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Low Income Women's Perception of Preparedness for Self Care and Infant Care Following Discharge from a Less than Forty-Eight Hour Hospitalization for Birth

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LOW INCOME WOMEN'S PERCEPTION OF PREPAREDNESS FOR SELF CARE AND INFANT CARE FOLLOWING DISCHARGE FROM A LESS THAN FORTY-EIGHT HOUR HOSPITALIZATION FOR BIRTH.

By:

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A THESIS

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ABSTRACT

LOW INCOME WOMEN'S PERCEPTIONS OF PREPAREDNESS FOR SELF CARE AND INFANT CARE FOLLOWING DISCHARGE FROM A LESS THAN FORTY-EIGHT HOUR HOSPITALIZATION FOR CHILDBIRTH

Patricia M. Ritola

The purpose of this study was to describe perceptions of preparation for self care and infant care of new mothers of low income following a short hospitalization for childbirth. Orem's nursing model was used as the conceptual framework for the study. A descriptive correlational, cross sectional design was used to examine preparedness for self care and infant care. The sample (N = 50) consisted of women who were served by Michigan Medicaid, 18 years or older and were hospitalized less than 48 hours. A telephone interview was conducted seven days after discharge.

Data were analyzed using descriptive statistics. Findings identified no significant difference in perceived preparedness for discharge between non-participants and participants of prenatal classes, or between nurse midwife and physician care provider groups. Findings also identified no relationship between perceived preparedness for discharge and age or between perceived preparedness for discharge and level of formal education.
DEDICATED TO THE STAFF OF THE MATERNITY UNIT AT MUNSON MEDICAL CENTER IN TRAVERSE CITY, MICHIGAN
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CHAPTER 1

INTRODUCTION

The maternity-newborn nurse functions in a variety of roles. Among these roles are caregiver, advocate and educator. Within these roles the nurse has the responsibility to prepare patients for self care after discharge. Nursing knowledge of patient perceptions which is founded in research will support the nurse to make clinical decisions which will optimally prepare newly delivered mothers for self care and infant care following discharge from the hospital. The postpartum patient's perception of how well she was prepared for self care and infant care following discharge from a less than forty-eight hour hospitalization is the focus of this study.

Throughout the world, early discharge programs for the birth experience are being seen as one strategy for reducing health care costs. The number of new mothers experiencing a less than forty-eight hour hospitalization for their birth has increased dramatically in the past decade. In 1950 the typical hospital stay for a maternity patient was seven to ten days (Hellman, Kohl, and Palmer, 1962). The current standard of care is a shortened length of stay, often one to two days for postpartum women and infants unless a serious complication exists.

The impact of this dramatic decrease in length of stay is seen in an increasing number of women leaving the hospital maternity setting while still in the dependent phase
of their postpartum recovery. The methods previously used to educate and prepare new mothers for self and infant care do not fit into the time constraints imposed by early discharge. Not only is the duration of the stay too short to provide all the traditional teaching but the early postpartum period is recognized as a poor time for extensive patient teaching due to the priority needs of the mother for rest and bodily comfort (Gruis, 1977). Complicating the issue are the additional responsibilities facing these new mothers once they leave the hospital. It may be overwhelming to have responsibility of assessing their own self care needs and those of their infants and, in addition, to be able to initiate appropriate interventions when both are still in the at-risk period of early postpartum and newborn complications.

When health care providers give patients the opportunity to relate their perceptions of the care they received, they assure patients that their concerns are viewed as important (Davis & Hobbs, 1989). Findings from patient perception surveys can be used to reinforce positive caregiving practices and to facilitate identification of, and justification for, changes in care delivery processes. Care delivery that matches the patients' expectations as closely as possible is important because patients' perceptions affect their definition of quality of care (Donabedian, 1988; Spitzer, 1988; Vuori, 1987).

Patients' definitions of "quality of care" are, to a great extent, a result of their perceptions of factors important to their physical and psychological comfort. Nurses need to become more familiar with patients' perceptions of their care. As the front-line caregivers, it is up to nurses to fulfill patients' expectations to the best of their abilities, within the constraints of time and money allotted, and within the limits imposed by regulatory bodies.
The purpose of this study is to obtain and analyze information about new mothers' perceptions of how well they were prepared for self-care and infant-care at home. Based on the analysis of the results of this study, changes can be made to enhance the effectiveness of the discharge preparation process.
CHAPTER 2

REVIEW OF LITERATURE AND CONCEPTUAL FRAMEWORK

This review of relevant literature will be around four themes. Patient perceptions as an area of study is reviewed, followed by a selected review of the literature of several specific aspects of patient care. The final two areas explore the theoretical concepts of Orem's conceptual framework and an examination of the published empirical work on Orem's self-care model.

Literature Review

Need to study patient perceptions. Peters and Waterman (1982), encourage endorsement of the management fundamental of staying close to the customer to satisfy the customer's needs and his wants. Laze and Wheaton (1990) believe that failing to meet the customer's expectation of quality results in customer dissatisfaction. Excellent organizations recognize the need to view service to the customer as an important indicator of quality. Hospitals as service organizations are no exception.

Since Florence Nightingale documented her experiences during the Crimean War there has been interest in providing quality hospital care. According to Berry, Zeithaml, and Parasuraman (1990), from the customer's perspective, the people performing the service are the organization. In hospitals, it is the nurse who is providing the primary service to the patient. Patients' perceptions of interactions with the nurse as the primary
health care provider should command consideration as a factor in assessing the quality of
the care rendered because patient-provider interactions have been shown to play an
important part in patient outcomes (Erwin, Walcott-McQuigg, Chen, & Upshaw, 1992).
The patient's perception of those interactions is central to the relationship between patient

With the rise of health care costs, patients have established a higher level of
expectations concerning their health care services with the rise of health care costs. Emily
Friedman (1986) believes that consumerism may be all about the perceived quality of care.
Deming's theory asserts that quality has meaning only in terms of the consumer (Walton,
1986).

The consumerism movement has played a significant role in the investigation of
patient perceptions by nurses. Nursing has long had a vested interest in assuring quality of
care based on professional standards and assessment of the patient needs; therefore, the
definitions of quality have traditionally been written by nurses. In past decades, patients
have been expected to be content and satisfied when nursing care met its own definition of
quality. In todays health care environment patients have significant input in defining
quality.

Nurses need to be aware of how patients perceive the quality of their care.
Ferguson and Ferguson (1983) point out that patients tend to judge care on the basis of
whether their perceived needs have been met, rather than on a critique of the nurse's skill
level. Vuori (1987) believes that, given an effective tool, patient perceptions can be used
as a proxy measurement of certain qualitative aspects of care. Ericksen (1987) and
Petersen (1989) believe that it is this subjective perception from the patient's point of view
that caregivers must regard as reality, even though this perception may disregard the appropriateness of therapy and outcomes. It is through the identification of the patient's perceptions that nurses can respond, creating changes to improve the quality of the nursing service provided.

Taylor, Hudson and Keeling (1991) studied consumer perceptions about quality care using a qualitative approach. A core assumption was that what constitutes quality nursing care is rooted in the perceptions and reactions of the consumer. A grounded theory approach was used to accumulate the different perspectives through open-ended interviews with 140 consumers (70 pairs consisting of a patient and one significant other). Participants were asked to describe quality nursing care. Descriptions fell into one of two major types of attributes: practice attributes or nurse attributes. Two practice attributes were identified: holistic care and nurse-patient interaction. Five nurse attributes were identified: (a) personal qualities of the nurse, (b) caring, (c) proficiency, (d) professional character, and (e) commitment to excellence. The sample of patients and significant others described "quality nursing care" most often in terms of (a) the personal qualities of the nurse, (b) holistic care, (c) therapeutic nurse-patient interaction, and (d) having proficient nurses care for them.

Taylor and associates (1991) believe that the information gleaned should be used as an initial step to seek even more information about the consumers' expectations and perceptions with regard to what constitutes high quality nursing care. The consumers' perspective has implications not only for achieving and delivering the highest quality of nursing care, but also for marketing care.
Perceptions of discharge needs. A gap exists in the research related to the perceptions of postpartum mothers' readiness to provide self and infant care after discharge from the hospital. No studies were found by this author addressing the perceptions of discharge preparedness of the postpartum woman.

One study investigated indicators which influence the quality of the discharge planning process. Bull (1994) expressed the importance of assessing both patient and professional perspectives on quality to delineate processes and outcomes that facilitate quality discharge planning. Bull studied 25 elderly patients' and 38 health care professionals' perceptions of quality in discharge planning in a qualitative design. Semi-structured interviews were conducted with health care professionals and with elderly persons who were recently hospitalized for an acute episode of a chronic condition. Data was collected from two community hospitals and one teaching facility. Through personal interviews, patients were asked to respond to such questions as: What did you find important to consider or talk about in planning to leave the hospital? Professionals were asked similar questions.

The constant comparative approach was used in analyzing the data. The indicators of quality identified by elderly patients and health professionals were categorized as communication, access to resources, management of daily activities and satisfaction with care. Both elders and professionals identified communication, specifically the process of asking questions, getting answers, and questioning inconsistencies, as key components of successful discharge planning. The data suggest that the communication process in discharge planning might influence other outcomes, such as access to resources and management of daily activities. A limitation of this study is that participant representation
was limited to a single region of the country. Values may vary in other regions.

Replication in other regions of the country would allow for generalizability. Further research is also needed on the influence of the professionals' education, work experience, and life experiences; factors that may effect the perceptions of those involved in the discharge planning process.

**Perceptions of satisfaction of care.** Risser (1975, p.46) defines patient satisfaction as "the degree of congruency between a patient's expectations of ideal nursing care and his perception of the real nursing care he receives". Wares, Snyder, Wright and Davies (1983) describe patient satisfaction as a subjective measure to capture a personal evaluation of care, which cannot be observed directly. Wessler (1968) contends that a provider of services cannot ascertain the patient's perspectives; therefore, it is most important to elicit the patient's perceptions, so distorted views of the health care provider are avoided. Raphael (1967), Marram (1973) and Altschul (1983) attempted to justify patient satisfaction research by revealing how consumers' perspectives are different from those of health care administrators and providers, and how knowledge of such perceptions is useful in giving care. Patient perceptions are very important and are an actual outcome of care (Donabedian, 1988). The study of patient perceptions becomes an important component in assuring that nursing care meets the patient's needs and therapeutic outcome are achieved.

Two studies by Carty and Bradley, (1990), and Alexander, Sandridge, and Moore (1993) were examined which dealt with satisfaction with nursing care as a variable in the maternity patient. Carty and Bradley's study took place in a tertiary care maternity hospital in Vancouver. One hundred eighty-nine women at 37 weeks gestation were randomly
assigned to one of three postpartum hospital discharge times: 12 to 24 hours, 25 to 48 hours, and four days. One hundred thirty-one participants met the criteria following delivery and actually participated in the study. Depending on the group assignment, the women received from one to five home visits by a maternity nurse clinician during the first 10 days postpartum. Patient satisfaction with nursing care was assessed using a questionnaire developed for the study. All patients in the study were satisfied with their care. However, there was a significant difference in satisfaction scores among the three groups (p = <0.0009). Women discharged earliest reported being significantly more satisfied than those discharged later.

The strengths of the study included the randomized controlled experimental design and a moderate sample size. The additional home visits experienced by the early discharge groups may have influenced satisfaction more than the length of hospitalization, confounding the study results. Limited generalizability was a constraint due to the selection of only a preferred sample of healthy, well-educated women who were living in a stable relationship with their partners. Single women of low income with unstable relationships may respond differently.

Alexander and associates (1993) conducted a descriptive, correlational study to assess patient satisfaction with aspects of their hospital experiences after delivery and to relate satisfaction to patient characteristics. The convenience sample consisted of 152 subjects who delivered vaginally. They were predominately high-risk, with little or no prenatal care, had unreliable family and social support systems and were discharged within 48 hours following childbirth. A 100 item satisfaction instrument was adapted to be postpartum specific. The questionnaire was completed during the hospitalization.
Responses to two of the questionnaire items are of interest to the investigation of perceptions of discharge preparedness: (a) "I feel I was given enough information about baby care to feel comfortable taking care of my baby at home", and (b) "I feel I was given enough information about caring for myself at home". Over 90% of subjects reported most favorably to both of these responses.

A limitation of the study was that the questionnaire which asked questions pertaining to preparation for discharge was filled out during the hospitalization. Once home the subject may have realized there were unanticipated circumstances which arose for which they were unprepared.

**Perceptions of knowledge.** Norr, Nacion and Abramson (1989) evaluated the health impact of a nurse-managed early discharge (24 to 47 hour post delivery) program for low income mothers and infants. Thirty-five mothers and their infants who delivered in a metropolitan university hospital comprised the sample. Outcomes of the early discharge group was compared to a early discharge group of mother and infant couplets with greater than 48 hour hospitalizations and to a group of early discharge mothers whose infants remained hospitalized. No significant differences were found between the early discharge group and the two control groups in the overall incidence of such maternal physical problems as fever, engorgement, inadequate perineal healing and boarderline elevation of blood pressure. However, a high incidence of physical problems overall in this study highlights the importance of teaching for low-income mothers. Research found that teaching should focus on the most essential information and skills needed for self care and infant care. Understanding the patient's perceptions of her knowledge deficits is important in order to tailor education to meet her individual needs. It was found that
integrating a learning needs assessment and teaching into all patient care activities maximized opportunities for individualized instruction.

Heiser (1987), Moss (1981) and Gruis (1977) found possible incongruence between the concerns identified by new mothers who experienced traditional postpartum hospitalization and the traditional postpartum teaching done by nurses. Martell, Imle, Horwitz and Wheeler (1989) studied 42 postpartum patients' perceptions to identify the information meaningful to short stay mothers' experiences. The purpose of the study was to identify the information from the teaching protocol content that mothers in a maternity short-stay program thought was most important to them for the first three postpartum days. A descriptive clinical study was conducted utilizing a 24 item, Q sort technique. The mean rankings showed a high degree of concern by both primiparas and multiparas about health threats, infant care, and feeding. Mothers were least concerned about their own sexuality, family changes, and bowel function. Analysis of the responses supported the diverse opinions of the mothers about importance of the content areas. Aside from signs and symptoms of baby's illness, items were not ranked similarly by more than 50% of mothers.

A benefit of using this type of assessment procedure is that it allows the nurse the ability to individualize patient teaching to meet the unique needs of the patient. This flexibility is particularly important in view of the study's finding that new mothers have diverse opinions about what information is most important for the first two to three days after discharge from a short-stay program. The patient has individual needs and concerns. It is the nurse's responsibility to provide education tailored to the individual patient's perceived needs.
Davis and Eyer (1984) described the use of this type of card sort for assessing what mothers wanted to know about infant care on follow-up visits. Mothers in the study were pleased that their individual needs were being considered, while nurses found that their teaching became more efficient because they could focus on fewer concepts.

Degenhart-Leskosky (1988) compared the perceived needs for information on self-care and infant care in a two group comparative design study of 22 adolescent and 30 nonadolescent mothers. A structured questionnaire that focused on some aspects of maternal physical care, mother-infant psychosocial needs, infant physical care, and infant medical needs was employed for data collection. Adolescent mothers reported a greater perceived need for information on infant medical care than did nonadolescent mothers. Younger mothers also tended to have higher informational need scores on psychosocial and infant physical care parameters. Nonadolescent mothers had significantly greater perceived needs for information on their own physical care.

Nurses should support health education that focuses on the perceived informational needs of both adolescents and non-adolescents. Findings from this study suggest that between these two groups, needs may differ. Replication of this study with a larger sample size of adolescent and nonadolescent groups with different populations at varying times of the postpartum period is recommended.

Perceptions of infant care abilities. A mother's perception of her competence for infant feeding and care before leaving the hospital with the newborn may be an important factor in how she adapts to and accomplishes the parenting tasks associated with the neonate. Pridham (1983) reported in a survey of 49 mothers on their seventh day postpartum, that the greater a mother's perception of being adequately prepared for infant
the greater the sense of satisfaction and success in parenting reported throughout the infant's first three months. Brown (1967) postulated that unless mothers had direct contact with their infants, they may not have perceived themselves to be competent for infant care. Brown's hypothesis was supported by the findings of Greenberg, Rosenberg, and Lind (1973).

Rutledge and Pridham (1987) examined the relationship between mothers' early postpartum experiences and their perceptions of competence in infant feeding and care. A 68-item, self-administered questionnaire was the tool used for this descriptive study. A convenience sample of 140 primiparous and multiparous mothers completed the study. The mothers' perceptions of competence for infant feeding and care were associated with in-hospital preparation for bottle-feeding mothers and the amount of perceived rest for breastfeeding mothers.

Froman and Owen (1990) explored the congruence between nurses' assessment of new mothers' skills and the mothers' sense of self-efficacy for those same behaviors. The goal of the research was to establish the nurses' sensitivity to mothers' perceptions of their ability to care for their infants. Data on demographic variables and nurses' ratings of mothers' skills on five selected tasks were collected from 200 mothers and their nurses. Results from bivariate and multivariate analyses pointed to predictors of maternal feelings of efficacy and to discrepancies between mothers' and nurses' ratings. Maternal age, number of children, and nurses' ratings of mothers' skills were the strongest predictors of perceptions of self-efficacy for infant care. Mothers of male infants showed slightly lower efficacy perceptions than did mothers of females due to uncertainty related to circumcision care. Froman and Owen suggest that teaching time should not be directed solely at

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knowledge or motor skills for primiparous mothers but should include more "cheerleading" or building self-efficacy through verbal persuasion. In planning care for maternity patients, questions need to be asked about how confident mothers are in their skills. It is important to identify those mothers who seem skilled but suffer from low efficacy perceptions.

In summary, the review of the literature supports the assumption that patient's perceptions are becoming increasingly important to health care providers. The research studies reviewed have focused, to a large degree, on patient satisfaction with nursing care and on the definition of quality of care. Perceptions of preparedness for discharge has been peripherally examined primarily through studies of quality and satisfaction. No studies examined the perceptions of discharge preparedness of the low income maternity patient following a short hospitalization stay. The information obtained from this review, in conjunction with Orem's conceptual framework, will be used to develop this research study. The need for research to assess patient's perceptions of care related to discharge preparation is supported by the lack of research in this area and the trend in health care for a shortened length of hospitalization for childbirth.

**Theoretical Framework**

Self care for the postpartum patient is becoming increasingly more important as the length of hospitalization for childbirth decreases. Orem's self-care model (1971, 1985, 1991) supports nursing's contribution as one of facilitating the patient's self-care abilities and provides the conceptual basis for this study.

Orem's nursing model consists of the theories of self-care, self-care deficit, and nursing systems. Self-care is defined as "the practice of activities that individuals
personally initiate and perform on their own behalf in maintaining life, health, and well-being" (Orem, 1991, p. 117). A self-care deficit exists when there is an inadequate relationship between self-care demand and the self-care agency (Orem, 1991). Self-care agency is the human ability for engaging in self-care. When care is given to an infant, child, or socially dependent adult it is called dependent care, and the person providing the care is the dependent care agent (Orem, 1991). Nursing systems are formed when the self-care agent or dependent-care agent is unable to meet the therapeutic self-care demands. Nursing systems prescribe, design, and provide intervention which deals with self-care deficits (Marriner-Tomey, 1989).

Orem (1991) describes three types of self-care requisites necessary for maintaining an individual: universal, developmental, and health deviation. Universal self-care requisites are common to all human beings during all stages of life for maintenance of the integrity of the human structure and function. These requisites include air, water, food, elimination, activity and rest, solitude and social interaction, safety and normalcy. Developmental self-care requisites are associated with specific stages of the life cycle (e.g. pregnancy, newborn), and are concerned with maintenance of conditions that allow for healthy development. Health-deviation self-care requisites are associated with illness, medical care and treatment, and maximization of self-care potential within certain medical or health restrictions (Morse and Werner, 1988).

Orem (1991) focuses on the use of the nursing process to assist clients with self-care activities. Through the nursing process the nurse assesses the individual's self-care requisites and plans, implements, and evaluates nursing actions directed toward supplementing them. This is based on the premise that the self-care requisites must be
known before they serve as the basis of self-care.

Orem (1991) has developed a self-care nursing model that describes three systems within professional practice: a wholly compensatory, partly compensatory, and supportive-educative system. The data collected in this study will be used to evaluate the existing supportive-educative nursing system. The focus of this study will be to assess the perceptions of preparedness for self-care and dependent-care once the client is home following a short hospital stay for birth.

Orem's (1991) model is based on patients assuming a more active role in their own health care. Shortened hospital stays for birth demands that new mothers be able to provide self-care and dependent care relatively soon after birth. Nurses in practice must be able to assist the maternity patient in identifying their self-care and dependent-care requisites and enable and empower them to become knowledgeable in meeting their self-care and dependent-care demands. Effectively meeting these demands allows the patient to resume self-care and meet the needs of the infant.

The nursing goal within Orem's framework is to maximize the patient's potential for self-care. Orem's theory is based on the premise that people have the innate ability, right and responsibility to care for themselves and are self-reliant and responsible individuals. In the case of infants and children, the self-care agent acquires the knowledge to meet the self-care requirements necessary to protect the health and well-being of dependents.

Pregnancy and the birth of a child are healthy developmental tasks that occur within the life-cycle (Bliss-Holtz, 1988). Women normally engage in self-care until the labor and delivery phase of pregnancy at which time a partially compensatory nursing
system may be indicated. Following birth women usually regain more control of their self-care requisite. At this time the nurse can enhance the new mother's self-care and dependent-care abilities through use of the supportive educative nursing system. The supportive educative system is an intervention to assist the client in acquiring the knowledge or skills related to self-care (Riehl-Sisca, 1989).

Through the client's inherent ability for self-care and adequate nursing assessment of self-care requisites and deficits, knowledge can be acquired allowing restoration of self-care. Additional skills to provide dependent-care by the client allows for successful transition to the home environment in the postpartum period.

This interpretation of Orem's conceptual framework provides the foundation for this research in evaluating nursing systems specifically designed to meet the clients' postpartum needs. In meeting the needs of the self-care agent, the nursing system can facilitate recovery and transition, thus optimizing outcomes.

Research using Orem's Model. The utility of Orem's conceptual framework as a guide for nursing research is evident. Because the immediate goal of a conceptual model is to guide practice (Riehl & Roy, 1974), evaluation of a model's usefulness in practice is a necessary and important step. Many empirical studies have been conducted within the context of Orem's conceptual framework which can be integrated into Orem's later framework (1971, 1985, 1991).

The Self-Care Deficit model has been studied in the area of maternal-child nursing practice. Woolery (1983) used the Self-Care Deficit Theory (SCDT) with obstetrical patients. She found that the conceptual model allowed the nurse to operate from a client-centered perspective encouraging the individual to be responsible for her own care. Harris
(1980) designed nursing care based on the SCDT for patients having cesarean childbirth.

Kearney and Fleischer (1979) developed an instrument to measure exercise of self-care agency. Hanson and Bickel (1985) described their work to develop and determine the psychometric properties of a questionnaire designed to measure adults perception of their self-care agency. They validated the instrument by comparing items to other instruments that measure various psychological characteristics of individuals. Questionnaire items reflect the 10 power components of Orem's conceptual framework.

Lucas, Morris and Alexander (1988) investigated the patient's exercise of self care agency prior to hospitalization and subsequent satisfaction with nursing care during hospitalization. A descriptive, correlational design was utilized to determine the relationships among the individuals' characteristics, degree of self-care agency, and satisfaction with nursing care. A convenience sample consisted of sixty-eight subjects. The Kearney and Fleischer Exercise of Self-Care Agency instrument and the Hinshaw and Atwood Patient Satisfaction Instrument were utilized. The results of this study provide support for the relationship of self-care agency and patient satisfaction with nursing care for selected patients. For female patients and married patients, a higher level of self-care agency was associated with higher overall patient satisfaction with nursing care. This may indicate that patients who already take charge of their health care needs are less apt to depend on the nurse to meet their self-care needs.

Studies indicate that persons are able to identify both their universal and illness-related self-care demands and deficits and to initiate activities on their own behalf (Kubricht, 1984 & Woods, 1985). However, some studies have shown that individuals and nurses have different perceptions of the client's self-care needs (Dodd, 1982 &
Fernsler (1986) compared patient and nurse perceptions of patients' self-care deficits associated with cancer chemotherapy in an outpatient setting. An open-ended semistructured interview schedule was used to elicit data from 30 patients and their assigned registered nurses. In general, patients perceived more self-care deficits related to physical side effects of surgery than did their nurses. Nurses identified slightly more deficits related to the categories that included psychosocial problems. Nurses did not perceive the extent to which patients required assistance, particularly in relation to maintaining a balance between activity and rest. The results of Fernsler's research support the need to assess patient's perceptions of their self-care deficits as nurses perceptions were not consistently congruent with those of the patient. Discharge preparation must involve mutuality in determining educational objectives to meet expected outcomes.

No studies addressed the postpartum mother's perception of care related to her preparation for self and infant care following hospitalization for childbirth. The lack of published research supported the need for this study.

Summary. The literature revealed that there is a need for more research to be conducted with maternity patients on how effectively nurses are preparing patients for self-care and infant care. Although some studies have been conducted on patient's perceptions few have studied maternity patients. The studies reviewed were limited because the data obtained were not generalizable beyond the convenience samples reported, sample sizes were often small and no studies researched the perceptions of discharge preparedness of the maternity patient following a short hospital stay.

Orem's model has been successfully used to give direction for nursing in preparing
patients for self-care and discharge. Feedback on how nurses might accomplish preparing patients to assume more responsibility for their care is becoming increasingly more important in the current financial health care environment. Discharged patients' evaluations, of self-care and infant care preparation will add to nursing's body of knowledge. This knowledge can assist nurses to optimally prepare maternity patients for self and infant care. Results of this study will also add to the body of knowledge related to patient's perceptions of discharge preparedness.

Research Question

This study will address the following research question: How well do newly delivered, low-income women who are serviced by Medicaid perceive they were prepared for self care and infant care at home following discharge from a postpartum hospital stay of less than forty-eight hours? Additionally, this study will attempt to answer the following questions: (a) How is age related to perceptions of preparedness for discharge in women served by Medicaid discharged from a postpartum hospital stay of less than forty-eight hours? (b) Is there a difference in the perceptions of preparedness for discharge between women who attended prenatal classes and those that did not participate in classes? (c) How is level of formal education related to perceptions of discharge preparedness for this group of women? and (d) How is the category of care provider related to perceptions of preparedness for discharge for this group of women?

Definition of Terms

Low-income: Women whose third party payor for health care is Michigan Medicaid.

Self care: Ability to care for one's self.
Infant care: Ability to care for one's infant.

Care provider: Physician or Certified Nurse Midwife.

Preparedness: Overall perception of preparation for self and infant care including the aspects of (a) identification of, and access to resources; (b) provision of infant care; (c) infant nourishment; (d) provision of a safe environment for the infant; (e) treatment of pain and discomforts; (f) recognition of signs of illness in self and infant; and (g) infant soothing techniques.
CHAPTER 3

METHODOLOGY

The purpose of this study was to obtain evaluative data regarding the level of preparation for self-care and infant-care as perceived by new mothers of low income status following a short hospitalization for childbirth. Absence of research specifically addressing maternity patients' perception of their preparation for discharge prompted this research.

Design

A descriptive correlational, cross-sectional design was utilized in this study to explore maternity patients' perceptions of preparedness for self-care and infant-care. The intent of this study was to describe patients' perceptions of discharge preparedness. Questions were structured to elicit information in seven categories of self and infant care.

Data was collected by the researchers through the interviewing process. The telephone interview method was chosen by the researcher because it was recognized as a convenient method of collecting large amounts of information quickly. The large geographic area comprising the study population dictated the telephone interview method for efficiency of time. The low refusal rate, which is common with the interview method, also enhanced the desirability of the interview
method. The ability of the interviewer to use probes (prompting questions) with this method was believed to have a positive affect on the subject's understanding of the questions, thus assuring improved content reliability.

**Study Site and Subjects**

The site for recruitment of subjects was the maternity unit of a 350 bed rural regional medical center in northern Michigan. The recruitment period was for a 63 day period from December 9, 1994 to February 10, 1995. The sample consisted of low income mother-infant dyads served by Michigan Medicaid.

Criteria for selection maternal subjects included patients who:

a) were served by, or eligible for, Michigan Medicaid or Mich Care
b) were 18 years or older
c) had delivered vaginally
d) had temperatures less than 38.0 degrees centigrade
e) did not experience postpartal hemorrhage
f) were able to hear, read and speak English
g) had no history of gestational diabetes
h) had a blood pressure less than 140/90 mmHg
i) had access to a telephone
j) were discharged with their infant less than 48 hours following delivery.

Selection criteria of subjects was further limited to infants of these women who met the following criteria:

a) gestational age between 38 and 41 weeks
b) birth weight between 2500-4500 grams

c) a documented normal physical examination

d) a 5 minute Apgar score of greater than 7

e) a stable axillary temperature, between 97.6 degrees and 98.8 degrees fahrenheit

f) demonstrated ability to feed (intact suck and swallow mechanisms) using either the breast or bottle method

g) discharge with mother less than 48 hours following delivery.

The convenience sample included the first 55 mother-infant dyads who met the study criteria and agreed to participate in the research study. Fifty-five subjects were recruited to allow for subjects who might decline to continue the process or not be available for the phone interview. It was anticipated that a minimum of 50 subjects would complete the telephone interview.

Instrument

The instrument used in this study was designed by the investigator because no existing tool could be found to elicit the desired information. Previous research studies had used a similar format to obtain data from a different population of patients (Lawton, 1992; Peper, 1992). The tool was designed to collect information about the services provided to the mother-infant dyad prior to discharge and to document the perceived benefit of the information.

The Discharge Preparation Questionnaire (DPQ) consisted of a total of 64 questions (see Appendix A) and was designed for use as a telephone interview guide. The tool was divided into three sections: a demographic section consisting
of 10 questions; the second section, comprising questions 11 through 50, constituted the preparedness subscale; and finally the last section, comprising questions 51 through 64 constituted the needs and concerns section of the tool. Questions 51-64 were part of another researcher's study (Kujala, 1995) investigating mothers' needs and concerns after discharge. This information was gathered from the same population group, but not analyzed by this researcher. Data from questions 11-50 were analyzed as a part of this study. These questions pertained to perceptions of discharge preparedness. Ten categories of preparedness were examined. They were:

a) Provision of self-care  

b) The effect of the birth on family relationships  

c) Identification of, and access to, resources  

d) Provision of infant care  

e) Infant nourishment  

f) Provision of a safe environment for the infant  

g) Treatment of maternal pain and discomforts  

h) Recognition of signs of illness in self or infant  

i) Infant soothing techniques  

j) Follow up care with care providers.

Preparedness in each category was assessed with four questions. The first question in each category determined the degree of success in achieving the desired behavior. Subjects were asked if they had successfully accomplished the skills associated with the category topic. For example, in the infant soothing
techniques category, the question asked was "have you been able to soothe your baby when your baby is fussy?". The response options were yes or no.

The second question in each category focused on the instruction the patient received on the topic. The question asked in the infant nourishment category was, "before going home, did you receive instructions as to how to feed your baby?". Response options were yes or no. If the response to the second question was "no", indicating the patient did not receive instruction, the patient was asked the third question in the category. This question asked if those instructions would have been helpful. If the response to the second question was yes, the third question in the category was omitted.

The final question in each category asked the subject to rate how well they perceived they were prepared for self care or infant care in the particular topic category. Perceived preparedness for the fourth question in each category was measured using a five point scale ranging from well prepared (4) to not at all prepared (0).

Information was gathered in all ten preparedness categories. Upon further reflection it was determined that three of the categories items did not fit the construct of preparedness. The perceived preparedness question for the self care category, "How well do you feel you were prepared to go home and assume care for yourself?" was felt to be incongruent with the focus of the other questions. It addressed the global aspect of self care while the other category items addressed specific aspects of self care or infant care preparedness. The categories addressing the effects of the infant on family relationships and scheduling of follow-up...
appointments with care providers, after further consideration, were not felt to be critical aspects of the construct of preparedness. The category about the effect of the baby on relationships was felt to only marginally apply to the preparedness construct, where as the appointment category was felt to reflect a functional aspect of care rather than reflect an aspect of the construct of preparedness.

Validity and Reliability

Content validity was established for the DPQ by submitting the questionnaire to three nursing professionals experienced in research. Each validated the content appropriateness of the tool.

A pilot study using six subjects was conducted prior to the research study to determine the instrument's clarity and to time the interview process. Subjects for the pilot were recruited using the same criteria and from the same population of subjects used in the study.

Interrater reliability in recording the interview was established between the two investigators during the pilot study. Each researcher called three pilot subjects with the other researcher listening on another line. The researchers independently recorded their responses on the instrument. An initial level of ninety-three percent agreement was obtained. Conferences were held to correct discrepancies in recording responses.

Cronbach’s alpha was used to establish internal consistency reliability for the seven category scale of the DPQ for this study. The categories comprising the scale were: (a) identification of, and access to resources, (b) provision of infant care, (c) infant nourishment, (d) provision of a safe environment for the infant,
(e) treatment of pain and discomforts, (f) recognition of signs of illness in self and infant, and (g) infant soothing techniques. The coefficient of alpha for the scale was .71.

**Procedure**

All patients who delivered at the study site between December 9, 1994 and February 3, 1995 and met eligibility criteria were asked to participate in the research study. Subjects were identified and approached in their hospital room prior to discharge by one of the two researchers, both graduate students in nursing at Grand Valley State University. Participants were told that information was being sought to determine how adequately new mothers felt they are prepared to take care of themselves and their infants once they left the hospital. They were informed they would receive no direct benefit from participating. The study was explained using a structured interview script (see Appendix B). At this time the patient was asked to participate. Patients were informed that they could withdraw from the study at any time. Five patients declined to participate in the study. The researcher thanked these patients for their time and left. The patients who agreed to participate were asked to sign two copies of the consent form (see Appendix C). At this same time a mutually convenient time for the phone call was arranged for the seventh day following discharge.

Each subject was given a folder with the date and time to expect the interview call printed on the front. The folder contained the work sheets pertaining to questions on concerns, a copy of the consent which contained the researchers' names and phone numbers and a blue card which contained the
response scale (see Appendix D). The response scale was to be used as a reference for subjects during the interview to rate the fourth question in each of the seven categories. Subjects were instructed to have the folder available by the telephone the day of the interview. After consent was obtained and the information pertaining to the phone call was agreed to, demographic information was gathered by the researcher from the subject. The date and time of the interview was also noted on a master interview schedule for the researcher's reference.

Each subject was called on the seventh day following discharge at the scheduled interview time. The subject was asked if it was a convenient time for the interview. For those subjects who indicated that it was not a convenient time for the interview, another time was mutually agreed to. Twelve subjects required a second appointment and three subjects required a third appointment. For those with affirmative responses the interview was conducted following the structured telephone interview script (see Appendix E). Participants were instructed to refer to the rating scale each time a domain preparedness question was asked. The interview took approximately 15 minutes to complete.

**Human Subject Rights**

An exempt review of human subject rights was approved by Grand Valley State University’s Human Subjects Committee and the Vice President of Patient Care Services at Munson Meical Center, the site of subject recruitment. There was less than minimal risk to subjects participating in the study. Steps were taken to maintain subject's confidentiality by removing all identifying patient information from the interview schedule, using only a numeric identification code. In the postpartum period, fatigue is a common
complaint from mothers. To avoid unnecessary fatigue, mothers chose the most convenient time for the interview. No subjects indicated during the interview process that they were too tired to continue the interview. If they had indicated being tired the researcher would have make arrangements to finish the interview at another time chosen by the subject.
CHAPTER FOUR
RESULTS/DATA ANALYSIS

This study's purpose was to describe how well women of low income perceive they were prepared for self care and infant care following discharge from a postpartum hospital stay of less than forty-eight hours. Phone interviews were conducted on the seventh day following discharge.

A sample of 55 subjects was obtained over 63 consecutive days of data collection. Five of the subjects could not be reached for telephone interviews. Thus, results were analyzed based on a sample of 50 subjects.

Description of Sample

Descriptive statistics available through the Statistical Package for the Social Sciences for Windows were used to describe and analyze the sample. The sample consisted of 50 postpartum female subjects discharged between December 9, 1994 and February 10, 1995 from the maternity unit at a 350 bed rural Michigan hospital. Subjects ranged in age from 18 to 43 years, with a mean age of 24.6 years (SD = 5.69). Only 26 percent of the subjects were older than 27 years. The length of hospitalization ranged from 16 to 48 hours with a mean stay of 33.8 hours (SD = 8.26).

The largest percentage (68%) of subjects were high school graduates; 20% had completed some high school education, and 12% had some college education. The
education distribution is shown on Table 1.

Table 1

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>n</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than High School Graduate</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>34</td>
<td>68</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Bachelor Degree</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Graduate School</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

Sixty-eight percent (n = 34) of the subjects' care providers were physicians (M = 1.32, SD = .471). Fifty-four percent (n = 27) of the subjects were recipients of the Michigan Department of Public Health, Maternal Support Services Program (M = 1.46, SD = .503). Sixty-eight percent (n = 34) of the subjects had previous pregnancies (M = 1.18, SD = .471). Only 30 subjects (60%) had experienced at least one previous viable birth (M = 1.4, SD = .495). Eighty-two percent (n = 41) delivered without a surgical episiotomy (M = 1.18, SD = .388). Seventy percent (n = 35) of the subjects attended at least one prenatal class, (M = 1.3, SD = .46) and thirty-nine subjects (78%) chose to breastfeed their infants (M = 1.22, SD = .418). All infants were discharged with their mothers on the same day (see Table 2).
Table 2

Distribution of Provider, MSSP Enrollment, Gravida, Para, Episiotomy Status and Prenatal Class Attendance (N = 50 for each item)

<table>
<thead>
<tr>
<th>Item</th>
<th>n</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care Provider</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physician</td>
<td>34</td>
<td>68</td>
</tr>
<tr>
<td>Certified Nurse Midwife</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>MSSP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrolled</td>
<td>27</td>
<td>54</td>
</tr>
<tr>
<td>Non-participating</td>
<td>23</td>
<td>46</td>
</tr>
<tr>
<td>Gravida</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>Two or greater</td>
<td>34</td>
<td>68</td>
</tr>
<tr>
<td>Para</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zero</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>One or greater</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Prenatal Class Attendance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attended classes</td>
<td>35</td>
<td>70</td>
</tr>
<tr>
<td>Did not attend classes</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Surgical Episiotomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recipient</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>Non-recipient</td>
<td>41</td>
<td>82</td>
</tr>
<tr>
<td>Infant feeding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>39</td>
<td>78</td>
</tr>
<tr>
<td>Formula feeding</td>
<td>11</td>
<td>22</td>
</tr>
</tbody>
</table>

Preparedness for Discharge

The research tool was designed and administered using ten categories which together comprised the construct of preparedness. Upon further reflection three of the
categories (provision of self-care, the affect of the birth on family relationships, and follow-up care with care providers) did not seem to fit the construct of preparedness and were not used in computing an overall preparedness score. Thus, the scores representing the remaining seven categories were used to compute the overall score. Cronbach’s alpha was used to establish internal consistency reliability of the Discharge Preparedness Questionnaire (DPQ) for this study. The coefficient of alpha for the scale was .71.

Subjects’s preparedness scores in the moderately well and well preparedness ratings in the seven categories used to compute the preparedness score ranged from 86% to 100% with a mean of 91.7% (see Table 3).

Table 3

<table>
<thead>
<tr>
<th>Category</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources</td>
<td>43</td>
<td>86</td>
</tr>
<tr>
<td>Infant Care</td>
<td>47</td>
<td>94</td>
</tr>
<tr>
<td>Infant Feeding</td>
<td>43</td>
<td>86</td>
</tr>
<tr>
<td>Infant Safety</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Pain Management</td>
<td>46</td>
<td>92</td>
</tr>
<tr>
<td>Symptoms of Illness</td>
<td>48</td>
<td>96</td>
</tr>
<tr>
<td>Soothing Infant</td>
<td>44</td>
<td>88</td>
</tr>
</tbody>
</table>

34
Age and Preparedness

The first research question under consideration was how is age related to perceptions of preparedness for discharge. A Pearson correlation coefficient was computed to determine the relationship between age and the overall preparedness for discharge score. Results of equal group analysis indicated that no relationship existed between the age of the subjects and preparedness for discharge (r = -.06, df = 48, p = .68).

Class Attendance and Preparedness

The second question asked if there was a significant (p < .05) difference in preparedness for discharge between those women who took prenatal classes and those that did not. A t-test compared the difference between the means of the two groups. Because the groups were so unequal (prenatal class attendance, n = 35; non-participation in classes, n = 15), a random subsample (n = 15) was taken of the subjects who attended classes and compared to the non-participation group. Equal group analysis revealed no significant difference in the two groups (t = 1.11, df = 28, p = .28).

Formal Education and Perceived Preparation

The third research question investigated how the level of formal education was related to preparedness for discharge. Using the Spearman correlation coefficient to examine the relationship, no relationship between the level of formal education and preparedness was found (r = -.04, df = 48, p = .81).

Provider and Perceived Preparation

Differences in preparation between those receiving care from physicians and certified nurse midwives (CNM) were examined. Once again, because the group sizes were so disproportionate (physician providers, n = 34, CNM, n = 16) a random subsample
(n = 16) was taken of the subjects in the physician provider group and compared to those in the CNM provider group. Equal group analysis revealed no significant difference in the two groups (t = -1.01, df = 30, p = .32).

The perceptions of subjects receiving care from physicians were compared to those receiving care from CNMs in three areas: preparation for self-care, preparation for the effect the baby would have on family relationships, and preparation for follow-up care with care providers. Mann-Whitney U tests were used to compare equal groups (n = 16). No significant differences between the two provider groups were found. However, a significant difference was found in the area of preparation for self-care (U = 109, Z = -2.05, p = .02) between the two care provider groups when an unequal group analysis using all subjects was performed. The CNM care provider subjects felt more prepared for self-care than did the physician subjects.

Class Attendance and Perceived Preparation

Subjects who did and did not attend classes were also compared for the same three preparation areas: preparation for self-care, preparation for the effect the baby would have on family relationships, and preparation for follow-up care with care providers. Using the Mann-Whitney U tests, no significant (p < .05) differences were found between the two groups.
CHAPTER V

DISCUSSION

This chapter contains interpretations of the findings of Chapter 4. Discussions of research findings, implications for nursing, limitations, and recommendations for future research will be expressed.

Discussion of Findings

This study was designed to answer the question "How well do newly delivered, low-income women who are serviced by Medicaid perceive they were prepared for self care and infant care at home following discharge from a postpartum hospital stay of less than forty-eight hours". In studying the perceptions of preparedness that patients experienced, the researcher looked at four specific questions in addition to overall preparedness: a) How is age related to perceptions of preparedness for discharge? b) Is there a difference in the perceptions of preparedness for discharge between women who attended prenatal classes and those that did not participate in classes? c) How is the level of formal education related to perceptions of discharge preparedness for this group of women? and d) How is the category of care provider related to perceptions of preparedness for discharge for this group of women? The researcher used Dorothea Orem's Conceptual Framework to assist in reviewing the data.
One additional objective of the study was to design an instrument that could be used to evaluate the maternity patient's perception of discharge preparedness following childbirth. A gap exists in the literature related to the perceptions of how well mothers are prepared to provide self care and infant care following discharge from the hospital. Consequently, no instrument could be found to examine perceived preparation for discharge for this population.

The instrument that was designed and administered permitted examination of ten categories of preparation, which together comprised the construct of preparedness. Data was collected in all ten categories. Upon further reflection it was determined that three of the categories (a) provision of self-care, (b) affects of the birth on family relationships and (c) follow-up care with the care provider did not seem to fit the construct of preparedness and were not used in computing an overall preparedness score. A coefficient alpha of .71 was obtained for the seven items measuring perceived preparation supporting an acceptable level of internal consistency. The instrument worked effectively for data collection. Overall, subject understanding of the questions was high with few prompts required during the interview process. The time required for the telephone interview averaged approximately 15 minutes as anticipated.

Results of data analysis revealed that 86 to 100% of subjects felt moderately well or well prepared in each of the seven categories comprising the preparedness scale. Analysis also revealed that no relationships or significant differences existed between any of the independent variables and the dependent variable on any of the four research questions studied when equal group analysis was used. Anticipation that age may have influenced perception of preparation for discharge was not supported using a Pearson
correlation to examine the relationship between age and preparation score.

The results of question number two, "Is there a difference in the preparedness for discharge in the women who attended prenatal classes and those who did not participate in classes?" using equal group analysis again demonstrated no significant difference between the two groups of women. Because of the disproportionate size of the two groups, equal group analysis was employed using data from fifteen (n = 15) subjects from each group. It was expected that a high percentage of women with previous experience would be in the non-participating group. One might speculate that experience with previous childbirth might skew the results as the non-participating class group might be more prepared than if the comparison was of only women who were having children for the first time. However, the percentage of multiparous women in both the non-participating classes group and the participating group was relatively similar, 25% and 33% respectively, representing only an 8% variation in the composition of the groups.

The relationship between education and preparation was examined. Educational levels ranged from not having graduated from high school to holding a graduate degree. Twenty percent of the subjects had not graduated from high school and 12% had at least some college education. Again no relationship was found between education and preparedness. It was expected that women with higher levels of education would be more likely to have anticipated their discharge needs and would have been more confident and prepared to secure education and resources to address the anticipated needs. In actuality, the women with more formal education may have claimed a higher standard of preparedness for themselves than did the subjects with less education. Because the construct of preparedness is abstract resulting in a subjective evaluation, it is difficult to
determine how the level of education affects the perception of preparedness.

The relationship between category of care provider and preparation was also examined. Again, results revealed no significant difference in preparation between the physician and the nurse midwife provider groups. The nurse midwife provider group (N = 16) comprised 32% of the total subjects in the study. For this reason equal group analysis was again used. It was anticipated that subjects seeing the nurse midwives would perceive themselves to be more prepared for discharge since the nurse midwives involved in the study were known to spend considerably more antepartum clinic visit time meeting the educational and informational needs of their clients. It is possible that the nurse midwife patients had significant educational needs for which even the additional involvement did not entirely compensate. Another point to consider is that the education and information provided antepartum may not have been perceived by the subjects as important information. The processing of information to knowledge may not have occurred due to the information not being perceived as important.

Data directed analysis examining an equal group comparison of the nurse midwife care group and the physician care group in relation to the perceptions of preparation for self care revealed no significant difference in the two groups. Examination of the unequal groups, however, did reveal a significant difference between the groups. The trend therefore, is for the nurse midwife care group to be more prepared. One factor which may have had an impact on the trend is that substantially more nurse midwife provider subjects participated in the Maternal Support Services program, 81% compared to an overall participation of 54%. The program includes prenatal home visits by a registered nurse. Assessment, planning, education and support are integral components of the program and
may have had significant impact on the perception of preparation for self care in this group.

Data directed analysis also examined age in relation to the perceptions of preparation for the affects of childbirth on family relationships. A positive but somewhat weak relationship was found between the age of the woman and the perception of preparation in this category (\( \rho = .29, df = 48, p = .04 \)). Age alone provides more opportunities for learning the effects of multiple and different variables on relationships. It may be the sheer amount of life experiences that the older subject is able to learn from and draw upon that accounts for this relationship.

Overall, findings suggest that in the seven categories included in the preparedness score, patients are receiving preparation sufficient for them to perceive themselves to be moderately to well prepared for discharge. Overall an average of 92% of subjects felt they were moderately well to well prepared in each of the seven categories of preparation. On the average, 69% perceived they were well prepared. This suggests that the vast majority of subjects perceived they were prepared for self care and infant care following discharge.

The limited variance in preparedness may have partially explained the fact that none of the independent variables examined significantly accounted for differences in preparation among this group of subjects.

Interestingly, patient's perceptions of preparedness according to Pridham (1983) are an important factor in successful early parenting. Pridham reports that the greater a mother's perception of being adequately prepared for infant care, the greater the sense of satisfaction and success in parenting reported throughout the infant's first three months. Therefore, it is anticipated that the perceptions of preparedness experienced by this group
of subjects should positively influence their satisfaction and success with parenting.

**Implications for Nursing**

The phenomena of concern to nurses are human responses to actual or potential health problems. Preparedness for potential health problems that may arise following discharge from childbirth is a focus of the maternity nurse. Dorothea Orem's conceptual framework provides a structure upon which supportive-educative interventions can be implemented based on the nurses' assessment of actual and potential health problems affecting the maternity patient's ability to provide self-care and dependent-care after discharge from the hospital setting.

This study was undertaken to provide an evaluation of the level of perceived preparation for discharge of the maternity patient and to examine independent variables which may increase a patient's risk for potential health problems. An understanding of which patients are at risk for health problems related to self-care and infant-care deficits will assist the nurse in discharge planning. It will help to assure that this population receives educative support for information, skill development, and promotion of health-oriented attitudes and the related behavioral changes which will promote the actualization of self-care and ultimately family health.

The findings from this research did not support any of the four variables studied (age, class attendance, level of education or care provider classification) as putting populations at risk for not being prepared for discharge. Identification of risk factors which would place a population at risk would be very beneficial to nursing's knowledge base. Supportive-educative interventions specific to meet the needs of particular at-risk patients or groups could be designed. It is this type of information, incorporated with
other types of evaluation, that could be helpful to nurses as they prepare maternity patients for self-care and infant-care. Although the overall perceptions of discharge preparedness were high in this study population, information which would cue the nurse to patients whose risk for health care deficits were high would assist the nurse to further assess for self-care deficits and provide appropriate interventions.

The literature review failed to locate an instrument designed to measure perceptions of discharge preparedness for maternity patients. This study was an attempt to provide a valid and reliable instrument which could be used to examine preparedness in the maternity patient and upon which future examination of maternity patients' perceptions of preparedness could be based for both nursing research and nursing practice. While the instrument was reliable in this study, further use would help to establish reliability across various maternity populations. Each nurse possesses unique knowledge and skills based on her particular experiences and upon the influences of the hospital and community environment in which she practices. These variations will always be found. Further research will be necessary to support the findings of this study.

Nurse theorists recognize the need to explore patient perceptions as an important assessment component in the nursing process. An essential component of patient teaching must be an evaluation of patients' perceptions of their learning needs. Studies examining patient perceptions need to continue to be conducted to enhance nursing's knowledge base.

As hospital stays for child birth become increasingly shorter, the challenge to nurses increases to provide supportive-educative interventions appropriate to each patient. Recognition of variables which may place a patient at risk can quickly cue the nurse to
explore potential knowledge and skill deficits. Research is a mechanism for discovering which variables place populations at risk. Studies of patient perceptions can then provide the evaluative data needed to assess the research based supportive-educative interventions.

Limitations

The instrument to measure preparedness was designed for this study. Three of the ten categories originally considered to comprise the construct of preparedness for the maternity patient were later thought not to contribute to the construct and were not used to determine the overall preparedness score. The research tool used only closed ended questions. Solicitation of patient comments may have been helpful to determine if there were other categories that should be considered in the construct of preparedness. Future research to establish validity of the instrument is warranted.

Threats to the internal validity of the study were explored. Hospital events may have influenced the preparation of patients for discharge. The hospital was in the process of acquiring another hospital and this would increase the expected patient admissions to the maternity unit by 35%. As a result of the acquisition, orientation of multiple nursing staff occurred during the data collection period. Patients may have perceived a level of disruption or inconsistency in the discharge education process due to the sheer number of new employees orientating at the time. The maternity unit was also in the throes of transition, preparing to move from a traditional maternity setting to a single room maternity care unit within weeks of the data collection period. Multiple new processes, clinical pathways, a maternity preadmission program, new equipment and computerization of the patient record were being tried during the data collection period. The sheer volume of change experienced by nurses on the unit may have influenced the patients' perceptions
Another primary limitation of the study was that it used a convenience sample from a single setting. The main limitation of convenience sampling is that available subjects may be highly atypical of the population with regard to the critical variables being measured (Polit & Hungler, 1991). In addition, five subjects could not be reached for the interview. Therefore, the results of this study are limited to the study participants and cannot be generalized to other settings. The sample size also was a limitation. Creative approaches would be recommended to prevent the dropout of subjects for future studies.

Recommendations for Further Research

Replication of this study is recommended using the seven categories comprising the preparedness scale for this study. It is recommended that the study use maternity settings in both rural and urban areas and that the sample size be enlarged. Expanding the types of maternity settings would draw from a broader patient point of view. A random sampling method is recommended in further studies as it would facilitate the generalizibility of the findings. Including a couple of open-ended questions at the end of the instrument may elicit additional information which may be useful in further defining the construct of preparedness for the maternity patient. It is also recommended that data be collected five days after discharge rather than the seven days used in this study. It is anticipated that subjects would have sufficient time to determine the degree of preparation for discharge and the shorter time frame may decrease the probability of recall error.

Continued investigation of variables that have a potential for modifying preparation is encouraged. Nelson-Wernick, Currey, Taylor, Woodbury and Canter (1984) have shown that patient characteristics influence perceptions of care. Identification of risk
populations would assist the nurse in planning for the supportive-educative needs of patient.

Further research is needed to bridge the gap between Orem's Self-Care Model and clinical nursing practice. Theoretical based research provides a broader foundation to enhance understanding beyond the clinical experience. The future of knowledge development in nursing is dependent on the link between theory and research.
APPENDIX A

DISCHARGE PREPARATION QUESTIONNAIRE

Phone call completed: yes no
Comments:

Patient's name: ___________________________ Significant other: ___________________________
Address: _____________________________________________________________
Phone number: ___________________________ Date of phone call: ___________
Time of phone call: __________________ Second option: __________________
Admission date and time: ___________________________________________________
Discharge date and time: ________________________________________________

______________________________
Id#________________________
MSS: Yes No

1. Age: _______ in years.
2. Length of stay: _______ in hours.
3. Diagnosis (include episiotomy/tears): _________________________________
4. Gravida ___ Para ___
5. Any previous births yes no
6. Did the infant go home with you? yes no
7. Highest level of education completed:
   (1) Less than 9th grade
   (2) 9-12 grade
   (3) High school graduate
   (4) Two year associate degree
   (5) Four year bachelor degree
   (6) Graduate school
8. Who is your primary care provider: OB FP CNM No Care
9. Breastfeeding yes no
10. Did you attend any prenatal classes yes no

13
SELF CARE

11. Were you able to take care of yourself once you got home?
   (1) yes (go to #12)
   (2) no (go to #14)

12. Before going home did your nurse teach you about how to care for yourself? (perineal care, rest, diet)
   (1) yes (go to #14)
   (2) no (go to #13)

13. Do you feel those instructions would have been helpful to you?
   (1) yes (go to #14)
   (2) no (go to #14)

14. How well do you feel you were prepared to go home and assume care for yourself?
   (4) _____ well prepared
   (3) _____ moderately well prepared
   (2) _____ somewhat prepared
   (1) _____ poorly prepared
   (0) _____ not at all prepared

RELATIONSHIPS

15. Have you and your family adjusted to bringing the baby home?
   (1) yes (go to #16)
   (2) no (go to #18)

16. Before going home did your nurse discuss with you feelings you and your family might experience when you brought the baby home?
   (1) yes (go to #18)
   (2) no (go to #17)

17. Do you feel those instructions would have been helpful to you?
   (1) yes (go to #18)
   (2) no (go to #18)

18. How well do you feel you were prepared to understand bringing a baby home might effect your family?
   (4) _____ well prepared
   (3) _____ moderately well prepared
   (2) _____ somewhat prepared
   (1) _____ poorly prepared
   (0) _____ not at all prepared
RESOURCES

19. Do you know who to ask for help if you have questions about taking care of yourself?
   (1) yes___ (go to #20)
   (2) no___ (go to #22)

20. Before going home did your nurse help you identify who those people or groups might be?
    (family, church, neighbors)
   (1) yes___ (go to #22)
   (2) no___ (go to #21)

21. Do you feel that information would have been helpful to you?
   (1) yes___ (go to #22)
   (2) no___ (go to #22)

22. How well do you feel you were prepared to identify who those people or groups might be?
   (4)___well prepared
   (3)___moderately well prepared
   (2)___somewhat prepared
   (1)___poorly prepared
   (0)___not at all prepared

INFANT CARE

23. When you arrived home were you able to care for your baby?
   (1) yes___ (go to #24)
   (2) no___ (go to #26)

24. Before going home did you receive instructions about caring for your baby (taking a
    temperature, caring for the umbilical cord, bathing)?
   (1) yes___ (go to #26)
   (2) no___ (go to #25)

25. Do you think those instructions would have been helpful?
   (1) yes___ (go to #26)
   (2) no___ (go to #26)

26. How well were you prepared to care for your baby?
   (4)___well prepared
   (3)___moderately well prepared
   (2)___somewhat prepared
   (1)___poorly prepared
   (0)___not at all prepared
INFANT FEEDING

27. Were you able to feed your baby okay once you got home?
   (1) yes (go to #28)
   (2) no (go to #30)

28. Before going home, did you receive instructions as to how to feed your baby?
   (1) yes (go to #30)
   (2) no (go to #29)

29. Do you think those instructions would have been helpful to you?
   (1) yes (go to #30)
   (2) no (go to #30)

30. How well do you feel you were prepared for feeding your baby?
   (4) well prepared
   (3) moderately well prepared
   (2) somewhat prepared
   (1) poorly prepared
   (0) not at all prepared

INFANT SAFETY

31. Do you know how to provide a safe place for your baby (side or back positioning, car seat, unattended baby)?
   (1) yes (go to #32)
   (2) no (go to #34)

32. Before going home, did your nurse talk with you about your baby's safety?
   (1) yes (go to #34)
   (2) no (go to #33)

33. Do you think those instructions would have been helpful to you?
   (1) yes (go to #34)
   (2) no (go to #34)

34. How well do you feel you were prepared to provide a safe place for your baby?
   (4) well prepared
   (3) moderately prepared
   (2) somewhat prepared
   (1) poorly prepared
   (0) not at all prepared
PAIN

35. Were you able to do things to take care of any discomforts you were having after you got home?
   (1) yes (go to #36)
   (2) no (go to #38)

36. Before going home did you receive instructions about how to deal with this pain?
   (1) yes (go to #38)
   (2) no (go to #37)

37. Do you think those instructions would have been helpful?
   (1) yes (go to #38)
   (2) no (go to #38)

38. How well do you feel you were prepared to deal with your pain?
   (4) well prepared
   (3) moderately well prepared
   (2) somewhat prepared
   (1) poorly prepared
   (0) not at all prepared

SIGNS OF ILLNESS

39. When you arrived home did you understand what signs of illness were important to call your doctor or midwife about?
   (1) yes (go to #40)
   (2) no (go to #42)

40. Before going home did you receive information on signs of illness for yourself and your baby and when you should notify your doctors?
   (1) yes (go to #42)
   (2) no (go to #41)

41. Do you think those instructions would have been helpful to you?
   (1) yes (go to #42)
   (2) no (go to #42)

42. How well do you feel you were prepared to understand when it would be important to call the doctor about an illness?
   (4) well prepared
   (3) moderately well prepared
   (2) somewhat prepared
   (1) poorly prepared
   (0) not at all prepared
SOOTHING THE BABY

43. Have you been able to soothe your baby when your baby is fussy?
   (1) yes___ (go to #44)
   (2) no___ (go to #46)

44. Before going home, did the nurse talk to you about some techniques for soothing your baby?
   (1) yes___ (go to #46)
   (2) no___ (go to #45)

45. Do you think that information would have been helpful to you?
   (1) yes___ (go to #46)
   (2) no___ (go to #46)

46. How well do you feel you were prepared to know how to soothe your baby?
   (4) ___well prepared
   (3) ___moderately prepared
   (2) ___somewhat prepared
   (1) ___poorly prepared
   (0) ___not at all prepared

DOCTOR AND/OR MIDWIFE APPOINTMENT

47. Have you made an appointment for a follow-up visit with your doctor or nurse midwife?
   (1) yes___ (go to #48)
   (2) no___ (go to #50)

48. Did you receive information about when to make those appointments?
   (1) yes___ (go to #51)
   (2) no___ (go to #50)

49. Do you think this information would have been helpful to you?
   (1) yes___ (go to #50)
   (2) no___ (go to #50)

50. How well do you feel you were prepared to know when to make your appointments and with whom?
   (4) ___well prepared
   (3) ___moderately well prepared
   (2) ___somewhat prepared
   (1) ___poorly prepared
   (0) ___not at all prepared
Next I would like to ask some questions related to the 7 day worksheet that you were given before you left the hospital. Do you have the worksheet in front of you?

51. Have you checked anything on the list for day #1?

   (1)yes  (2)no

   If yes - please specify and comment:

   self care:

   relationships:

   resources:

   infant care:

   infant feeding:

   infant safety:

   other:
52. Have you checked anything on the list for day #2?

   (1)yes___ (2)no___

   if yes - please specify and comment:

   self care:___

   relationships:___

   resources:___

   infant care:___

   infant feeding:___

   infant safety:___

   other:___
53. Have you checked anything on the list for day #3?

(1) yes (2) no

if yes - please specify and comment:

self care:

relationships:

resources:

infant care:

infant feeding:

infant safety:

other:
54. Have you checked anything on the list for day #4?

(1)yes  (2)no

if yes - please specify and comment:

self care:

relationships:

resources:

infant care:

infant feeding:

infant safety:

other:
55. Have you checked anything on the list for day #5?

(1)yes  (2)no  

if yes - please specify and comment:

self care:  

relationships:  

resources:  

infant care:  

infant feeding:  

infant safety:  

other:  

57
56. Have you checked anything on the list for day #6?

(1)yes  (2)no

if yes - please specify and comment:

self care: __

relationships: __

resources: __

infant care: __

infant feeding: __

infant safety: __

other: __
57. Have you checked anything on the list for day #7?

   (1) yes   (2) no __

   if yes - please specify and comment:

   self care: __

   relationships: __

   resources: __

   infant care: __

   infant feeding: __

   infant safety: __

   other: __
58. Did you experience any concerns/needs in these first 7 days following your discharge that I have not covered on the checklist?
   (1)yes__  (2)no__
   if yes - please specify and comment:

59. Was there one thing you can identify that was most helpful about the discharge preparation you received?
   (1)yes__  (2)no__
   (Go to # 61)

60. Describe this one thing that was most helpful regarding the discharge preparation you received.
    Comments:

61. Is there anything you would like to change regarding the discharge preparation you received?
    (1)yes__  (2)no__
    (Go to # 63)

62. Describe what you would like to change, regarding the discharge preparation you received.
    Comments:

63. Is there anything else the nurse could have done for you which would have made you discharge easier?
    (1)yes__  (2)no__
    if yes - please specify and comment:

(Note to interviewer if subject listed anything in questions 51-57, but does not mention anything for question 61 or 63, use probes from questions 51-57 to elicit information)

64. What about ____? What could the nurse have done to help with ____?
APPENDIX B

SCRIPT FOR OBTAINING STUDY CONSENT

Hello (patient's name).

My name is (researcher's name). I am a registered nurse and currently a graduate student in the Grand Valley State masters program. I have a special interest in how mothers and babies get along after they are discharged from the hospital. As part of my graduate work I am conducting a study that will help determine how well mothers feel they were prepared for taking care of themselves and their babies at home after discharge from the hospital. Munson Medical Center has given me permission to contact each patient discharge from the obstetrical floor for participation in this study.

Your participation is voluntary and would involve receiving a telephone call 7 days after discharge. I will ask question regarding your discharge preparation. This will take approximately 15 minutes of your time. The information provided would be valuable for nursing to assist future patients in a smooth transition to home.

Your honest opinions are important; therefore, your responses will remain confidential. Reports of this study will be reported in group fashion and will not identify you in any way. You will be free to withdraw from this study at any time.

Would you be willing to participate in this study by agreeing to a telephone interview after discharge?

If No - Thank you for your time and consideration.

If Yes - Thank you. I will need to obtain written permission for this phone call. Please review this consent form. Do you have any questions? (Answer questions and obtain signature)

I will need a telephone number where you can be reached following discharge. Also a second contact number would be helpful in case your plans change following discharge. (Telephone numbers to be recorded on telephone questionnaire)

What time of day would you prefer to be called?
Is there a second time that would also be convenient for you? (Times to be recorded on telephone questionnaire)

A piece of information that will help to analyze these data is education. What is the highest level of education that you have completed? 1. Less than 9th grade; 2. 9-12th grade; 3. High school graduate; 4. Two year associate degree; 5. Four year bachelor degree; 6. Any additional training. (Educational level to be recorded on telephone questionnaire)

(Hand patient index card which contains the possible response choices). This card contains a sample of the choices you will need to make in answering some of the questions you will be asked. Please place this card by your telephone for the day of our scheduled call.

61
This is a worksheet. Each day following discharge until my telephone call, please make any notes that you feel would be important to assist you in answering questions about your discharge preparation.

Thank you again for your willingness to participate.
(The researcher will then go to the record to obtain the demographic information listed on the telephone questionnaire)
APPENDIX C
APPENDIX C

INFORMED CONSENT

I understand that this is a study to get information about how well prepared new mothers are to care for themselves and their infants when they go home from the hospital. The information we get from you will help nurses to prepare you to take care of yourself and your baby at home. I am giving you permission to look at my hospital chart.

I understand you will call my home seven days after I go home. This telephone call will take less than 15 minutes. There will be no direct benefits to me but my information may help other new mothers.

I further understand that:

1. Information I give you will remain private. My name will not be used in any way.

2. I can quit the study at any time. If I quit it will not affect future care in any way.

3. My participation in the study involves answering questions over the telephone. It will not cost me anything. If any medical problems are identified in the interview, I understand that Pat or Karen will not directly help me but will recommend where I can get help.

4. Pat Ritola and Karen Kujala are collecting this information. If I have questions they can be reached at 935-6284.

I have read and I understand the above information and agree to help in this study.

________________________________________   ___________________________
Participant’s Signature                      Date

________________________________________
Researcher’s Signature
APPENDIX D

RESPONSE SCALE
(for use with some of the questions)

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<td>1</td>
<td>Well prepared</td>
<td>Moderately well</td>
<td>Somewhat prepared</td>
<td>Poorly prepared</td>
<td>Not at all</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>well prepared</td>
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Hello

My name is (researcher's name) from Munson Medical Center.

May I speak with Ms., Mrs. , please.

Ms., Mrs. , this is (researcher's name), the graduate student from Grand Valley State that spoke with you before discharge from Munson. I am calling to ask you about your feelings on how well you and your baby were prepared for discharge.

Is this a convenient time for you to talk with me?

If No - What would be a more convenient time for you and I will call you back?

(Patient's answer) I will call you back around (time). Thank you. Good-bye.

If Yes - I handed you a response card and a 7 day worksheet before discharge, do you have those handy?

If No - I will hold the line while you go and get it.

If Lost - I will hold the line while you get pencil and paper so you may write the response choices down.

(Read choices)

If Yes - (go on)

Please remember that your honesty is important and your answer will remain confidential. If at any time you feel too tired to continue, please let me know. (If patient indicates they are too tired to continue, ask the patient if a return call to complete the questions could be made at a later time that day).

I'll begin with question #1.............

(Continue through each question)

I want to thank you for your participation in this discharge preparation study. The results of the study will be used to improve the discharge preparation for future patients on the obstetrical floor at Munson Medical Center.

Good-bye.
LIST OF REFERENCES


