and responses were recorded in a manner so no participants could be identified. Participants completed an unsigned modified CST and descriptive data questionnaire, placed them in a plain envelope provided by the nurse giving them discharge instructions, and placed the envelope in a locked box at the nurses' station.

All new mothers who met the inclusion criteria were given a choice to participate

(or not) in this study. A consent form was not utilized; completion of the questionnaire implied consent. A cover letter explained the purpose of the study, the procedure for participation in the study, the fully voluntary nature of participation, and the guarantee of anonymity.

Once retrieved from the locked box at the nurses' station, hard copies of the pilot study data were kept in a locked cabinet in the investigators office. The investigator had the only keys to the locked box and cabinet.

Only the investigator, the investigator's chairperson and her dissertation committee had access to these data which, once entered in the SPSS software program, revealed only responses to survey items. All findings and results were reported in aggregate form. The data will be maintained in the investigator's locked file cabinet for a period of five years; at the end of this period, the data will be destroyed.

### Data Collection

#### *Traditional Method of Discharge Teaching*

*Recruitment.* On the morning of the day postpartum patients were expected to be discharged, nurses were instructed to give them a flyer (Appendix B) and to explain the purpose of the study using a script provided by the researcher (Appendix C). After the nurse on the floor went into the patients' rooms to give them discharge instructions later that day, she was instructed to give all patients who met the inclusion criteria the cover letter (Appendix D), the demographic questionnaire (Appendix E), the satisfaction survey (Appendix F), and a plain envelope.

After discharge teaching was concluded, interested mothers were instructed to fill out the questionnaire and survey, place them in the plain envelope, and seal it. Those not

interested were instructed to place the blank questionnaire and survey in the plain envelope and seal it. All were instructed to place envelopes in the locked box at the nurses' station, as they were leaving the hospital. This recruitment procedure continued until the investigator collected 88 usable questionnaires and surveys.

*Procedure.* One of the nurses on the postpartum unit gave a recruitment flyer (Appendix B) to all new mothers scheduled for discharge that day, informing them about the study. The nurse explained the study using the prepared script (Appendix C). Beginning September 15, 2008, each woman who met inclusion criteria had the opportunity to participate in this pilot study.

The unit secretary placed the questionnaires on the charts of patients who were scheduled for discharge that day. Prior to their departure from the hospital, a nurse provided the patients with the traditional discharge instructions. The traditional method of discharge instructions includes inspecting each new mother's Multi-disciplinary OB Patient Education Record, which lists various areas of maternal and infant care teaching topics. Education provided during the mother's postpartum stay is noted on the form.

The nurse asks the mother if she has any questions regarding her own or her newborn's care, and if additional teaching is provided, records it on this Education Record at that time. She then informs the mother when to make follow-up appointments for her and her baby, and any special instructions included in the mother's or baby's health care providers' orders. Each mother receives a New Mom's Handbook, which contains information on self and infant care, infant health concerns, safety tips and immunization schedules. The nurse asks the patients if they have any questions about the written information contained within the handbook, and answers those questions.

After completing traditional discharge instructions, the nurse gave the patients the cover letter (Appendix D), the demographic questionnaire (Appendix E), the satisfaction survey (Appendix F), and a plain envelope. After the nurse left the patient's room, if the patient agreed to participate in the study, she completed the questionnaire and the survey, and placed them in the plain envelope and sealed it. If she did not agree to participate, she placed the blank questionnaire and survey in the plain envelope, and sealed it.

The modified CST and descriptive data questionnaire took approximately 5 minutes to complete. After the patient was discharged, as she was leaving the nursing unit, she placed the envelope in a locked box located at the nurses' station. The investigator retrieved the envelopes one day each week. The pilot portion of the study ended on February 25, 2009, when it was determined that 88 usable questionnaires and surveys were collected.

The modified CST had not been tested for reliability prior to this study. This pilot portion of the study served the additional purpose of determining the reliability of the modified CST.

#### *Demonstration/Return Demonstration Method of Discharge Teaching*

*Recruitment.* On the morning of the day postpartum patients are expected to be discharged, the nurses were instructed to give all patients who meet the inclusion criteria a flyer (Appendix G) that explains the purpose of the study, using the script provided by the researcher (Appendix H). After the nurse on the postpartum floor went into the patients' rooms to give them discharge instructions later that day, if the new mother chose not to participate in the study, the nurse then provided the traditional postpartum discharge instructions. If the new mother was interested in participating in the study, the

nurse was instructed to give her the cover letter (Appendix I) and the list of skills the patient could choose from to have additional experience in practicing (Appendix J). The mother then chose all the skills she wished to practice.

Once the new mother received the demonstration/return demonstration discharge teaching from the nurse, the nurse put the skills list in a plain envelope. The patient was handed the demographic questionnaire (Appendix K), the satisfaction survey (Appendix E), and the envelope. The patient was instructed to fill out the questionnaire and survey once the nurse left the room, place them in the plain envelope, and seal it. If the patient was not interested in further completion of the study or completing the questionnaire, she was instructed to place the blank questionnaire and survey in the plain envelope and seal it. The nurse returned to the patient's room approximately 15 minutes later to provide the traditional method of discharge teaching prior to the patient's departure. Once the patient was discharged, she placed the sealed envelope in the locked box, located at the nurses' station, as she left the hospital. This recruitment procedure continued until 35 usable questionnaires and surveys were collected by the investigator during this demonstration/return demonstration intervention.

*Procedure.* In preparation for the intervention portion of the study, three nurses were chosen by the nurse manager to employ the intervention of the demonstration/return demonstration method of discharge teaching. These nurses worked on the mother-baby unit of this hospital, and were experienced in teaching new mothers self and infant care. Nurses met with the investigator to review the procedure for implementing the intervention. After explaining the procedure to the nurses, they had the opportunity to ask questions or seek clarification from the investigator. This helped nurses understand their

role in this intervention and elicited their facilitation of the study.

The instructions provided to the nurses included a complete explanation of the procedure to be followed. The nurses were instructed to give the new mothers who met the inclusion criteria the recruitment flyer (Appendix G) and to explain the study by reading the prepared script (Appendix H). If the mother chose not to participate in the study, the nurse then provided the traditional postpartum discharge instructions.

If the mother agreed to participate in the study, the nurse gave the mother the cover letter (Appendix I) and the skills list (Appendix J). Nurses were instructed to ask mothers to choose all skills they wished to learn and/or have additional experience performing, from a list that contained items of self and infant care (Appendix J). Nurses also emphasized that mothers had up to 30 minutes to practice these skills. Nurses then reviewed the list of skills chosen and gathered any equipment needed to implement the teaching, the protocol form (Appendix L), the demographic questionnaire (Appendix K), satisfaction survey (Appendix F) and a plain envelope.

The nurse demonstrated the patient's chosen skills, using the protocol developed by the investigator (Appendix L) and placed a check mark next to the items demonstrated. Then she allowed the mother to return the demonstration, thereby increasing the mother's self-efficacy in performing these skills independently, and placed a check mark next to the items return-demonstrated.

The nurse placed the skills list in the plain envelope, and handed the envelope, the demographic questionnaire and satisfaction survey to the mother. She asked the mother to complete the questionnaire and survey, and put them in the envelope. The nurse then left the room. At this time, the nurse signed her name next to all the skills she

demonstrated on the patient's Multi-Disciplinary OB Patient Education Record located in her medical record. In approximately 15 minutes she returned and provided traditional discharge instructions to the mother. She instructed the new mother to place the sealed envelope with the questionnaire, survey, and skills list in the locked box at the nurses' station as she left the hospital.

Once the quasi-experimental study commenced, the unit secretary placed the recruitment flyer, cover letter, skills list, protocol form, questionnaires, and plain envelope on the charts of patients who were scheduled for discharge that day. One of the three designated postpartum nurses gave the recruitment flyer (Appendix G) to all new mothers who met inclusion criteria and were scheduled for discharge that day and informed them about the study.

The nurse explained the study to the new mothers using the prepared script (Appendix H). Each woman who met inclusion criteria had the opportunity to participate. If the new mother chose not to participate, the nurse provided traditional postpartum discharge instructions. If she agreed to participate the nurse gave her the cover letter (Appendix I) and a skills list (Appendix J), with instructions to choose all skills on the list she wished to learn/have additional experience in performing with nursing assistance. The nurse explained that she would be given up to 30 minutes to practice those skills. Once the skills were chosen, the nurse left the room to gather any needed supplies and the protocol list (Appendix L), demographic questionnaire (Appendix K), satisfaction survey (Appendix E), and a plain envelope.

The nurse returned to the mother's room and provided the demonstration/return demonstration method of discharge teaching. This method required the nurse to



demonstrate each of the chosen skills according to the protocol. After each demonstration, the mother was given the opportunity to practice the skill until she expressed comfort with performing it. The nurse allowed up to 30 minutes for the mother to practice these skills. As each skill was demonstrated and return-demonstrated, the nurse indicated its completion with a check mark on the protocol form.

At the conclusion of the demonstration/return demonstration of self and newborn care skills, the nurse placed the skills list in the envelope, and handed the envelope, the demographic questionnaire and satisfaction survey to the mother. She asked the mother to complete the questionnaire and survey, and put them in the envelope. After the nurse left the room, if the mother agreed to continue to participate in the study, she completed the questionnaire and survey and placed them in the envelope with the skills list and sealed it. If she did not agree to continue to participate, she placed the blank questionnaire and survey in the plain envelope with the skills list in it and sealed it.

The modified CST and descriptive data questionnaire took approximately 5 minutes to complete. When the nurse left the room, she signed her name next to all the skills she demonstrated on the patient's Multi-Disciplinary OB Patient Education Record located in her chart. The nurse returned in approximately 15 minutes to provide the patient with the traditional discharge instructions, as described in the procedure for the pilot study. She instructed the new mother to place the sealed envelope with the questionnaire, survey and skills list in the locked box at the nurses' station as she left the hospital. The investigator retrieved the envelopes one day each week, until 35 usable questionnaires and surveys were collected.

### Instruments

This study used a modified version of the Client Satisfaction Tool (CST), developed by Bear & Bowers (1998), to measure patient satisfaction with nursing care. Both the traditional method and the demonstration/return demonstration method of postpartum discharge teaching were employed. Bear and Bowers (1998) used the Cox Model to develop the CST; therefore the instrument is congruent with the theoretical framework on which this study is based. The original CST was developed to measure patient satisfaction with nurse practitioner care in a senior health clinic. This tool includes measurement of satisfaction with the dimensions of affective support, health information, decisional control and professional-technical competencies identified within the element of Patient-Professional Interaction in the IMCHB, as well as accessibility and an overall dimension of satisfaction with care. Twelve items are included in this tool, with two items representing each of the six dimensions.

Reliability and validity for the original instrument were established. Internal consistency was high, measured by Cronbach's alpha (0.956). This indicates that items on the instrument measured the above dimensions and nothing else (Polit & Beck, 2004), and that patient satisfaction with nurse practitioner care was operationalized. Content validity was established with a review of the tool's 12 items by nurse practitioners working at the senior health clinic, graduate students, and faculty members at the local university. This entailed evaluating each item's relevance and adequacy in measuring patient satisfaction with nurse practitioner care. These experts validated that the items on the instrument were consistent with the concepts within the IMCHB. Construct validity

was also ascertained by correlating individual measures of patient satisfaction with overall satisfaction with care.

Bryant and Graham (2002) used an adapted version of the CST to measure client satisfaction with advanced practice nurses (APNs) in the Wright State University Pilot Project. APNs in the Project cared for various clients in both private/group practices and in community health/public clinic settings. The CST was modified by removing items related to clinic accessibility and substituting the term “nurse practitioner” for “clinic staff”. Reliability for adaptation of the CST was established with Cronbach’s alpha (0.935). The researchers found that the CST provided important data related to patient satisfaction with care provided by nurse practitioners.

The original CST was modified for this proposed study to measure patient satisfaction with postpartum teaching methods used by nurses. Permission to modify the tool was obtained by this researcher (Appendix M). Eight items in the original CST were altered to reflect discharge teaching, and the items related to appointment availability and treatments were omitted.

The modified CST questionnaire consists of nine items, two which represent each element of the patient-provider relationship (affective support, health information, decisional control and professional/technical competencies). These are contained within Cox’s (1982, 2003) Interaction Model of Client Health Behavior, theorized to influence the health outcome, *satisfaction with care* (Bears & Bowers, 1998). The last item represents the overall satisfaction with care. The questionnaire consists of a five-item Likert scale, with responses extending from strongly agree (5) to strongly disagree (1). The total range of responses extends from a low of 9 to a high of 45, with a score of 9

representing the lowest level of satisfaction and the score of 45 representing the highest level of satisfaction.

Content validity for the modified CST was established with three experts in the field of maternity nursing. This team is comprised of university professors who are knowledgeable of the IMCHB, along with Dr. Mary Bear, the developer of the original instrument. The pilot study was used to determine the reliability of the modified CST. Reliability for the Modified CST was established with Cronbach's  $\alpha = 0.983$ , which means the Modified CST measures patient satisfaction with postpartum teaching methods used by nurses.

Along with the modified CST, a demographic questionnaire (Appendix E) was designed by this researcher, containing questions about demographic characteristics (age, ethnicity, marital status, education, income, type of delivery, and parity), social influence, previous health experience, and environmental resources. Items for this demographic questionnaire were chosen as they are elements of patient singularity in the IMCHB. The original demographic survey used for the pilot phase of the study was modified for the experimental phase to make the question regarding participant's educational accomplishments clearer, and to omit overlapping between income ranges (Appendix K).

#### Data Analysis

The following research question and hypothesis were tested.

#### *Research Question*

What is the relationship between new mothers' background variables of age, marital status, and parity; their participation in postpartum discharge teaching by nurses; and satisfaction with nursing care?

### *Hypothesis*

New mothers who receive the demonstration-return demonstration method of postpartum discharge teaching by nurses will report higher satisfaction than new mothers who receive the traditional method of postpartum discharge teaching by nurses, controlling for the new mother's background variables of age, marital status and parity.

### *Descriptive Statistics*

Demographic data were analyzed using descriptive statistics and summarized both comparison group and experimental group samples. Descriptive items for this survey included categorical (both nominal and ordinal) variables and interval variables. According to Polit & Beck (2004), *categorical variables* are those with discrete values that do not represent a quantity. *Interval variables* are ranked on a scale, with equal intervals between each object on the scale. Categorical data (ethnicity/race, marital status, mode of delivery, parity, social support, previous hospital experience, method of payment, education and income) were summarized with counts and percentages. Interval data (age) were summarized with means and standard deviations. Categorical and ordinal data were compared using Chi-square tests. The Mann-Whitney test was used to compare the interval data, as the data were not normally distributed.

Additionally, each of the questions on the survey was summarized by mean, standard deviation and percent responding to "Strongly agree." The two treatment groups were compared with respect to the demographic variables of age, marital status and parity, and the mean satisfaction scores using Kendall's tau, Mann-Whitney and chi-squared tests for correlation, mean, and percents, respectively.

All data were input and analyzed by this researcher. The Statistical Package for Social Sciences (SPSS) version 16.0 was used to perform the statistical analysis.

### *Chi-Square*

*Chi-square* is a nonparametric statistical test that examines whether there is a relationship between categorical variables. The assumptions of this test are as follows: variables must be categorical data, contribute to only one cell on the contingency table, and have expected frequencies greater than five (Field, 2005). The chi-square test determined if there was a significant difference between the two treatment groups based on each of the categorical demographic variables. It was proposed that those demographic variables demonstrating a significant difference between the two groups would be controlled, using ANCOVA, when measuring satisfaction with care.

### *Mann-Whitney Tests*

The Mann-Whitney test is the non-parametric equivalent of the independent t-test. This test can be used to compare the means of interval level variables between two independent groups, when the data are not normally distributed. The scores for the means are converted to ranks, and the mean ranks are then compared (Munro, 2005). The literature has demonstrated that age has an effect on satisfaction with care (Brown, Davey, & Bruinsma, 2005). In this study, the Mann-Whitney test was used to determine if there was a significant difference between maternal satisfaction with discharge teaching in the two treatment groups based on the interval level variable (age), as the data were not normally distributed.

The Mann-Whitney test can also be used to analyze the relationship between two different conditions, when different samples participate in each of the conditions. The

literature has reported that the independent variables of marital status and parity influence patient satisfaction (Kapzawni, 2006; Peterson & DiCenso, 2002). Therefore, the Mann-Whitney test compared new mothers' satisfaction with two different methods of discharge teaching and the demographic variables marital status and parity. Effect size of the differences between satisfaction means of these groups was also computed and reported.

#### *Kendall's tau*

Kendall's tau is a non parametric test that can be used to compare the means of interval level variables between two groups from different samples. This test can be carried out when the assumptions for Pearson's correlation coefficient, such as normal distribution of data, are not met. Kendall's tau is most useful when the data sets are small and uneven, and has been suggested as a better estimate of the general population than Spearman's rho (Field, 2005). The data for this study were not normally distributed, and thus violated the assumptions for using Pearson's correlation coefficient. Additionally, the sample sets for this study were uneven, with 88 new mothers participating in the pilot phase and 35 new mothers participating in the intervention phase. Thus, Kendall's tau was used to compare the satisfaction means of interval level variables between the two discharge teaching groups.

Kendall's tau explored the relationship between new mothers' ages and their satisfaction with discharge teaching. The literature has demonstrated that age has an effect on satisfaction with care (Brown, Davey, & Bruinsma, 2005). It was proposed that if there were significant differences between the means for age, this variable would be controlled with ANCOVA when measuring satisfaction with care.

### *Analysis of Covariance*

Analysis of Covariance (ANCOVA) can be used if differences are found between two groups with regard to demographic variables. *ANCOVA* is a statistical test that can remove the effect of extraneous variables (covariates) on the dependent variable when examining differences between two or more groups in experimental studies (Polit & Beck, 2004). Covariates are not part of the manipulation of the independent variable but do influence the dependent variable (Field, 2005).

Independent variables of age, marital status and parity have been found to influence patient satisfaction (Brown, Davey, & Bruinsma, 2005; Kapzawni, 2006; Peterson & DiCenso, 2002). Thus, it was planned that if any of the means for these demographic variables were significantly different between the two groups, they would be controlled for, as a covariate.

The hypothesis was tested by comparing the pilot's group mean scores on the modified CST with the intervention group's mean scores on the modified CST. It was proposed that controlling for covariates that demonstrated a difference between both treatment groups would help determine if the manipulation of the independent variable (teaching method used by nurses) had a causal effect on patient satisfaction scores. However, no differences were found between the two groups with respect to age, marital status and parity and the proposed ANCOVA was not employed.

### Chapter Summary

Chapter 3 described the quasi-experimental design of the study, the hospital setting, and the sample to be recruited, including inclusion and exclusion criteria. Ethical considerations were ascertained and discussed. The pilot phase of the study was



described, including establishment of validity and reliability of the instrument used.

Procedures for the intervention phase and recruitment methods were presented.

Instruments used for this study were described in detail, including modifications that have been implemented. Additionally, statistical analysis methods for the data collected were conveyed.

## CHAPTER FOUR: FINDINGS OF THE STUDY

### Introduction

The purpose of this study was to determine the relationship between new mothers' interaction with nurses using two different methods to provide postpartum discharge teaching and their satisfaction with nursing care. The relationship between new mothers' background variables and the level of their satisfaction with nurses' teaching methods was also explored. Chapter 4 will provide a description of the sample, psychometric estimations, results of the statistical methods employed to analyze the data, and findings from the research question and hypothesis.

This study employed a quasi-experimental, posttest-only design. Data were collected from postpartum women who delivered in a hospital in northeast Florida. The pilot phase of this study was conducted to establish reliability of the Modified Client Satisfaction Tool (2008), which was modified from the Client Satisfaction Tool (1998) to measure patient satisfaction with postpartum teaching methods used by nurses. Mothers' satisfaction with nursing care was also measured after nurses provided the traditional method of postpartum discharge instructions.

The intervention phase of the study was conducted to measure new mothers' satisfaction with nurses after they were provided with the demonstration/return demonstration method of postpartum discharge instructions. Outcomes of this study were measured with the Modified Client Satisfaction Tool (2008), and a demographic survey was used to identify the background variables of the participants.

Descriptive statistics were used to summarize the demographic characteristics of both groups. Satisfaction data were analyzed using descriptive statistics and the Mann-Whitney test.

### Sample Description

A convenience sample of postpartum patients who met the inclusion criteria was recruited for this study. Sample size, analyzed a priori, was determined to be 88 participants for the pilot group and 88 for the intervention group, for a total of 176 participants. This was the total determined by G\*power for achieving a medium effect size when conducting independent t-tests for statistical analysis of the data.

While 88 new mothers participated in the pilot group, only 35 usable surveys were obtained after implementing the intervention phase. After inputting data for the first 28 participants of the intervention phase of the study, a pattern of responses was revealed. Responses for each item on the Modified Client Satisfaction Tool were yielding little variation to responses on items input for the pilot phase. A preliminary statistical analysis of the data for the intervention phase revealed that very little of the data had statistical significance. The observed effect of the method of teaching was very small ( $r = 0.01$ ) with the effect size being an objective measurement of the importance and strength of an experimental effect (Field, 2005).

In this study, preliminary analysis of the intervention phase showed the method of teaching demonstrated little effect on the outcome, satisfaction with discharge teaching. Continued data collection would not yield enough variation to make a significant difference in the results, except in extreme instances. Sample size was thus recalculated with G\*power. In order to achieve a large effect with a power of .95, the sample size

needed for two independent groups was 35, as independent t-tests were the intended statistical tests, if the data met all assumptions. Upon consultation with the statistician on this dissertation committee, data collection ceased once 35 usable surveys were collected. Therefore, the sample size for the two phases of the study is different, with 88 mothers participating in the pilot phase and 35 mothers in the intervention phase, for a combined total of 123 participants.

Descriptive statistical analysis was performed on the demographic data collected for both samples (see Table 1). Responses for some variables were missing, as can be seen from the sample sizes indicated in Table 1. Out of 123 total participants, one (0.8%) did not include her age, two (1.6%) did not identify parity, three (2.4%) either did not note their education level or their response was undecipherable, six (4.9%) did not report their income bracket, one (1.1%) did not report previous hospital experience, and two (2%) did not report method of payment. However, these missing data appeared to be randomly omitted and represented less than 5% of the total sample for each of the demographic variables. Therefore, these missing data were omitted from the statistical analysis (Munro, 2005).

Table 1

*Comparative Demographic Characteristics of the Sample and Teaching Methods*

<i>Variables</i>	<i>Traditional</i>		<i>Demonstration</i>		<i>U test or</i>
	<i>(n=88)</i>		<i>(n=35)</i>		<i>Chi-Square</i>
Age in years ( <i>M, SD</i> )	26.44	5.69	24.57	6.50	$U = 1339.5$
Race/Ethnicity					
White	75	84.3	24	77.4	$\chi^2 = 1.610$
Black	8	9.0	6	9.4	
White/Hispanic	6	6.7	1	3.2	
Marital Status					
Single	30	33.7	15	48.4	$\chi^2 = 2.224$
Married/cohabitating	58	65.2	16	51.6	
Education					
High school diploma or less	34	38.2	15	48.4	$\chi^2 = 0.495$
More than high school	27	30.3	9	29.0	
Baccalaureate or higher	25	28.1	7	22.6	
Missing	3	3.4			

(Table 1 continues)

(Table 1 continued)

Income					
< 25,000	30	33.7	17	48.6	
\$25,000-49,999	22	24.7	5	14.3	
\$50,000-74,999	15	16.9	6	7.1	$\chi^2 = 3.051$
>\$75,000	17	19.1	5	14.3	
Missing	5	5.6	2	5.7	
Mode of delivery					
Vaginal	60	67.4	29	82.9	$\chi^2 = 2.696$
Cesarean	28	32.6	6	17.1	
Parity					
Primipara	46	51.7	24	68.6	$\chi^2 = 3.146$
Multipara	42	48.3	11	31.4	
Previous hospital experience					
Positive	57	65.2	15	42.9	
Negative	7	7.9	4	11.4	$\chi^2 = 5.390$
None	23	25.8	16	45.7	
Missing	1	1.1			

(Table 1 continues)

(Table 1 continued)

Insurance					
Private insurance	45	50.6	14	40.0	
Medicaid/Medicare	41	46.1	20	57.1	$\chi^2 = 4.494$
Self-pay/other	2	2.2	0	0	
Missing	1	1.1	1	2.9	

Note: Values are *n* values and percentages, unless otherwise noted. All *U*-tests and Chi-Square tests were not significant ( $p > .05$ ).

The typical participant in the pilot group was married, white, and a first-time mother 26.44 years of age, educated at the high school level or less, with an annual family income of less than \$50,000. Her baby delivered vaginally, she had experienced a previous hospital experience that was positive, and had some form of insurance, either private or government provided (Medicaid/Medicare).

The typical participant in the intervention group was also married, white, and a first-time mother 24.57 years of age, educated at the high school level or less, with an annual family income of less than \$50,000. Her baby was delivered vaginally, she had either not had a previous hospitalization or had a hospital experience that was positive, and had some form of insurance, either private or government provided (Medicaid/Medicare).

Demographic data collected for the study included the categorical variables race, marital status, education, income, mode of delivery, parity, previous hospital experience and method of payment. Pearson's chi-square test was employed to determine whether

there was a difference between the two groups with respect to these variables. The assumptions of chi-square tests include that each variable contributes to only one cell, and that cells have an expected frequency greater than five (Field, 2005). The variables of race, education, income, previous hospital experience and method of payment contained cells with expected frequencies less than five. Therefore, the number of cells was reduced by grouping some categories together to ensure adequate cell size (Munro, 2005). Chi-square analysis for all categorical variables showed no significant differences between the traditional teaching method group and the demonstration/return demonstration teaching method group ( $p > .05$ ).

The demographic variable, *age*, is interval data; therefore, data for each group was explored for normality prior to analysis. The Kolmogorov-Smirnov test for normality of both the mothers receiving the traditional method of discharge teaching and mothers receiving demonstration/return-demonstration method of discharge teaching was highly significant ( $p < .001$ ), meaning that both distributions are not normal (Field, 2005). This deviation from normality does not meet the assumptions necessary for conducting an independent t-test to test for differences between the groups. Therefore, the non-parametric test, Mann-Whitney, was performed. The mean age of participants in the traditional teaching group ( $M = 26.44$ ) was not statistically different from the mean age of the participants in the demonstration-return demonstration group ( $M = 24.57$ ), with Mann-Whitney  $U = 1339.5$ ,  $p > .05$ ,  $r = -.31$ .

Statistical analysis showed no significant difference between the participants in the traditional teaching method group and those in the demonstration/return demonstration teaching method group with respect to any of the demographic variables.



### Satisfaction Scores

Data collected on the Modified CST for the pilot and the intervention groups were explored to determine if they were normally distributed. Participants were asked to rate their satisfaction with the discharge teaching provided by the nurse on nine items on the satisfaction tool, using a 5-point Likert scale. Scales ranged from “strongly agree” (5) to “strongly disagree” (1). The scale also included a choice of “not sure” (3). Two participants left one or more items blank on their satisfaction tool. The number of missing data was 5 (less than 5% of the 1,107 total sample items) and these items were omitted from the statistical analysis.

. The satisfaction scores for participants in both the traditional group and demonstration/return demonstration group were high, with respect to all measures of satisfaction appearing on the instrument. Most responses indicated “strongly agree” to each of the items on the Modified CST. There was little variation in the satisfaction scores for either group. High satisfaction was reported with both teaching methods.

Histograms and scatterplots were created for both data sets. The histograms revealed that all responses to items on the satisfaction tool were positively skewed, with scores piling up on the right side of the distribution.

Scatterplots revealed several outliers in the pilot phase of the study. One participant marked all items on the satisfaction tool as “strongly disagree” (1). However, the participant wrote in the optional comment section “*While I dislike (the hospital), my experience from pregnancy to delivery/going home was amazing!*” which contradicted her responses (“strongly disagree” on every item), indicating dissatisfaction. To correct for these outliers, this participant’s responses were changed to reflect the mean plus two

standard deviations (Field, 2005) for all items. Two other outliers were provided by another participant, where the response to the items “*The nurse gave me encouragement in teaching me care of myself and care of my infant*” and “*The discharge teaching I received was of high quality*” were marked “disagree” (2). This may have reflected dissatisfaction with the manner in which the nurse provided the discharge teaching, and therefore the responses were left as they were recorded.

Two outliers were identified in the intervention group data. One participant answered “disagree” (2) to the item “*The nurse gave me encouragement in teaching me care of myself and care of my infant*” and may have reflected dissatisfaction with the manner in which the nurse provided the discharge teaching. Another participant answered “disagree” (2) to the item “*The topics covered in my discharge teaching were of particular interest to me*”. Because the topics offered may not have been of interest to this patient, as indicated, the responses were left as they were recorded.

All responses in the pilot group to each item on the Modified CST were “*strongly agree*”, or “*agree*”, except for three responses marked “*not sure*” and the outliers identified above. All responses in the intervention group marked on the Modified CST were “*strongly agree*” or “*agree*” except for the two outliers identified above and three responses marked “*not sure*”. The mean scores and standard deviations for each of the items on the Modified CST for both groups are provided in Table 2.

Table 2

*Satisfaction Scores on the Modified Client Satisfaction Tool*

<i>Item</i>	<i>Traditional</i>			<i>Demonstration</i>		
	<i>M</i>	<i>SD</i>	<i>Strongly Agree</i>	<i>M</i>	<i>SD</i>	<i>Strongly Agree</i>
	<i>(n = 88)</i>			<i>(n = 35)</i>		
1	4.93	.254*	81 91.0	4.77	.490	25 80.6
2	4.91	.388	82 93.1	4.77	.598	27 87.1
3	4.93	.254*	81 91.0	4.83	.453	27 87.1
4	4.88	.396*	78 87.6	4.86	.355	28 90.3
5	4.92	.271	81 91.0	4.86	.355	28 90.3
6	4.88	.364	78 87.6	4.86	.550	30 96.8
7	4.89	.413*	79 88.8	4.86	.430	29 95.3
8	4.96	.208	84 94.4	4.89	.323	29 95.3
9	4.96	.208	84 94.4	4.71	.893 **	27 87.1

Note: values for Strongly Agree are *n* values and percentages

\**n* = 87

\*\**n* = 34

The scores on the Modified CST were evaluated for normal distribution. Once the data were converted to z-scores for standardization, they were evaluated for skewness and kurtosis. All scores for both groups had absolute values for skewness greater than 1.95 ( $p > .05$ ), showing a positive skew. Additionally, the kurtosis values were positive,

indicating a pointy distribution. This means that most likely the data were not normally distributed. The Kolmogorov-Smirnov and Shapiro-Wilk tests were performed and were highly significant ( $p < .001$ ) for all items on the Modified CST for both groups, confirming that the deviation of the data from normal is significant.

#### Estimation of Internal Consistency

The modified CST was evaluated for internal consistency in order to determine the extent that the satisfaction tool measured patient satisfaction with discharge teaching. The tool consisted of 9 items, with each item measured on a 5-point Likert scale. Reliability of the 9-item tool was evaluated with Cronbach's alpha. Cronbach's alpha is a statistical test that measures the extent to which the scales on an instrument consistently measures the critical attribute (Polit & Beck, 2004). In this study the attribute was satisfaction with discharge teaching.

The acceptable value of an alpha score is a .7 or .8 or higher, which indicates consistency in measuring the attribute (Field, 2005). The pilot group ( $\alpha = .983$ ) and intervention group ( $\alpha = .868$ ) both showed high internal consistency. This means that for this study the scales on the modified CST demonstrated consistency in measuring satisfaction with discharge teaching.

#### Research Question

The research question for this study was: *What is the relationship between new mothers' background variables of age, marital status, and parity; their participation in postpartum discharge teaching by nurses; and satisfaction with nursing care?* The data for the background variables and the satisfaction scores were not normally distributed, as

reported previously, and therefore non-parametric tests were used to analyze the data.

The results are reported in Table 3.

The relationship between new mothers' age and their satisfaction with discharge teaching was analyzed with Kendall's tau. Kendall's tau is a non-parametric test that can be used in place of Pearson's correlation coefficient, when the assumptions of Pearson's correlation coefficient, such as a normal distribution of data, are violated and the data set is small (Field, 2005). The age of the participants receiving the traditional method of postpartum discharge teaching ( $M = 26.44$ ,  $SD = 5.69$ ) was slightly higher than the age of the participants receiving the demonstration/return demonstration method of postpartum discharge teaching ( $M = 24.57$ ,  $SD = 6.50$ ). However, this age difference was not significant ( $U = 1339.5$ ,  $p > .05$ ). Satisfaction with discharge teaching, as measured by the modified CST, was not significantly correlated with age as shown by Kendall's tau ( $\tau = -.069$ ,  $p > .05$ ).

The relationship between new mothers' marital status and their satisfaction with discharge teaching was also measured with the modified CST, and the data analyzed. The Mann-Whitney test was used because the satisfaction scores were not normally distributed and therefore did not meet the assumptions to perform an independent t-test. More women were married in the group receiving the traditional method of postpartum discharge instructions (65.2%) and in the group receiving the demonstration/return demonstration method of postpartum discharge instructions (51.6%). However, this difference in marital status was not significant ( $\chi^2 = 2.224$ ,  $p > .05$ ). Analysis with the Mann-Whitney test showed no significant difference between married women's

satisfaction and single women's satisfaction with discharge teaching ( $U=1498$ ,  $p> .05$ ,  $r = -.026$ ).

The Mann-Whitney test was also used to analyze the relationship between parity and new mothers' satisfaction with discharge teaching with the modified CST. The satisfaction scores were not normally distributed, and thus necessitated nonparametric testing. There were more primiparous participants in the group that received the traditional method of postpartum discharge instructions (51.7%) and in the group that received the demonstration/return demonstration method of postpartum discharge instruction (68.6%), although the difference in parity was not significant ( $\chi^2 = 3.146$ ,  $p > .05$ ). However, the Mann-Whitney test demonstrated no significant difference between primiparas' satisfaction and multiparas' satisfaction with discharge teaching ( $U = 1690.5$ ,  $p > .05$ ,  $r = .09$ ).

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Table 3

*Comparative Demographic with Satisfaction Scores of the Sample (N = 123)*

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<i>Variable</i>	<i>Kendall's tau or Mann-Whitney Test</i>	<i>Statistical Significance</i>
Age	$\tau = -.069$	$p > .05$
Marital Status	$U = 1498$	$p > .05$
Parity	$U = 1690.5$	$p > .05$

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In summary, statistical analysis of data collected in this study revealed that no relationship exists between new mothers' background variables of age, marital status, and parity; their participation in postpartum discharge teaching by nurses; and satisfaction with nursing care.

### Hypothesis

The hypothesis for this study was that new mothers who receive the demonstration/return demonstration method of postpartum discharge teaching by nurses will report higher satisfaction than new mothers who receive the traditional method of postpartum discharge teaching by nurses, controlling for the new mother's background variables of age, marital status and parity. The mean satisfaction scores for each of the participants who received the traditional method of discharge teaching ranged from 3.33 – 5 ( $n = 88$ ). The average mean for this group was 4.91 ( $SD=.271$ ). The mean satisfaction scores for each of the participants who received the demonstration/return demonstration method of discharge teaching ranged from 3.67 – 5 ( $n = 35$ ). The average mean for this group was slightly lower, 4.84 ( $SD = .358$ ). However, the Mann-Whitney test showed these means were not significantly different ( $U = 1342, p > .05, r = -.14$ ).

The data have shown that there was no difference between the variables of age, marital status and parity, when compared with the satisfaction scores. Therefore, the earlier proposed ANCOVA statistical analysis was not used to control for these covariates.

Since the data were not normally distributed and there were two methods of discharge teaching used, the Mann-Whitney test was used to analyze the data. The test results showed there was no significant difference between satisfaction scores for the new

mothers who received the traditional method of postpartum discharge instructions and the mothers who received the demonstration/return demonstration method of discharge instruction ( $U = 1341$ ,  $p > .05$ ,  $r = .23$ )

Based on these findings, the hypothesis was not supported. The findings showed new mothers who received the traditional method of discharge instruction provided by nurses were just as satisfied as those that received the demonstration/return demonstration method of discharge instructions provided by nurses.

### Chapter Summary

A convenience sample of 88 postpartum women received the traditional method of discharge instructions provided by nurses in the pilot phase, and 35 postpartum women received the demonstration/return demonstration method of discharge instructions provided by nurses in the intervention phase, and furnished the data for this study. The main finding in this study is the high level of satisfaction reported by both participant groups with respect to all measures of satisfaction on the instrument. This lack of variability made it impossible to show improvement.

The data demonstrated there was no relationship between new mothers' background variables of age, marital status, and parity; their participation in postpartum discharge teaching by nurses; and satisfaction with nursing care. The hypothesis that new mothers who received the demonstration/return demonstration method of postpartum discharge teaching by nurses will report higher satisfaction than new mothers who receive the traditional method of postpartum discharge teaching by nurses was not supported. The Mann-Whitney test showed there was no significant difference between



the satisfaction reported by new mothers and the method of postpartum discharge instruction provided by nurses.

## CHAPTER FIVE: SUMMARY AND DISCUSSION

The purpose of this study was to determine the relationship between new mothers' interaction with nurses using different methods to provide postpartum discharge teaching and their satisfaction with nursing care. Additionally, the relationship between new mothers' background variables and the level of their satisfaction with nurses' teaching methods was explored. Cox's (1982, 2003) IMCHB was used as the theoretical framework to guide this study. Satisfaction with nursing care was measured with the Modified CST, which specifically examined patient satisfaction with discharge teaching. Comparisons were made of patient satisfaction with discharge teaching scores from new mothers who received the traditional method of postpartum discharge teaching and new mothers who received the demonstration/return demonstration method of postpartum discharge teaching. The relationship between the background variables of age, marital status and parity and satisfaction with care was also explored. In this chapter summary of the findings, implications and significance of the study to nursing education, practice, research and public policy will be discussed. Strengths and limitations will be identified and recommendations made for future research.

### Summary of the Findings

This quasi-experimental study used a convenience sample of 123 postpartum women who delivered their babies in a hospital in northeast Florida. Eighty-eight new mothers participated in the pilot portion of the study and received the traditional method of postpartum discharge teaching by nurses. Thirty-five new mothers participated in the intervention portion of the study and received the demonstration/return demonstration method of postpartum discharge teaching by nurses. The difference in the number of

participants in each group resulted from cessation of data collection during the intervention arm of this study. While inputting data for the first 28 participants of the intervention study, the author realized that responses to each item of the Modified Client Satisfaction Tool were yielding little variation to responses to each of the items input for the pilot study. After consultation with a statistician, the author decided that continuing data collection would not yield enough variation to make a significant difference in the results, except in extreme instances. Therefore, a decision was made to terminate data collection early in the intervention phase.

Demographic data were collected with a researcher-designed questionnaire.

Satisfaction data were collected with the nine item modified CST.

#### *Demographic Findings*

Demographic data collected included age, race, marital status, education, income, mode of delivery, parity, previous hospital experience and method of payment.

Statistical analysis showed there were no significant differences in demographic variables between new mothers in the traditional teaching method group and new mothers in the demonstration/return demonstration teaching method group.

#### *Satisfaction Findings*

The modified CST was used to measure patient satisfaction with a specific element of nursing care, discharge teaching. This tool used a 5-point Likert scale, with responses ranging from strongly agree (5) to strongly disagree (1). Mean satisfaction scores for participants who received the traditional method of discharge teaching ranged from 3.33 – 5 ( $n = 88$ ). The average mean for this group was 4.91 ( $SD=.271$ ). Mean satisfaction scores for the participants who received the demonstration/return

demonstration method of discharge teaching ranged from 3.67 – 5 ( $n = 35$ ). The average mean for this group was slightly lower, 4.84 ( $SD = .358$ ). Responses on the modified CST for both groups had low variability in satisfaction scores and demonstrated a positive skew in the data, indicating high satisfaction with both methods of discharge teaching. This tool demonstrated high reliability in both arms of the study, with Cronbach's alpha ranging from 0.868 – 0.983.

The research question for this study was: What is the relationship between new mothers' background variables of age, marital status, and parity; their participation in postpartum discharge teaching by nurses; and satisfaction with nursing care? Study results demonstrated there was no relationship between the variables of age, marital status, and parity and the type of teaching received, or with satisfaction with either method of discharge teaching.

Age has been shown in the literature to have an influence on satisfaction with postpartum care (Brown, Davey, & Bruinsma, 2005; Peterson & DiCenso, 2002). Younger mothers reported less satisfaction with postpartum care than older mothers. However, in this study the results of Kendall's tau test indicated age was not significantly correlated with satisfaction scores for new mothers.

Marital status has been demonstrated in the literature to have an influence on postpartum satisfaction (Brown, Davey, & Bruinsma, 2005; Peterson & DiCenso, 2002), with married women expressing greater satisfaction with postpartum care than single women. The Mann-Whitney test was used to compare the satisfaction scores for the women receiving both methods of discharge instructions with their marital status. The

satisfaction scores of married women did not differ significantly from satisfaction scores of single women.

The literature has also demonstrated a relationship between parity and satisfaction scores (Kapzawni, 2006) wherein multiparous mothers were more satisfied than primiparous mothers with their postpartum care. The Mann-Whitney test was used to compare satisfaction scores with parity of new mothers. Satisfaction scores of primiparous mothers receiving either method of discharge teaching did not differ significantly from satisfaction scores of multiparous mothers. Therefore, the answer to the research question for this study is that there is no relationship between new mothers' background variables of age, marital status and parity, and their satisfaction with care.

This study specifically measured patient satisfaction with the method of discharge teaching provided by nurses. Previous studies of patient satisfaction with postpartum care measured patient satisfaction with the overall postpartum care experience, which is a broader measure of care than discharge teaching. Thus, the difference in results in the current study may be explained, in part, by the difference in the outcome measures. The positive skew toward satisfaction and low variability in the data may also explain the lack of a relationship between the background variables and patient satisfaction with discharge teaching. Since satisfaction ratings were so high for all items on the modified CST, it may be that they had no room for improvement.

It may be that the mothers participating in this study were satisfied with their overall maternity care, including the discharge teaching provided, and therefore their background characteristics did not have an impact on satisfaction scores. Additionally, sample size for the study was determined a priori to be 88 participants for each group, for

a medium effect size for the intended t-tests. However, data collection in the intervention phase ceased after obtaining 35 completed surveys and questionnaires, for reasons explained earlier, for a large effect size. It may be that the sample sizes were too small to detect a significant relationship between the background characteristics and satisfaction scores.

The hypothesis for this study was that new mothers who receive the demonstration/return demonstration method of postpartum discharge teaching by nurses will report higher satisfaction than new mothers who receive the traditional method of postpartum discharge teaching by nurses. Since no statistical differences were found between the satisfaction scores of the new mothers in both groups and the proposed covariates of age, marital status and parity, the planned ANCOVA analysis was not carried out. The Mann-Whitney test was employed to compare satisfaction scores of new mothers receiving the traditional method of postpartum discharge teaching and new mothers receiving the demonstration/return demonstration method of postpartum discharge teaching. The results revealed no significant difference in the satisfaction scores between the two groups of new mothers. Therefore, the study hypothesis was not supported.

This study was based upon Cox's (1982, 2003) IMCHB. The model provides a framework to analyze the uniqueness of the patient, the patient/nurse relationship, and their combined influence in determining the health outcomes of patient care. The underpinning of this theoretical model is the degree that the nurse tailors care to meet the unique needs of the patient directly relates to patient health outcomes. The health outcome for this study was satisfaction with care. Based on this model, mothers who

were allowed to choose the skills they wished to learn more about, have them demonstrated and practice them with the assistance of their nurse would more likely report higher satisfaction with discharge teaching than mothers receiving the traditional discharge instructions. However, there was no significant difference between the satisfaction reported by new mothers receiving the traditional method of postpartum discharge instructions and new mothers receiving the demonstration/return demonstration method of discharge instructions.

There may be several reasons for this finding. Experiencing the birth of a baby is generally a happy time in a woman's life, and most women respond affirmatively when asked about satisfaction following their delivery (Redshaw, 2008). New mothers who are euphoric over the birth of their newborn may express satisfaction with all areas of their nursing care throughout this particular hospitalization. Hence, they may generalize their overall satisfaction with care to their satisfaction with discharge teaching. There is some support for this phenomenon in this study, based on written comments on the satisfaction surveys by the new mothers. *"Everyone was wonderful. Thanks very much to all"; "(the nurse) was very helpful throughout the whole stay"; "I was very impressed and satisfied with my whole experience here"; "Overall great care"; "Everyone was wonderful! Thanks for everything all of you"; and "Everyone who dealt with me was great. Thank you."* Another mother said *"While I dislike (the hospital) my experience from pregnancy to delivery/going home was amazing."* Thus, even though the modified CST was very specific in asking about satisfaction with discharge teaching, some of the new mothers may have been answering items on the modified CST based on their total hospital stay, including their labor and delivery experience, and all nurses they received care from,

rather than specifically answering the items based on their satisfaction with the postpartum teaching.

Out of 430 mothers discharged from September 15, 2008 to February 25, 2009, 88 participated in the pilot phase of the study, for a response rate of 20.47%. It may be that only mothers who perceived satisfaction with their discharge teaching participated in the pilot, and filled out the satisfaction surveys and demographic questionnaires, resulting in the positive skew for the satisfaction scores. This is one of the problems with a self-selected sample. There is no randomization and mothers who were satisfied with their discharge teaching may be more willing to participate in the study and fill out the surveys.

Out of the 200 mothers discharged from July 15, 2009 to September 15, 2009, 35 participated in the intervention phase, for a response rate of 17.5%. The percentage of mothers participating in the intervention was lower than those participating in the pilot study, perhaps because they did not need demonstrations of any skills on the skills list. As was written on one of the skills list, *“Patient did not need anything demonstrated.”* Only mothers who wished to have at least one skill demonstrated by their nurse were included in the intervention phase. Because they were given decisional control over the method of discharge teaching furnished, this variable could account for the high satisfaction ratings on the Modified CST.

#### *Patient/Nurse Interaction*

Within the patient/nurse relationship, the nurse has the opportunity to give the new mother encouragement and support, allow decisional control over health decisions, and provide competent technical skill and pertinent information when rendering



postpartum discharge teaching. This process helps instill a sense of self-efficacy and increased satisfaction for the new mother. Interaction with the nurse using the demonstration/return demonstration method gave each mother the opportunity to choose the skills she wished to learn more about and practice, exercising decisional control over her education needs. Throughout the intervention, the nurse could then competently provide discharge instructions as outlined in the written protocols and be supportive of the new mother's efforts as she practiced chosen skills.

The average mean for satisfaction scores on the Modified CST were slightly lower for the new mothers who received the demonstration/return demonstration method of discharge teaching than for those who received the traditional method of discharge teaching, although the difference was not significant. Overall, the comments from mothers who received this intervention were positive. *"My nurse was attentive and demonstrated everything I asked. She was helpful and very patient"; "She was very thorough and helpful"; and "It was very informative."* These comments aligned with the high satisfaction scores on the Modified CST.

However, one mother in this group commented, *"She seemed slightly rushed, wasn't detailed because my mother was here."* This comment seems to suggest that perhaps the nurse did not attend to this new mother's level of emotional arousal, thereby not supplying the affective support she needed. Findings from a study by Peterson, Sword, Charles, & DiCenso (2007) revealed that new mothers who perceived their nurses as too rushed/not understanding their individualized needs expressed greater dissatisfaction with postpartum care. Certainly, each mother's unique characteristics and

circumstances need to be considered when interacting with them, to elicit the highest level of satisfaction.

New mothers who received the traditional method of discharge teaching also had positive comments to make about their nurse and the teaching they received. One mother commented, *“She was wonderful and very clear about all the instructions. She really took time to answer all my questions and go over everything!”* Another mother wrote, *“My nurse was very patient and helpful in answering my questions and demonstrating anything I wasn’t sure about.”* These comments reflect that mothers felt affective support from their nurse. These particular statements seem to indicate that some nurses may utilize demonstration techniques routinely in their discharge teaching, instead of just offering verbal instructions. Thus, the traditional discharge method and return demonstration method may not have been as distinctly different as was intended.

Patient satisfaction with the traditional method of discharge teaching may not strictly reflect verbal instructions, but rather a blended approach that may have involved demonstrations. This additional provision demonstrates individualization or tailoring of discharge teaching strategies by some nurses, and supports the premise of the Cox Model of greater satisfaction with care when individual health needs are met. As one mother commented: *“Nurse made us feel much more comfortable with leaving the hospital and beginning parenthood.”* The IMCHB suggests that to the degree a nurse tailors his/her interventions to needs of the patient, the greater the potential satisfaction. This may account for some of the high satisfaction responses on the Modified CST for mothers receiving the traditional method of discharge instructions.

## Significance of the Study

### *Education*

The American Association of Colleges of Nursing (2008) has identified patient education and nurses' ability to demonstrate effective communication skills while educating patients as essential curricular components of a baccalaureate nursing program. Thus, nurse educators need to prepare students to assume, among their many nursing roles, that of patient educator, including discharge instructions for patients prior to leaving the hospital (Wagner, Bear, & Sander, 2009). Learning how to best implement discharge teaching in a manner that provides the greatest patient satisfaction is a skill that could benefit both patients and nurses, including student nurses.

This study's findings have shown that new mothers expressed high satisfaction with both the traditional method and demonstration/return demonstration method of providing postpartum discharge teaching. In addition, findings revealed that some nurses included demonstrations in their traditional verbal discharge teaching, thereby individualizing postpartum instructions to new mothers. Although more evidence would be needed to make any clear-cut conclusions, results suggest that teaching nursing students that consideration of a new mother's singularity, individual choice of health care topics during discharge teaching, and the inclusion of skills demonstration can enhance mothers' satisfaction with nursing care.

### *Practice*

According to the American Nurses Association (2004) one of the Standards of Practice is to provide health teaching for patients and to seek feedback about the effectiveness of teaching strategies used. Nurses working on maternity units are required

to provide discharge instructions about self care and infant care to new mothers prior to discharge home. To comply with this practice standard, it is imperative for maternity nurses to not only prepare new mothers to care for themselves and their newborns, but to evaluate both educational effectiveness and teaching methods used. After receiving her postpartum discharge teaching, one mother in this study commented: *“The nurse made us feel much more comfortable with leaving the hospital and beginning parenthood,”* which strongly suggests that her educational needs were met. This study has demonstrated that using either the traditional method or the demonstration/return demonstration method of providing postpartum discharge teaching can result in high levels of satisfaction with nursing care. These results may encourage nurses to realize that discharge teaching should be tailored to individual mothers’ singularity and needs and that employing various methods to enhance delivery of health teaching may bolster satisfaction with nursing care.

### *Research*

Women’s satisfaction with postpartum discharge teaching is an important topic for research, as little is known in this area. Postpartum teaching strategies vary in style and quality of interaction between nurses and patients, but current teaching methods may be based on what works best for the nursing staff, rather than patient preference or research findings (Ruchala, 2000). Current literature does not address patient satisfaction with the teaching methods used by nurses, representing a gap in nursing knowledge. This study has provided the foundation for research in the area of patient satisfaction with postpartum discharge teaching methods used by nurses. The results of this study indicated that patient satisfaction with the two methods of providing postpartum

discharge teaching was not significantly different. However, continued research in this area with a larger sample size of mothers in other geographic areas or hospital facilities, and exploring other methods of discharge teaching could build upon this foundation. Extending the research in this area, may increase the body of evidenced-based nursing knowledge from which to provide postpartum discharge instructions using methods that result in the highest patient satisfaction.

### *Public Policy*

Current regulations require hospitals to make patient satisfaction surveys available to the public in order to secure financial reimbursement from governmental sources. The literature has shown that higher levels of satisfaction may influence existing and potential patients' choice of medical facility for future health care needs (Elder et al., 2004; Laschinger et al., 2005; Otani & Kurz, 2004). This study has shown that delivering postpartum instructions, using either the traditional or the demonstration/return demonstration method to provide postpartum discharge teaching, can result in high patient satisfaction with nursing care. This level of satisfaction may compel future patients to seek this particular facility for their own maternity health care needs.

Health literacy, an important public policy issue, is linked to a person's health status (Elwood, 2009). Health information provided by nurses can empower patients to make informed health care decisions, and increase the likelihood of adherence to behaviors that promote health (Jennings, Thompson, & Roberts, 2002). Affirmative comments by new mothers following the traditional discharge instructions provided by their nurse included: *"She made sure we understood everything and was very thorough"*; *"She was great! Answered all my questions and had time for me"*; and *"I*

*was extremely satisfied with the information that I received and all my questions were answered.”* This study demonstrated a form of individualized postpartum discharge teaching incorporated within a traditional method used by nurses that appeared to ensure new mothers’ questions and concerns were addressed. This resulted not only in high satisfaction ratings but infers that the health literacy was improved for the new mothers involved in the study.

### Strengths and Limitations of the Study

#### *Strengths*

One of the strengths of this study was the use of a theoretical framework as a guide. Cox’s Interaction Model of Client Health Behavior (1982, 2003) emphasizes a patient-centered, holistic model of care, describing the uniqueness of the patient, and provides a method to document outcomes based on individualized, holistic care. Although results of the study demonstrated no significant difference in the outcome, satisfaction with care, based on implementation of the traditional and the demonstration/return demonstration methods of providing postpartum discharge teaching to new mothers, it did demonstrate high satisfaction with both methods. Additionally, affective support, individualizing teaching and using demonstration techniques produced positive comments from new mothers receiving both methods of discharge teaching. Nurses can use this information to tailor their postpartum discharge teaching based on individual patient choice and needs, to produce the greatest satisfaction with nursing care.

Another strength of this study was the use of a valid and reliable instrument to measure new mothers’ satisfaction with postpartum teaching methods. The original CST (Bear & Bowers, 1998) was developed using the Cox Model; therefore, the instrument is

congruent with the theoretical framework on which this study is based. Cronbach's alpha showed high internal consistency (0.956) when measuring patient satisfaction with nurse practitioner care in a senior health clinic. An adaptation of the CST, measuring patient satisfaction with advanced practice nurses in the Wright State University Pilot Project, had an alpha coefficient of 0.935 (Bryant & Graham, 2002).

For this study, content validity for the modified CST was established with three experts in the field of maternity nursing, who are knowledgeable of the IMCHB, along with Dr. Mary Bear, the developer of the original instrument. The pilot group utilized the Modified CST to measure patient satisfaction with nurses using the traditional method to provide postpartum discharge teaching and showed high internal consistency ( $\alpha = .983$ ). The intervention group utilized the Modified CST to measure patient satisfaction with the nurses using the demonstration/return demonstration method to provide postpartum discharge teaching and also showed high internal consistency ( $\alpha = .868$ ). Therefore, each item on the Modified CST demonstrated consistency in measuring satisfaction with discharge teaching.

The last strength was using written protocols to provide the demonstration of the chosen skills to new mothers in the intervention study. This allowed for standardization of the discharge teaching, since three different nurses implemented this intervention. Constructing written protocols will also make it easier for other researchers to replicate this study in the future.

### *Limitations*

There were several limitations to this study. The sample size to detect a medium effect size with a power of .95 for the expected independent t-tests was determined

a priori to be 88 participants in both the pilot group and the intervention group. However, a preliminary statistical analysis of the data for the intervention group showed that very little of the data had statistical significance and the observed effect of the method of teaching was very small ( $r = 0.01$ ). Data collection was continued until 35 usable surveys were collected, in order to achieve a large effect, at which time data collection in the intervention study ceased. This smaller sample size failed to detect a significant difference between the mean satisfaction scores of the participants in both groups.

This study consisted of a self-selected convenience sample from one hospital setting. The sample was comprised of primarily white, married, first-time mothers, most of whom were identified as having a high school education or less, with an annual family income of less than \$50,000. The lack of ethnic diversity and singular setting limits the possibility of generalizing this study to the population.

Recruitment for this study occurred prior to new mothers' discharge from the hospital. This factor may have influenced a mother's decision to participate in the study, particularly if she had family or friends waiting to take her home or if she was anxious to leave the hospital. This may have resulted in the low participation rate of eligible patients.

Finally, it is possible the study was affected by a double Hawthorne effect. Since the mothers were aware of participating, this may have affected their responses on the satisfaction survey. It may be true that the extra attention they were given, particularly in the intervention study, resulted in higher satisfaction with the discharge teaching provided. Additionally, since the nurses were aware that the new mothers they provided the discharge teaching to could potentially fill out the satisfaction surveys, they may have



made an extra effort to be very thorough in explaining the information and answering questions.

### Recommendations for Future Study

There are several recommendations for future research based on the findings of this study. The first would be to broaden the scope of the study, beyond one setting with one specific population. By replicating this study in other medical facilities in different geographic locations, ethnic diversity could be increased. Since age has been shown in other studies to have an effect on postpartum satisfaction, consideration could be given to including new mothers under the age of 18, in order to ascertain their satisfaction with both methods of postpartum teaching.

The sample size for future studies should be increased. This study's sample size was too small to detect clinical significance between satisfactions with either method of discharge teaching. Since the effect of the intervention itself was small, findings from a larger sample may be able to reveal if there is truly a significant difference in patient satisfaction with either teaching method.

This study examined patient satisfaction with two methods of discharge teaching. Other teaching methods could be analyzed, such as group discharge teaching classes, in order to expand the exploration of patient satisfaction with postpartum teaching methods.

Finally, the IMCHB was "designed for application to a variety of health care decisions and behaviors" (Cox, 1982, p. 55) and can be used in identifying "the uniqueness of the patient and the nurse-patient relationship and interactions that result in patient satisfaction with nursing care" (Wagner & Bear, 2009, p. 699). Other areas of nursing practice may benefit from exploration of patient satisfaction with discharge

teaching methods and benefit from replicating this study. The CST could be modified to reflect the patient population served, based on the medical conditions being addressed. By using various methods to provide discharge teaching for these patients and measuring their satisfaction with these methods, the relationship between nurses' teaching interventions and patient satisfaction with discharge teaching could be established.

### Conclusions

The purpose of this study was to determine the relationship between new mothers' interaction with nurses using different methods to provide postpartum discharge teaching and their satisfaction with nursing care. This quasi-experimental study used a convenience sample of 123 postpartum women who delivered their babies in a hospital in northeast Florida. Patient satisfaction with the method of providing postpartum teaching by nurses was measured with the Modified CST. It was hypothesized that new mothers who received the demonstration/return demonstration method of postpartum discharge teaching by nurses would report higher satisfaction than new mothers who receive the traditional method of postpartum discharge teaching by nurses.

The data did not support the hypothesis, as there was no significant difference between patient satisfaction and the method of discharge teaching. It may be that new mothers have a difficult time differentiating satisfaction with postpartum teaching from their satisfaction with the total maternity care experience. Nurses may blend their postpartum teaching styles and instinctively include demonstrations while they are providing the traditional method of discharge instructions, as requested by their patients, thereby increasing patient satisfaction with this method. Implementing individualized care, based on the needs of the patient, was demonstrated in this study to result in high

satisfaction with nursing care with both methods of providing postpartum discharge teaching.

Strengths of this study included the strong theoretical framework provided by the Cox IMCHB, using a valid and reliable instrument to measure patient satisfaction with the postpartum teaching methods, and developing teaching protocols to ensure consistency with the intervention teaching method used by nurses. Limitations included a small sample size and lack of diversity within the sample, self selected sample, and a possible Hawthorne effect. Recommendations for future research include extending the study to other medical facilities and geographic areas to increase diversity in the sample, increasing the sample size, and expanding the study to explore patient satisfaction with discharge teaching in other areas of nursing practice.

## References

- Ackley, B. J., & Ladwig, G. B. (2008). *Nursing diagnosis handbook: An evidence-based guide to planning care*. (8<sup>th</sup> ed.). St. Louis: Mosby Elsevier.
- American Association of Colleges of Nursing. (2008). *Essentials of Baccalaureate Education for Professional Nursing Practice*. Washington, DC: Author.
- American Nurses Association. (2004). *Nursing: Scope and Standards of Practice*. Washington, D.C.: Author.
- American Nurses Credentialing Center. (2008). Program overview. Retrieved November 7, 2008 from <http://www.nursecredentialing.org/Magnet/ProgramOverview.aspx>.
- American Nurses Credentialing Center. (2008). Forces of magnetism. Retrieved November 7, 2008 from <http://www.nursecredentialing.org/Magnet/ProgramOverview/ForcesofMagnetism.aspx>.
- Bear, M., & Bowers, C. (1998). Using a nursing framework to measure client satisfaction at a nurse-managed clinic. *Public Health Nursing*, 15, 50-59.
- Bear, M., Brunnell, M. L., & Covelli, M. (1997). Using a nursing framework to establish a nurse-managed senior health clinic. *Public Health Nursing*, 15(1), 50-59.
- Bear, M., & Wagner, D. (2008). *Modified Client Satisfaction Tool*.
- Beger, D., & Cook, C. A. L. (1998). Postpartum teaching priorities: The viewpoints of nurses and mothers. *JOGNN*, 27, 161-168.
- Beger, D., & Cook, C. A. L. (1996). Maternal postpartum learning needs. *International Journal of Childbirth Education*, 11, 22-26.

- Birk, D. (1996). Postpartum education: Teaching priorities for the primipara. *Journal of Perinatal Education*, 5, 7-12.
- Bowman, K. G. (2005). Postpartum learning needs. *JOGNN*, 34, 438-443.
- Bowman, K. G. (2006). Adolescent postpartum care: What daughters want and what their mothers expect to provide. *Pediatric Nursing*, 32, 209-213.
- Brown, S. J., Davey, M., & Bruinsma, F. J. (2005). Women's views and experiences of postnatal hospital care in the Victorian survey of recent mothers 2000. *Midwifery*, 21, 109-126.
- Bryant, R., & Graham, M. C. (2002). Advanced practice nurses: A study of client satisfaction. *Journal of the American Academy of Nurse Practitioners*, 14(2), 88-92.
- Canavan, K. (1997). Proving nursing's value. *American Journal of Nursing*, 97, 57-58.
- Cleary, M., Horsfall, J., & Hunt, G. E. (2003). Consumer feedback on nursing care and discharge planning. *Journal of Advanced Nursing Practice*, 42(3), 269-277.
- Colley, S. (2003). Nursing theory: Its importance to practice. *Nursing Standard*, 17, 33-37.
- Cox, C. L. (1982). An interaction model of client health behavior: Theoretical prescription for nursing. *Advances in Nursing Science*, 5(1), 41-56.
- Cox, C. L. (2003). A model of health behavior to guide studies of childhood cancer survivors. *Oncology Nursing Forum*, 30(5): Online Exclusive: E92-E99.
- Dana, S. N., & Wambach, K. A. (2003). Patient satisfaction with an early discharge home visit program. *JOGNN*, 32, 190-198.

- Donabedian, A. (1988). The quality of care: How can it be assessed? *Journal of the American Medical Association (JAMA)*, 260(12), 1988, pp. 1743-1748, 1970.
- Elder, R., Neal, C., Davis, B. A., Almes, E., Whitledge, L., & Littlepage, N. (2004). Patient satisfaction with triage nursing in a rural hospital emergency department. *Journal of Nursing Care Quality*, 19, 265–268.
- Elwood, T. W. (2009). Health status determinants in relation to federal health policy. *Journal of Allied Health*, 38 (1), 3-7.
- Field, A. (2005). *Discovering statistics using SPSS*. (2<sup>nd</sup>. ed.) London: Sage Publications.
- George, L. (2005). Lack of preparedness: Experiences of first time mothers. *The American Journal of Maternal/Child Nursing*, 30(4), 251-255.
- González-Valentín, A., Padín-López, S., & Ramón-Garrido, E. (2003). Patient satisfaction with nursing care in a regional university hospital in southern Spain. *Journal of Nursing Quality*, 20, 63-72.
- Han, C., Connolly, P. M., & Canham, D. (2005). Measuring patient satisfaction as an outcome of nursing care at a teaching hospital of southern Taiwan. *Journal of Nursing Care Quality*, 18, 143-150.
- Harriott, E. R., Williams, T. V., & Peterson, M. R. (2005). Childbearing in U. S. military hospitals: Dimensions of care affecting women's perceptions of quality and satisfaction. *Birth*, 32, 4–10.
- Hildingsson, I., & Thomas, J. E. (2007). Women's perspectives on maternity services in Sweden: Processes, problems, and solutions. *Journal of Midwifery and Women's Health*, 52, 126-133.

- Hinshaw, A. S., & Atwood, J. R. (1981). A patient satisfaction instrument: Precision by replication. *Nursing Research*, 31, 170-175.
- Hiser, P. L. (1987). Concerns of multiparas during the second postpartum week. *JOGNN*, 16, 195-203.
- <http://www.jointcommission.org/PerformanceMeasurement/PerformanceMeasurement/Current+NHQM+Manual.htm>
- <http://www.pscho.uni-duesseldorf.de/aap/projects/gpower/>
- Jamison, S. (2008). The challenges of patient education. *Med-Surg Matters*, 17(1), 4-5.
- Jennings, C. P., Thompson, L., & Roberts, D. (2002). Achieving health literacy. In Mason, D. J., Leavitt, J. K., & Chafee, M. W. *Policy & Politics in Nursing and Health Care*. (4<sup>th</sup> ed.) (p. 107). St. Louis: Saunders.
- Kapzawni. (2006). Mothers' level of satisfaction with postnatal care. *Nursing Journal of India*, 97, 153-5.
- Kuosmanen, L., Hätönen, H., Jrykinen, A. R., Katajisto, J., & Välimäki, M (2006). Patient satisfaction with psychiatric inpatient care. *Journal of Advanced Nursing*, 55(6), 655-663.
- Laschinger, H. S., Hall, L. M., Pedersen, C., & Almost, J. (2005). A psychometric analysis of the patient satisfaction with nursing care quality questionnaire: An actionable approach to measuring patient satisfaction. *Journal of Nursing Care Quality*, 20(3), 220-230.
- Martin, M. (2005, Fall). Women's judgements and attitudes about the quality and quantity of postpartum teaching. *Journal of Undergraduate Nursing Scholarship*,

- 7(1). Retrieved May 29, 2008 from  
<http://juns.nursing.arizona.edu/articles/Fall%202005/Martin.htm>.
- Merkouris, A., Papathanassoglou, & Lemonidou, C. (2004). Evaluation of patient satisfaction with nursing care: Quantitative or qualitative approach? *International Journal of Nursing Studies*, 41, 355-367.
- Montalvo, I. (2007). The National Database of Nursing Quality Indicators (NDNQI®). *OJIN: The Online Journal of Issues in Nursing*, 12(3).
- Moore, M. L. & Billings, S. (1993). Learning interests of men and women attending childbirth classes. *Journal of Perinatal Education*, 2, 37-41.
- Moorhead, S., Johnson, M., Maas, M., & Swanson, E. (2008). *Nursing outcomes classification (NOC)* (4<sup>th</sup> ed.). St. Louis, MO: Mosby.
- Mrayyan, M. T. (2006). Jordanian nurses' job satisfaction, patients' satisfaction and quality of nursing care. *International Nursing Review*, 53, 224-230.
- Munro, B. (2005). *Statistical methods for health care research* (5<sup>th</sup> ed.). Philadelphia: Lippincott Williams & Wilkins.
- Oermann, M. H. (2003). How effective is your patient teaching? *Journal of Wound, Ostomy and Continence Nursing*, 30(3), 122-5.
- Olinzock, B. J., & Bloom, K. C. (2008). Deficient knowledge (specify). In Ackley, B. J., & Ladwig, G. B. (Eds.) *Nursing Diagnosis Handbook: An Evidenced-based Guide to Planning Care*. (8<sup>th</sup> ed.) (pp. 520-524). St. Louis: Mosby Elsevier.
- Otani, K., & Kurz, R. S. (2004). The impact of nursing care and other healthcare attributes on hospitalized patient satisfaction and behavioral intentions. *Journal of Healthcare Management*, 49, 181-196.



- Perla, L. (2002). Patient compliance and satisfaction with nursing care during delivery and recovery. *Journal of Nursing Care Quality*, 16, 60-67.
- Peterson, S. J., & Bredow, T. S. (2004). *Middle range theories: Application to nursing research*. Philadelphia: Lippincott, Williams & Wilkins.
- Peterson, W., Charles, C., DiCenso, A., & Sword, W. (2005). The Newcastle satisfaction with nursing scales: A valid measure of maternal satisfaction with inpatient postpartum nursing care. *Journal of Advanced Nursing*, 52(6), 672-681.
- Peterson, W. E., & DiCenso, A. (2002). A comparison of adolescent and adult mothers' satisfaction with their postpartum nursing care. *Revue Canadienne de Recherche en Sciences Infirmie' res*, 34, 117-127.
- Peterson, W. E., Sword, W., Charles, C., & DiCenso, A. (2007). Adolescents' perceptions of inpatient postpartum nursing care. *Qualitative Health Research*, 17, 201-212.
- Polit, D. E., & Beck, C. T. *Nursing research: Principles and methods*. (7<sup>th</sup> ed.). Philadelphia: Lippincott Williams & Wilkins.
- Raper, J. L. (1996). A cognitive approach to patient satisfaction with emergency department nursing care. *Journal of Nursing Care Quality*, 10, 48-58.
- Redshaw, M. (2008). Women as consumers of maternity care: Measuring "satisfaction" or "dissatisfaction"? *Birth*, 35, 73-76.
- Rubin, R. (1984). *Maternal Identity and the Maternal Experience*. New York: Springer Publishing.

- Ruchala, P. L. (2000). Teaching new mothers: priorities of nurses and postpartum women. *Journal of Obstetric, Gynecologic, and Neonatal Nursing (JOGNN)*, 9(3), 265-273.
- Schmidt, L. A. (2003). Patients' perceptions of nursing care in the hospital setting. *Journal of Advanced Nursing*, 44(4), 393-399.
- Stewart, M. (2003). Patient education makes cents. *Pelican News*, 59(3), 7-8.
- Sword, W., & Watt, S. (2005). Learning needs of postpartum women: Does socioeconomic status matter? *Birth*, 32, 86-92.
- Troumbley, P. F., & Lenz, E. R. (1992). Application of Cox's interaction model of client health behavior in a weight control program for military personnel: A preintervention baseline. *Advances in Nursing Science*, 14(4), 65-78.
- Wagner, D. L., & Bear, M. (2009). Patient satisfaction with nursing care: A concept analysis within a nursing framework. *Journal of Advanced Nursing*, 65, 692-701.
- Wagner, D. L., Bear, M., & Sander, J. (in press). Turning simulation into reality: Increasing student competence and confidence. *Journal of Nursing Education*.
- Williams, L. R., & Cooper, M. K. (1996). A new paradigm for postpartum care. *JOGNN*, 25, 745-749.
- Wong, D. L., Perry, S. E., Hockenberry, M. J., Lowdermilk, D. L., & Wilson, D. (2006). *Maternal child nursing care*. (3<sup>rd</sup> ed.). St. Louis: Mosby Elsevier.

## APPENDIXES

## APPENDIX A

## Summary of Studies

Author(s)	Purpose/ Research Question	Design	Sample	Instrument	Results
Peterson & DiCenso (2002)	Examine differences in perceived level of satisfaction with inpatient nursing care.	Matched- cohort survey	80 unmarried adolescents mothers and 80 married adult mothers	Experiences of Nursing Care Scale of the Newcastle Satisfaction with Nursing Scales (NSNS) questionnaire	Unmarried adolescent mothers were less satisfied than married adult mothers
Brown, Davey, & Bruinsma, 2005	New mothers views & experiences of postpartum nursing care received.	Survey	1,616 new mothers	Victorian Surveys of Recent Mothers	Younger mothers less satisfied than older mothers
Kapzawni (2006)	Assess level of satisfaction with postnatal care given by nurses	Structured interview	100 new mothers	Researcher developed survey	Multiparas more satisfied with care than primiparas; health teaching was area of care ranked lowest.
Hildingsson & Thomas (2007)	Determine what is important to prenatal women during pregnancy and birth	Qualitative	827 pregnant women	Researcher developed questionnaire	Need for more individual- ized postpartum teaching

Peterson, Sword, Charles, & DiCenso (2007)	Describe both satisfactory and unsatisfactory experiences of adolescents, from their perspective, with their postpartum nursing care	Phenomenology	14 new mothers	Researcher developed questionnaire	Satisfied when individual learning needs are met
George (2005)	Understand the reality of their experience during the postpartum period	Grounded theory	10 mothers	Researcher developed questionnaire	Knowledge deficit of self and infant care
Martin (2005)	Determine women's preferences regarding postpartum teaching	Descriptive	27 mothers	Researcher developed questionnaire	Most were very satisfied or satisfied with discharge teaching; preferred personal teaching
Dana and Wambach (2003)	Evaluate satisfaction with an early discharge home visit program	Descriptive	440 mothers	KU Med Maternal/Child home Care Program Patient Satisfaction Questionnaire	High satisfaction reported with working one-on-one to address needs
Harriott, Williams, & Peterson (2005)	Discover how women evaluated their maternity	Descriptive	1,612 mothers	Inpatient Childbirth Satisfaction Survey	Greatest satisfaction reported with information and

	care in a military hospital				education provided
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## APPENDIX B

# Patient Satisfaction with Postpartum Teaching Methods

*If all of the following apply to you:*

1. 18 years of age or older and delivered a baby
2. Experienced an uncomplicated vaginal or cesarean delivery
3. Have a healthy baby who is rooming-in
4. Expect to be sent home today
5. Can speak, read, and write in English

*Will you help us to learn more?*

Debra Wagner, a nursing PhD student at Barry University, is conducting this study to try to learn more about satisfaction with methods used by nurses to teach new mothers how to care for themselves and their newborn after childbirth. If you participate in the study, you will be asked to complete a survey about your experience with the method used to teach you how to care for yourself and your baby, after you receive your discharge teaching. You will also be asked to fill out a questionnaire telling me a little bit about yourself. The questionnaires take approximately 5 minutes to complete.

## APPENDIX C

### **Staff Script**

A doctoral student is conducting a study to try to learn more about new mothers' satisfaction with methods used by nurses to teach new mothers how to care for themselves and their newborn after childbirth. Here is a flyer that explains the study. After you receive your discharge instructions, you will be given a letter that explains the study in detail, a background questionnaire, the satisfaction survey, and a blank envelope. Your decision to participate by filling out the questionnaire and survey is entirely voluntary. Your choice to participate or not will not affect your health care in any way. You will not be identified in any way on the forms that you complete.



## APPENDIX D

**Barry University  
Cover Letter**

Dear Research Participant:

Your participation in a research project is requested. The title of the study is Patient Satisfaction with Postpartum Teaching Methods. The research is being conducted by Debra Wagner, a doctoral student in the nursing department at Barry University, and she is seeking information that will be useful in the field of nursing. The aims of the research are to assess mothers' satisfaction with postpartum discharge teaching provided by nurses during the hospital stay following childbirth prior to discharge and to test the reliability of the questionnaire used to assess mothers' satisfaction. In accordance with these aims, the following procedures will be used: a demographic survey and satisfaction questionnaire will be distributed to mothers to complete. We anticipate the number of participants to be 88.

If you decide to participate in this research, you will be asked to do the following: after receiving your discharge instructions, your nurse will give you a demographic questionnaire, a satisfaction survey and a plain envelope. If you agree to participate in this project, when the nurse leaves your room, you will fill out the survey and questionnaire, which will take approximately five minutes to complete. Upon completion, you will put the questionnaire and survey into the envelope, and seal it. Please do not put any information identifying you or your nurse on this questionnaire or the envelope. If you choose not to participate, you will put the blank questionnaire and blank survey into the envelope, and seal it. Please keep this cover letter, only placing the questionnaire and the survey in the envelope. As you leave the hospital, please place the envelope in the locked box on the unit secretary's desk.

Your consent to be a research participant is strictly voluntary and should you decline to participate or should you choose to drop out at any time during the study, there will be no adverse effects on your health care.

There are no known risks to you. Although there are no direct benefits to you, your participation in this study may help our understanding of mothers' satisfaction with postpartum discharge teaching provided by nurses during the hospital stay following childbirth.

As a research participant, information you provide will be kept anonymous, that is, no names or other identifiers will be collected on any of the instruments used. Data will be kept in a locked file in the researcher's office. By completing and returning this survey you have shown your agreement to participate in the study.

If you have any questions or concerns regarding the study or your participation in the study, you may contact me, Debra Wagner, at [REDACTED], my supervisor, Dr. Mary Bear, at [REDACTED] or the Institutional Review Board point of contact, Barbara Cook, at [REDACTED]

Thank you for your participation.

Sincerely,

*Debra Wagner*

## APPENDIX E

## Demographic Questionnaire

I am interested in knowing some information about you. It will take about five minutes of your time. Everything that you tell me will be anonymous and confidential. Please do not put any information identifying you on this questionnaire. If you choose not to answer these questions, it will not affect the care that you receive at the hospital.

**Age:** \_\_\_\_\_

**Ethnicity/Race** (you may pick more than one): ☐ Black ☐ White ☐ Asian or Pacific Islander ☐ Hispanic ☐ Native American or Alaskan Native ☐ Other

\_\_\_\_\_

**Marital status:** ☐ Single ☐ Married/cohabitating ☐ Divorced/separated/widowed

**Education completed:** Number of years \_\_\_\_\_

**Family Income:** ☐ < \$25,000 ☐ \$25,000-50,000 ☐ \$50,000-75,000 ☐ \$75,000-100,000 ☐ > \$100,000

**How did you deliver your baby?** ☐ Vaginal ☐ Cesarean section

**How many babies have you previously delivered?** ☐ None ☐ One or more

**Who do you rely on to help you make health care decisions?** (you may pick more than one)  
☐ Spouse/significant other ☐ Mother/father ☐ Sibling ☐ Friend  
☐ Other \_\_\_\_\_

**How would you describe your previous experience with other hospitalizations?**  
☐ Positive ☐ Negative ☐ No previous experience with hospitalization

**What insurance method are you using?** ☐ Private insurance ☐ Medicaid ☐ Self pay  
☐ Other \_\_\_\_\_

## APPENDIX F

## Modified Client Satisfaction Tool

I am interested in knowing your opinion on the discharge teaching given by your nurse. It will take about five minutes of your time. There is no right or wrong answers and everything that you tell me will be anonymous and confidential. Please do not put any information identifying yourself or your nurse on this survey. If you choose not to answer these questions, it will not affect the care that you receive at the hospital.

Please answer the following statements with a check mark in the strongly agree, agree, disagree, strongly disagree, or not sure column.

	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
1. The nurse understood my learning needs regarding my self-care and infant care					
2. The nurse gave me encouragement in teaching me care of myself and care of my infant.					
3. I got my questions answered in an individual way.					
4. I was included in decision-making about my discharge teaching.					
5. The discharge information I received in the hospital will help me take care of myself and my infant at home.					
6. The topics covered in my discharge teaching were of particular interest to me.					
7. The discharge teaching I received was of high quality.					
8. The nurse did a good job doing my discharge teaching.					
9. Overall, I was satisfied with my discharge teaching.					

Is there anything else you would like to say about the discharge teaching that you received from your nurse?

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## APPENDIX G

# Patient Satisfaction with Postpartum Teaching Methods

*If all of the following apply to you:*

1. 18 years of age or older and delivered a baby
2. Experienced an uncomplicated vaginal or cesarean delivery
3. Have a healthy baby who is rooming-in
4. Expect to be sent home today
5. Can speak, read, and write in English

*Will you help us to learn more?*

Debra Wagner, a PhD student in the Division of Nursing at Barry University, is conducting this study to try to learn more about satisfaction with methods used by nurses to teach new mothers how to care for themselves and their newborn after childbirth. If you agree to participate in the study, you will be given the opportunity to choose skills you are interested in learning more about, an opportunity to have them demonstrated to you, and to practice them with your nurse. You will have up to 30 minutes to practice these skills. Then you will receive the usual discharge instructions provided by the hospital. If you do not wish to participate in this study, you will receive the usual discharge instructions provided by the hospital. If you participate in the study, you will be asked to complete a survey about your experience with the method used to teach you how to care for yourself and your baby, after you receive your discharge teaching. You will also be asked to fill out a questionnaire telling me a little bit about yourself. You may receive the skills practice without completing the questionnaires. However, the questionnaires take approximately 5 minutes to complete. You will not be identified in any way on the forms that you complete.

## APPENDIX H

### Staff Script

A doctoral student is conducting a study to try to learn more about new mothers' satisfaction with methods used by nurses to teach new mothers how to care for themselves and their newborn after childbirth. Here is a flyer that explains the study.

If you participate in the study, you will be given the opportunity to choose skills you are interested in learning more about from a skills list. Your nurse will demonstrate those skills to you and you will have the opportunity to practice them with her. You will also receive the regular discharge instructions.

You have three options:

- 1) Choose to participate in the study, and receive the enhanced teaching, in addition to the regular discharge instructions. You will have up to 30 minutes to practice the skills you choose. The length of time depends on the number of skills you choose to practice, and how comfortable you are in performing these skills. At the end of your enhanced discharge teaching, you will be asked to fill out a questionnaire and survey, which will take approximately 5 minutes to complete.
- 2) Choose to participate in the study, and receive the enhanced teaching, in addition to the regular discharge instructions. At the end of your enhanced discharge teaching, you can decline to fill out the questionnaire and survey.
- 3) Choose not to participate in the study, and receive the regular discharge instructions.

You will be given a letter that explains the study in detail. If you agree to participate in the study, you will be given a skills list to choose the topic(s) you wish to learn more about, the background questionnaire, the satisfaction survey, and a plain envelope. Your decision to participate in this enhanced teaching and to fill out the questionnaire and survey is entirely voluntary. Your choice to participate or not will not affect your health care in any way. You will not be identified in any way on the forms that you complete.

## APPENDIX I

**Barry University  
Cover Letter**

Dear Research Participant:

Your participation in a research project is requested. The title of the study is *Patient Satisfaction with Postpartum Teaching Methods Used by Nurses*. The research is being conducted by Debra Wagner, a doctoral student in the Division of Nursing at Barry University, and she is seeking information that will be useful in the field of nursing. The aims of the research are to assess mothers' satisfaction with postpartum discharge teaching provided by nurses during the hospital stay following childbirth prior to discharge. In accordance with these aims, the following procedures will be used: a demographic survey and satisfaction questionnaire will be distributed to mothers to complete. We anticipate the number of participants to be 88.

If you decide to participate, you will be provided with the opportunity to learn more about skills that you'd like to practice before you are discharged. You will be asked to choose all the skills you would like to learn more about on the skills list the nurse will give you. After your nurse demonstrates the skills, you will practice them with her. You will have up to 30 minutes to practice these skills.

After you receive these discharge instructions, your nurse will give you a demographic questionnaire, a satisfaction survey and a plain envelope with your skills list enclosed, which will take approximately 5 minutes to complete. If you agree to participate in this project, when the nurse leaves your room, you will fill out the survey and questionnaire. Upon completion, you will put the questionnaire and survey into the envelope, and seal it.

Please do not put any information identifying you or your nurse on this questionnaire or the envelope. You may receive the skills practice without completing the questionnaires. If you choose not to participate, you will put the blank questionnaire and blank survey into the envelope, and seal it. Please keep this cover letter, only placing the questionnaire and the survey in the envelope. The nurse will return in approximately 15 minutes to give you the usual discharge instructions. When you are leaving the hospital, you are asked to place the sealed envelope in the locked box at the nurses' station.

If you decide not to participate in this research, you will be provided with the usual discharge instructions provided by the hospital.

Your consent to be a research participant is strictly voluntary and should you decline to participate or should you choose to drop out at any time during the study, there will be no adverse effects on your health care.

There are no known risks to you. Although there are no direct benefits to you, your participation in this study may help our understanding of mothers' satisfaction with postpartum discharge teaching provided by nurses during the hospital stay following childbirth.

As a research participant, information you provide will be kept anonymous. No names or other identifiers will be collected on any of the instruments used. Data will be kept in a locked file in the researcher's office. By completing and returning this survey you have shown your agreement to participate in the study.

If you have any questions or concerns regarding the study or your participation in the study, you may contact me, Debra Wagner, at [REDACTED], my supervisor, Dr. Mary Bear, at [REDACTED], or the Institutional Review Board point of contact, Barbara Cook, at [REDACTED].

Thank you for your participation.

Sincerely,

*Debra Wagner*



## APPENDIX J

## Skills List

Please place an “X” in the box next to the skills you would like to have additional experience in performing with the help of your nurse before you go home. You may choose as many of the items as you like. Your nurse will have up to 30 minutes to assist you in practicing the skills that you choose.

Self Care Skills	“X”
Breast Care	
Perineal Care	
After Birth Exercises	
Infant Care Skills	
Breast Feeding	
Bottle Feeding	
Burping	
Swaddling	
Use of the Bulb Syringe	
Cord Care	
Circumcision Care	
Temperature Taking	
Bathing	

## APPENDIX K

## Demographic Questionnaire

I am interested in knowing some information about you. It will take about five minutes of your time. Everything that you tell me will be anonymous and confidential. Please do not put any information identifying you on this questionnaire. If you choose not to answer these questions, it will not affect the care that you receive at the hospital.

**Age:** \_\_\_\_\_

**Ethnicity/Race** (you may pick more than one): ☐ Black ☐ White ☐ Asian or Pacific Islander ☐ Hispanic ☐ Native American or Alaskan Native ☐ Other

\_\_\_\_\_

**Marital status:** ☐ Single ☐ Married/cohabitating ☐ Divorced/separated/widowed

**Education completed:** \_\_\_\_\_ Less than high school \_\_\_\_\_ high school or GED  
\_\_\_\_\_ more than high school but less than baccalaureate degree \_\_\_\_\_ baccalaureate degree or higher

**Family Income:** ☐ < \$25,000 ☐ \$25,000-49,999 ☐ \$50,000-74,999  
☐ \$75,000-100,000 ☐ > \$100,000

**How did you deliver your baby?** ☐ Vaginal ☐ Cesarean section

**How many babies have you previously delivered?** ☐ None ☐ One or more

**Who do you rely on to help you make health care decisions?** (you may pick more than one) ☐ Spouse/significant other ☐ Mother/father ☐ Sibling ☐ Friend  
☐ Other \_\_\_\_\_

**How would you describe your previous experience with other hospitalizations?**  
☐ Positive ☐ Negative ☐ No previous experience with hospitalization

**What insurance method are you using?** ☐ Private insurance ☐ Medicaid ☐ Self pay  
☐ Other \_\_\_\_\_

## APPENDIX L

## Teaching Protocol for Intervention Study

Check when demonstrated	Check when return demonstrated	Skill
		Breast Care
		Spread colostrum/nipple cream over nipples after nursing
		Breast massage <ul style="list-style-type: none"> <li>-cup breast</li> <li>- using firm, but gentle pressure, slide hands forward to the areola</li> <li>- starting at the top of the breast, rub in a circular motion down toward the nipple, repeating this motion all around the breast</li> </ul>
		Hand expression of milk <ul style="list-style-type: none"> <li>- place hand at the edge of areola, with thumb above and other finger below the areola</li> <li>- press in toward chest</li> <li>- squeeze breast by rolling thumb and fingers forward</li> <li>- repeat until milk flows</li> </ul>

		Perineal Care
		Use of peri-bottle <ul style="list-style-type: none"> <li>-fill bottle with warm water</li> <li>- squirt water toward perineum</li> <li>- repeat after each void/bowel movement</li> </ul>
		Use of anesthetic cream/witch hazel pads/hemorrhoid cream <ul style="list-style-type: none"> <li>-apply cream to stitches/hemorrhoids three times a day</li> <li>-apply witch hazel pads to stitches/hemorrhoids after toileting</li> </ul>

		After Birth Exercises
		Exercise 1 <ul style="list-style-type: none"> <li>-lie on back on a firm surface</li> <li>- breathe in slowly, letting abdomen to rise</li> <li>- breathe out, pulling in abdominal muscles until flat</li> <li>- repeat x 6</li> </ul>
		Exercise 2 <ul style="list-style-type: none"> <li>-sit up with legs outstretched</li> <li>-bend and stretch your ankles, then toes</li> <li>- roll feet in circles, in one direction, then the other</li> </ul>

		-repeat x 10
		<p>Exercise 3</p> <ul style="list-style-type: none"> <li>-lie on back with knees bent, feet flat</li> <li>-pull in abdominal muscles and raise head and shoulders slightly into a half sit-up</li> <li>-cross right hand over to left side, twisting from waist</li> <li>-lie back</li> <li>-repeat with the opposite side</li> <li>-repeat x 4-10 times</li> </ul>
		<p>Exercise 4</p> <ul style="list-style-type: none"> <li>-lie on back with knees bent, feet flat</li> <li>-press spine as flat as possible</li> <li>-slowly lift legs until grasped, and pull gently toward chest</li> <li>-relax</li> <li>-repeat x 4-10 times</li> </ul>
		<p>Exercise 5</p> <ul style="list-style-type: none"> <li>-rotate right shoulder up, back, down, forward, and up in a circular motion</li> <li>-repeat in the opposition direction</li> <li>-repeat with left shoulder</li> </ul>

		Breast feeding (this will be demonstrated on mother)
		<ul style="list-style-type: none"> <li>○ Gently stroke baby's lips and cheek closest to body with nipple, until baby turns head toward nipple</li> <li>○ Forming a "c" with fingers, cup breast and slowly stroke baby's face from nose to chin, until baby opens mouth</li> <li>○ Insert breast up to and covering as much of the areola as possible, depending on nipple size</li> <li>○ If breasts are large, depress upper area of breast so that baby can breathe easily</li> <li>○ When it's time to switch breasts, break the suction created by the baby by slipping finger between breast and baby's lips</li> <li>○ Repeat on other side</li> </ul>
		<p>4 nursing positions:</p> <ol style="list-style-type: none"> <li>1) side-lying – lie on side with infant close to body, and also side lying, "tummy-to-tummy"</li> <li>2) cradle hold – with baby's head cradled in inner crook of elbow, support baby's body with forearm, holding onto outer leg with fingers</li> <li>3) cross cradle hold - hold baby in arm opposite the nursing breast; support head with that hand</li> <li>4) football hold – using a pillow or arm of chair, support baby's</li> </ol>

		head and neck in palm, facing the breast; support the body by holding it between elbow and side
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		<b>Bottle Feeding</b>
		<ul style="list-style-type: none"> <li>○ Tip bottle to the side, allowing formula to fill nipple</li> <li>○ Insert into baby's mouth</li> <li>○ Rub nipple against cheek</li> <li>○ Insert nipple into baby's mouth</li> </ul>

		<b>Burping</b>
		Place burp cloth near infant's mouth
		3 techniques: <ul style="list-style-type: none"> <li>- seat baby on lap, leaning against hand; gently pat/rub back</li> <li>- drape over shoulder; gently pat/rub back</li> <li>- lay across knees; gently pat/rub back</li> </ul>
		Burp after baby drinks $\frac{1}{2}$ - 1 ounce of formula, or when done nursing on each breast.

		<b>Swaddling</b>
		Place receiving blanket on a flat surface, in diamond position <ul style="list-style-type: none"> <li>- fold top corner down 6 inches</li> <li>- place baby on blanket, with head above the folded down corner</li> <li>- take left corner of blanket, and bring it across the baby, tucking it under the baby's right and under the back on the right side</li> <li>- bring the bottom corner up over the baby's body, and tuck it into the top of the blanket</li> <li>- take the right corner of blanket, and bring it across the baby, tucking it under the back on the left side</li> </ul>
		Repeat with baby's hands outside of the blanket

		<b>Use of Bulb Syringe</b>
		Depress bulb and hold in this position <ul style="list-style-type: none"> <li>- insert into nare</li> <li>- release pressure on bulb slowly, withdrawing it from nare</li> <li>- outside of nare, squeeze &amp; release bulb several times quickly, to expel contents</li> <li>- repeat as necessary, in both nares</li> </ul>

		<b>Cord Care</b>
		Wet a cotton swab with rubbing alcohol; apply around the stump of the cord after each diaper change

		Fold diaper so that it sits underneath the stump of the cord
--	--	--

		Circumcision Care
		Apply generous amount of petroleum jelly to gauze, and place over penis before closing the diaper, until surgical site is healed

		Temperature Taking
		Remind mother to use only an electronic thermometer – no glass thermometers with mercury
		Axillary <ul style="list-style-type: none"> <li>- place thermometer in the center of the armpit</li> <li>- press arm down, against the side of the chest</li> <li>- read thermometer when it “beeps”</li> </ul>
		Rectal (only when axillary reads over 99.6° F) <ul style="list-style-type: none"> <li>- apply a small amount of petroleum jelly to end of thermometer</li> <li>- insert into anus ½”</li> <li>- hold thermometer in place, while holding baby’s legs firmly</li> <li>- remove and read when thermometer “beeps”</li> </ul>

		Sponge Bathing
		Fill sink or container with warm (not hot) water
		With undressed baby wrapped in a receiving blanket or towel, place the baby in the football hold to wash baby’s hair <ul style="list-style-type: none"> <li>- wet hair</li> <li>- apply small amount of mild baby shampoo; rub head/scalp gently</li> <li>- use cupped hand or plastic cup to pour water over baby’s head to rinse it, careful to avoid the eyes</li> <li>- dry head with a clean towel</li> </ul>
		Wash baby’s face and neck area with plain water (no soap), using a soft wash cloth, and pat dry
		Uncover baby, and place a towel over the torso <ul style="list-style-type: none"> <li>- wash arms and underarms with wet wash cloth (only using mild baby soap once or twice a week when bathing baby); dry</li> <li>- uncover and wash torso; dry</li> <li>- turn baby over and wash the back; dry</li> <li>- wash legs, including creases in groin area; dry</li> <li>- wash genital/anal area; dry               <ul style="list-style-type: none"> <li>• Wash vulva front to back for girls</li> <li>• Left scrotum to remove any stool for boys; squeeze wash cloth to rinse penis – do not pull back on the foreskin</li> </ul> </li> </ul>
		Diaper and dress baby

## APPENDIX M

From: [REDACTED]  
To: [REDACTED]@ [REDACTED]  
Sent: 6/30/2008 8:51:38 A.M. Eastern Daylight Time  
Subj: Re: IRB forms

Debi,

I am pleased to grant you permission to use a modified version of the Client Satisfaction Tool for your dissertation research.

Mary Bear PHD, RN  
Professor and Coordinator  
Barry PHD Nursing Program, Orlando  
[REDACTED]  
[REDACTED]

## APPENDIX N

## CURRICULUM VITAE

Debra Wagner, MS, CNM

[REDACTED]  
Jacksonville, F [REDACTED]  
[REDACTED]

<b>Education</b>	2009	PhD	Doctor of Philosophy, Nursing, Barry University
	1990	MS	Master of Science, Nursing/Midwifery, University of Utah
	1982	BSN	Bachelor of Science in Nursing, Houston Baptist University

**Employment**

2000-Present	RN-BSN Coordinator and Nursing Instructor, University of North Florida, Jacksonville, FL
1999-2000	Staff Nurse Midwife, Ocala Regional Medical Center, Ocala, FL
1996-1999	Certified Nurse Midwife, Fernandina Beach OB/GYN, Fernandina Beach, FL
1995	Staff Nurse Midwife, Northwest Women's Care, Marietta, GA
1982 – 1994	Certified Nurse Midwife/Charge Nurse/Staff Nurse, United States Air Force

**Publications*****Refereed***

**Wagner, D. L., & Bear, M.** (2009). A concept analysis of patient satisfaction with nursing care within a nursing framework. *Journal of Advanced Nursing*, 65, 692-701 .

**Wagner, D. L., Bear, M., & Sander, J.** (2009). Turning simulation into reality: Increasing student competence and confidence. *Journal of Nursing Education*, 38(8), 465-468.

**Presentations*****Refereed (International)***

Sander, J., & **Wagner, D. L.** (August, 2007). *Prenatal and Postpartum Instruction by BSN Students*. Poster session presented at the annual meeting of Lamaze International, Phoenix, AZ.



### ***Refereed (Local)***

**Wagner, D. L.** (June, 2007). *Patient Satisfaction with Postpartum Teaching*. Poster session presented at the Summer Research Program of Sigma Theta Tau International Lambda Rho Chapter-at-Large, Jacksonville, FL.

### ***Local (Invited)***

**Wagner, D.** (September, 2009). *Patient Satisfaction with Postpartum Teaching Methods Used by Nurses*. Poster session presented at the Florida Nurses Association Centennial Convention, St. Petersburg Beach, FL.

Brogden, M., Lariosa, G., Schwartz, S., Williams, T., McMarlin, S., & **Wagner, D.** (April, 9, 2008). *Assimilation of Refugees: Health Promotion (Lutheran Social Services)*. Poster session presented at the Celebrating Community-Campus Partnerships conference, School of Nursing, Brooks College of Health, University of North Florida, Jacksonville, FL.

Chang, J., Crespo, J., Sartalamacchia, M., Strong, G., Carson, E., McMarlin, S., & **Wagner, D.** (April, 9, 2008). *World Relief Refugee Resettlement Program: Health Promotion Classes*. Poster session presented at the Celebrating Community-Campus Partnerships conference, School of Nursing, Brooks College of Health, University of North Florida, Jacksonville, FL.

Harvey, L., McDuffie, B., Schafer, J., Martin, J., McMarlin, S., & **Wagner, D.** (April, 9, 2008). *Brooks Family YMCA Team Helps Local Teachers Fight Obesity*. Poster session presented at the Celebrating Community-Campus Partnerships conference, School of Nursing, Brooks College of Health, University of North Florida, Jacksonville, FL.

Kimball, E., Wing, L., Serman, T., McMarlin, S., & **Wagner, D.** (April, 9, 2008). *A Health Education Program for Developmentally Disabled*. Poster session presented at the Celebrating Community-Campus Partnerships conference, School of Nursing, Brooks College of Health, University of North Florida, Jacksonville, FL.

**Wagner, D. L.** (February 2003). *"Can You Enjoy Your Retirement After Your Career as A Nurse-Practitioner"*. Third Annual Practice Management Issues for Primary Care Providers Conference, Jacksonville, FL.

**Wagner, D. L.** (February, 2002). *"Can You Enjoy Your Retirement After Your Career As a Nurse-Practitioner"*. Second Annual Practice Management Issues for Primary Care Providers Conference, Jacksonville, FL.

### ***Scholarships***

Lambda Rho Chapter-at-Large of Sigma Theta Tau International Research Grant, 2009. \$1,000.  
Great One Hundred Nurses of Northeast Florida Scholarship, 2008. \$500.  
Great One Hundred Nurses of Northeast Florida Scholarship, 2007. \$500.  
Aretz Endowed Nursing Scholarship, 2006. \$5,000.

## **Awards**

Northeast Florida “Great One Hundred Nurses”, 2004.

## **University Service**

Admissions, Progression and Graduation Committee (2003-2006)  
 Curriculum Committee (2009-present)  
 Evaluation Committee (2007-present)  
 Instructional Technology Committee (2002-2004; Chairman)  
 School of Nursing Scholarship Committee (2007-present)  
 Search Committee (2004-2006)

## **Community Service**

**American Red Cross**, Mayport Naval Station, Jacksonville, FL. Serve as a Certified Nurse Midwife Volunteer, treating prenatal and postpartum women in the Obstetrics Clinic as a Volunteer, 2005-present.

**Mission House**, Jacksonville Beach, FL. Member, Board of Directors for an organization assisting the homeless in Jacksonville Beach, FL. Raise funds for the organization, provide and supervise nursing student assistance in the free medical clinic for the uninsured, and serve and provide meals for the homeless, 2004-present.

**Northeast Texas Chapter of the March of Dimes**. Member, Board of Directors, 1990-1993. Organized and facilitated local fundraisers and walks.

## **Professional Organizations**

American College of Nurse-Midwives  
 Association of Women’s Health, Obstetric, and Neonatal Nurses  
 Florida Nurses Association  
 Florida Chapter III of the American College of Nurse Midwives (State Treasurer 1998-2002; Treasurer, local chapter 2002-present)  
 Northeast Florida Council of Advanced Registered Nurse Practitioners  
 Phi Kappa Phi  
 Sigma Theta Tau (Treasurer local chapter, 2004-2007; Vice President local chapter, 2009-present)