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Concerns/Needs Experienced by Low-Income Mothers Following a Postpartum Hospital Stay of Less Than Forty-Eight Hours

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CONCERNS/NEEDS EXPERIENCED BY LOW-INCOME MOTHERS FOLLOWING A POSTPARTUM HOSPITAL STAY OF LESS THAN FORTY-EIGHT HOURS

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ABSTRACT

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The purpose of this study was to describe the needs and concerns that low income women experience during the first seven days at home following discharge from a postpartum hospital stay of less than forty-eight hours. Dorothea Orem's theory of self-care was the conceptual framework.

The sample (n = 50) consisted of Medicaid eligible postpartum mothers, 18 years of age or older, who were discharged with their infants in less than 48 hours after delivery. The mothers were contacted by telephone seven days after discharge to complete an interview regarding concerns they might have experienced.

Data were analyzed descriptively. The top three categories of concerns were: self-care, infant care, and infant feeding. Mothers who expressed the most concerns had other children to care for or were breastfeeding their infants, and also contacted the healthcare provider most often during the first seven days postpartum.

The findings indicate the need to assess the individual needs of mothers and anticipate that support may be necessary for some mothers in the postpartum period. Further research needs to be conducted looking at the relationship of needs to availability of support in the postpartum period.

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CHAPTER 1

INTRODUCTION

Early postpartum discharge became popular in the 1980's as a means to alleviate crowded postpartum units, control escalating health care costs, and meet consumer needs. Many of the first early discharge programs incorporated follow-up home visits or follow-up telephone calls to assure well-being of the childbearing family. With the advent of the Diagnostic Related Groups (DRG's) and prospective reimbursement mechanisms, hospitals have committed to controlling costs necessitating a change in practice. Early discharge programs, driven by the reimbursement system, have now become the standard length of stay (LOS) for the obstetrical patient. Follow-up visits or telephone calls in the postpartum period are no longer routine. These changes in obstetrical services will continue to evolve as the health care delivery system and reimbursement mechanisms change.

Several researchers have conducted studies examining various aspects of early discharge in the postpartum period. While early discharge has been found to be cost effective and relatively safe for both mother and infant, many of the studies included only low risk, middle income women. In addition, these women and infants were receiving the benefit of early follow-up. The impact of DRG's and declining reimbursement for routine obstetrical care have decreased the LOS to what was once considered early discharge. The current standard of care is a shortened LOS for all

uncomplicated obstetrical patients and early postpartum follow-up is not always an option. Health care professionals must now re-examine the impact of decreased LOS without the benefit of early follow-up and its effect on mothers and infants.

In a two stage quasi-experimental study Norr, Nacion and Abramson (1989) looked at three different discharge times including early discharge and its effect on health problems for mothers and infants. The results indicated a high incidence of physical problems in all three groups. Inadequate breastfeeding and lack of infant weight gain were frequently identified. All of the low income women in the study had a high rate of physical problems in the first two weeks postpartum. In addition, low income women and infants continued to have unmet health needs in the first month after delivery regardless of when they were discharged. Previous studies have supported these findings showing that mothers continue to have concerns related to physical, social and emotional needs (Lemmer, 1987). Lukas (1991), studying the effects of decreased LOS on the caregiver, found these health professionals frustrated knowing that new mothers' needs, when left unmet, can potentially have a negative impact on infant and family development.

The purpose of this study was to evaluate information about the needs/concerns of low-income obstetrical mothers and their infants at one week postpartum following discharge within 48 hours after delivery. The following research questions were addressed in this study in order to gather information regarding the needs/concerns of the low-income obstetrical patient. Question number one was, "are there differences in the number of needs/concerns of the mothers who have attended prenatal classes and those who have not?" The second research question was, "are there differences in

the number of needs/concerns between women who are cared for by physicians versus nurse midwives?" The results of this study will be utilized to identify where changes and improvements need to be made for future patients. The recognition of the needs/concerns following hospital discharge could guide a community into planning services to assist in meeting the needs of the low-income women and infants.

CHAPTER 2

CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

Increased costs, consumer demand, family centered birthing environments, and shortened hospital stays have all increased the need for self-care in the postpartum period. Orem's self-care model supports nursing's contribution as one of facilitating the patient's self-care abilities and provides the conceptual basis for this study.

Orem's Model

Orem's (1991) model is based on patients assuming a more active role in their own healthcare. Due to the decreased length of stay (LOS) for the obstetrical patient it is imperative to enhance patients' abilities to care for themselves in the postpartum period. In addition, new mothers also must be able to meet the needs of their infants. The nursing goal within this framework is to maximize a patient's potential for self-care.

Nurses in practice must be able to assist patients in identifying their self-care needs and in developing knowledge so that they are able to perform self-care. Effectively identifying these needs facilitates the patient's resumption of 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.

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" (p. 117). Self-care demand refers to the amount and kind of self-care that a person should perform within a time frame to regulate human functioning and development (Orem, 1991). Self-care agency is the human ability to engage in self-care. A self-care deficit exists when there is an inadequate relationship between self-care demand and the self-care agency (Orem, 1991). Nursing systems are formed when the self-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., prematurity, pregnancy), and are concerned with maintenance of conditions that allow for proper 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 & 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 assessment is based on the premise that the self-care needs must be known before they serve as the purpose of self-care. In evaluating the outcomes the nurse can describe if the self-care requisites were accurately assessed and the knowledge provided to enable the client to meet their self-care and dependent-care demands.

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 supportive-educative nursing system is utilized by nurses to provide the client with the knowledge necessary for them to meet their self-care needs and dependent-care demands.

Pregnancy and the birth of a child are healthy developmental tasks that occur within the life-cycle (Bliss-Holtz, 1988). Women have a significant degree of self-care agency enabling them to engage in self-care during pregnancy. Women may need only a modest amount of supportive-educative intervention by the nurse during the labor and delivery phase. Supportive educative nursing systems assist the client in acquiring the knowledge or skills related to self-care (Riehl-Sisca, 1989). Self-care is expected to resume following the birth experience. 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. It is important to know what the self-care deficits experienced by postpartum women are in order to evaluate if the supportive-educative systems have been appropriate. Meeting the needs

of the client allows for successful transition to the home environment in the postpartum period.

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

Research Using the Self-Care Model

Empirical work using Orem's self-care model is well documented in the literature. A model's usefulness depends on nurses ability to adapt it to their clinical setting. Degenhart-Leskosky (1989) studied the health education needs of adolescent and nonadolescent mothers using Orem's self-care framework to guide the study. Educational programs that focused on the learning needs of mothers of varying ages were found to motivate them to accept responsibility for their self-care and infant care. New mothers required teaching to meet their knowledge deficits regarding their self-care and dependent-care needs. Nurses functioned to assist these mothers toward optimal self-care through supportive-educative nursing systems that provided a developmental environment which facilitated learning. Once the teaching needs of the adolescent mothers were assessed, educational programs were designed to assist mothers in gaining knowledge and skills to meet their own care needs and the needs of their infants. It was found in this research that infants' medical needs were the primary concern of this adolescent population during the postpartum period. Over-all concerns of both adolescent and nonadolescent mothers focused on the care of the infant.

Providing educational programs designed to meet adolescent mothers self-care and infant-care needs has important implications for nursing and family development. By increasing the self-care agency in the adolescent population mothers are decreasing unnecessary contacts with health providers thereby reducing costs. In addition, maternal self confidence is improved, promoting bonding and family well-being.

Woolery (1983) used the Self-Care Deficit Theory (SCDT) with obstetrical patients and 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.

The hospitalized patient's self-care agency is the foundation on which all subsequent nursing actions can be based. Orem (1991) says that unless self-care agency is accurately assessed, nurses have no rational basis for making judgements about existing or projected self-care deficits. Some of the investigations have focused on development of instruments to measure aspects of self-care agency.

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 reflected the 10 power components of Orem's conceptual framework.

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; and Woods, 1985). However, some studies have shown that individuals and nurses have different perceptions of the client's self-care needs (Dodd, 1982; and Fernsler, 1986).

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. Results indicated that generally patients perceived more self-care deficits than did their nurses in the categories that included problems with physical side-effects of therapy. Nurses perceived slightly more deficits than did patients in relation to the categories that included psychosocial problems. The findings indicated that nurses did not perceive the extent to which patients required assistance, particularly in relation to maintaining a balance between activity and rest. Clearly, measures for validating nurses' perceptions with those of patients are needed to reduce the disparity between nurses' and patients' perceptions. Additional validation may provide nursing administrators with a valuable perspective as they design effective nursing systems for quality patient care.

Review of Literature

A review of the outcomes of postpartum early discharge programs published between 1960 and 1986 found no program that identified any increase in maternal or infant morbidity associated with early discharge (Norr & Nacion, 1987). In most of these studies the participants were middle class women and they received early follow-up home care visits. In addition, many of these programs were voluntary which could

introduce bias from self-selection. The studies conducted during the 1970s and 1980s showed that early discharge was not only safe for the majority of low-risk women (Avery, Fournier, Jones, & Sipovic, 1982; Scupholme, 1981; and Yanover, Miller, & Jones, 1976), but that early discharge was economically feasible for hospitals and parents (Scupholme, 1981; Yanover et al. 1976; and Regan, 1984).

Research on postpartum concerns has involved a variety of time frames for data collection (Bull, 1981; Gruis, 1977; Hiser, 1987; and Sumner & Fritsch, 1977). Concerns specific to breastfeeding mothers were identified by Graef et al. (1988) through the first month postpartum. Research conducted by Miovech, Knapp, Borucki, Roncoli, Arnold, and Brooten (1994) identified the concerns of women after cesarean birth and found that psychologic and life style concerns did not decrease from two to eight weeks postpartum. Few studies have examined the concerns for low-income populations following early discharge (Norr, Nacion, & Abramson, 1988). In addition, no studies were found that looked at postpartum concerns experienced by women as a result of the decreased length of stay (LOS) in the absence of in-home follow-up.

In 1985, Jansson studied 925 middle class mother and infant dyads in a health maintenance organization (HMO) who experienced mandatory early discharge. Most of these participants were married or living with a partner and represented many ethnic groups. In-home physical and psychosocial assessments were conducted by nurses and focused on the concerns of the parents. Although this program found a high incidence of problems they were problems that had not been considered in previous studies, such as the risk of inadequate attachment, lack of social support, and

inadequate breastfeeding. While these mothers were satisfied with early discharge, problems identified resulted in minimal savings from early discharge due to the high cost of follow-up.

Hiser (1987) conducted a study to identify the concerns of 20 multiparas during the second postpartum week. Participants in this study were from various income levels ranging from less than $5,000 to more than $25,000 a year. A card-sort tool was used focusing on three potential areas of concern: family, mother, and infant. Strict criteria was used for screening participants which resulted in a relatively homogenous group. This makes it difficult to generalize the results of this study. Findings revealed that 51% of the concerns were related to the family compared with 36% of the mother items and 29% of the infant items. While this sample was too small and select to generalize from, it did identify areas of concern that needed to be addressed prior to discharge.

Lemmer (1987) studied a convenience sample to ascertain the impact of early discharge on the outcomes of primiparas and their infants. The purpose of this study was to see if a significant difference would occur between the morbidity rates of primiparas discharged prior to and after 24 hours. The sample included 21 mother-infant dyads in both the early and late discharge groups. All women in the short stay group were married and all but one attended prenatal classes. Median family income was between $20,000 and $24,000 during the period of time in 1984 when this data was collected. The findings revealed that no adverse effects were found in terms of outcomes for mothers and infants. However, women in both groups expressed specific concerns regarding infant feeding and recognizing signs of illness in infants.

Lemmer found that 57% of the mothers from the short-stay group and 38% from the long-stay group had concerns about infant feeding. Mothers in the short-stay group were concerned about recognizing signs of illness 57% of the time and 61% of the time in the long-stay group. In addition, both groups were cited as having frequent contact with their health-care provider. These women were not considered low-income and all of the participants in the short stay group volunteered and had support in the home. Even with these advantages, healthcare providers were frequently contacted with unmet needs and concerns in the postpartum period.

Carty and Bradley (1990) randomly assigned 131 women to one of three postpartum hospital discharge times: 12 to 24 hours (n=44), 25 to 48 hours (n=49), and 4 days (n=38). The results indicated that maternal and infant morbidity were low regardless of discharge time. Maternal morbidity for the group discharged 12-24 hours after delivery was 5.3% and in the traditional group (n=38) morbidity was 7.9%. Infant morbidity was 4.3% for the first two discharge times and 2.6% for the traditional stay group. The investigators felt that the sample sizes were too small to detect significant differences and recommend further studies be conducted. Other limitations include, 95% of the women were Caucasian, 93% were married or living with their partner, 65% had attended college, and 58% had a combined family income over $40,000. Women in this study also received from one to five home visits by a maternity nurse clinician during the first 10 days postpartum.

While early discharge has been found to be medically safe for low-risk middle-income women and does not have adverse effects in terms of outcome, these studies emphasize the need for greater nursing intervention in the postpartal period. Infants

involved in Lemmer's (1987) study who were discharged early had follow-up care with a pediatrician on the second or third day of life. Even with these medical interventions, it is evident by the frequent provider contact that concerns remained.

Norr, Nacion, and Abramson (1989) in a two-stage quasi-experimental design compared three different types of hospital discharge programs for low-income women. There were 333 participants in this study. One hundred forty mothers were under 20 years old, and 148 were primiparas. Most of the mothers in this study were unmarried and half of these participants (173) had not finished high school. The final sample included 124 mother-infant dyads in the early discharge group (24-47 hours), 115 in the conventional discharge group (48-72 hours), and 94 in a group where the mother was discharged early and the infant remained hospitalized the conventional length of time.

Maternal and infant outcomes were assessed using the maternal concerns questionnaire developed by Bull (1981). The instrument was verbally administered by the data collectors during a visit to the hospital during the second postpartum week. Results indicated that there was a high rate of physical problems in all three groups regardless of discharge time. All the low-income, low risk infants in the study had a high rate of physical problems during the first two weeks of life. Forty-four percent of the infants had one or more problems. Fifteen percent of the infants examined had two or more problems. The most frequent problems encountered were constipation and lack of weight gain. Maternal problems were also high with 41% having one or more problems. Although early discharge did not increase the patients' health problems, low income mothers and infants all had unmet health needs in the first

month after delivery regardless of the time of discharge. These findings were consistent with Lemmer's (1987) where both early and late discharge middle-class women had a high rate of concerns in the postpartum period.

In the study done by Lemmer (1987) both groups contacted their provider frequently. Low-income women with concerns in the postpartum period may not have the available resources or accessibility to contact a provider resulting in unmet needs. Although early discharge has become a widely accepted practice, little is known about the impact on low-income mothers and infants who are not receiving early follow-up. The safety and acceptability of early discharge for middle class populations is well established; research is limited to support early discharge for more disadvantaged mothers and infants, however. The universally accepted practice of early discharge coupled with declining reimbursements will continue to affect the LOS of the obstetrical patient regardless of income level. The incidence of physical problems in the low-income population (Norr et al., 1989) and the high rate of provider contact in the middle class population (Jansson, 1985; Lemmer, 1987; Carty & Bradley, 1990) highlight the need for further investigation.

In a more recent qualitative study done by Hall and Carty (1993) a grounded theory method was used to study women's perceptions of the experiences in early discharge programs. Eight middle-class women participated in this study. Interview questions were designed to elicit descriptions of participants' behaviors and impressions. Findings identified the social process of taking control. This was broken down into three parts: "organizing antenatal requirements, meeting their own expectations during labor and birth, and learning to trust their self-care and parenting

abilities postpartum" (Hall & Carty, 1993, p. 576). Women began to take control during the antenatal period by organizing their care requirements. This continued into the intrapartal and postpartal period as they assumed responsibility for their own care and that of their infants. Through mutual participation of nurses and clients, self-care practices were facilitated by identifying nursing interventions relevant to women's needs during the childbearing process. In addition, these women identified the importance of home visiting by a nurse as well as telephone contact. While these interventions are becoming less frequent, this study provides insight into the importance of postpartum follow-up.

In the current climate of attempting to control escalating health care costs, what was once called early postpartum discharge is now the standard LOS. Many community agencies offer home-based postpartum care for insured clients and middle-class families. Public agencies that serve the uninsured are highly dependent on local and federal priorities, which often exclude care for well newborns and mothers (Patterson, 1987).

Summary and Implications for Study

In summary, the literature has supported decreased LOS as being safe for the majority of women (Avery, Fournier, Jones, & Sipovic, 1982; Carty & Bradley, 1990; and Yanover, Jones, & Miller, 1976). Most of these studies focused on middle class women who received early follow-up and often volunteered for early discharge. The results were therefore limited and not generalizable beyond the samples reported. The studies were further limited by the fact that most clients had social support in the home at the time of discharge.

Although the literature supports the fact that low-income women continued to have unmet healthcare needs and concerns in the postpartum period, research is limited in the low-income population and therefore inconclusive. Concerns about infant feeding and inadequate breastfeeding were identified by Lemmer (1987) and Jansson (1985). Norr et al. (1989) identified a high rate of physical problems, specifically lack of infant weight gain in 8% of the low-income population studied, regardless of discharge time. This high incidence of physical problems highlights the need to further investigate the concerns of the low-income population. Hall and Carty (1993) indicated that by identifying the needs of postpartum women, nursing interventions relevant to women's needs can be designed and facilitate their self care practices.

Nurses are responsible for preparing postpartum patients for self-care and dependent-care at home following discharge. The LOS of the obstetrical patient is rapidly declining resulting is less in-patient time to accomplish necessary teaching. The Joint Commission on Accreditation of Healthcare Organizations now places an emphasis on measuring quality based on the impact of nursing interventions on patient outcomes (Lower & Burton, 1989). If the postpartum patient is unable to meet their self-care and dependent-care needs the overall quality could be affected.

Research Questions

The basis of this research was the evaluation of the needs/concerns of the low-income postpartum patient. The focus of this research was on two questions: 1. "are there differences in the number of needs/concerns of the mothers who attend prenatal classes and those who do not?", and 2. "are there differences in the number of

needs/concerns of the mothers who are cared for by a physician versus a nurse midwife?". Areas of concern must be identified and addressed in an attempt to meet the needs of the low-income population.

Definition of Terms

Decreased length of stay (LOS) refers to the period of time, in hours, spent in the hospital following a vaginal delivery. For the purpose of this study it consists of the first 48 hours or less.

Low-income, for this study, refers to the population of people whose healthcare is paid by medicaid.

Concerns/needs refers to worries, questions, and focuses of interest or intense preoccupation related to the postpartal period.

Orem (1991) defines self-care as "the practice of activities that individuals personally initiate and perform on their own behalf in maintaining life, health, and well-being" (p.117). For this study, *self-care* will refer to the mother's perceived ability to care for herself.

Orem (1991) defines dependent-care as "the continuing health-related personal regulatory and developmental care provided by responsible adults for infants and children or person with disabling conditions" (p.3). In this study, *dependent-care* is limited to the infant.

A supportive-educative nursing system is required when the client is capable of providing self-care but needs assistance in acquiring the knowledge and skills necessary to meet their self-care requisites (Orem, 1991). This would also include the needs and concerns that mothers state that they have when they get home in the postpartum period.

CHAPTER 3

METHODOLOGY

Previous studies have indicated that obstetrical patients, specifically low-income obstetrical patients, have unmet needs and concerns in the postpartum period. Decreased length of stay (LOS), coupled with declining outpatient services, have compounded the ability to resolve these needs for this population of women and infants. The purpose of this study was to provide evaluative data to be used as a basis for making modifications to meet the needs and concerns of low-income women.

Design

This study utilized a descriptive design to explore the concerns/needs experienced at home within seven days after discharge. Questions were structured to elicit information about what processes helped during this transition period to home and what might have helped them during the first week at home. Descriptive studies observe, describe, and record naturally occurring events. In addition, two research questions were asked. "Are there differences in the number of needs/concerns of the mothers who have attended prenatal classes and those who have not?" The second question, "are there differences in the number of needs/concerns between women who are cared for by physicians versus nurse midwives?"

Data was collected by the researcher through the interview process. The telephone interview method was chosen because it is 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 its desirability. Individuals who had limitations which may have prevented them from participating with other data collection methods, such as, limited writing skills or limited vision, could still participate in the study. The ability of the interviewer to use probes (prompting questions) with this method was felt to have a positive affect on the subject's understanding of the questions, thus improving reliability.

It was important for the interviewer to assure confidentiality to the respondent, especially for highly sensitive or personal responses. An interview format was developed to assure that interviewing was done the same way for each subject, thus avoiding bias.

Study Site and Subjects

Research was conducted in a 315 bed rural regional medical center in northern Michigan from December 9, 1994 to February 10, 1995. The purpose of this research was to identify the needs/concerns of the low-income population of women and infants, therefore, the sample consisted of mother-infant dyads served through Michigan Medicaid.

Selection criteria for subject participation in this research included patients who (a) were served by, or eligible for, Michigan Medicaid or Mich Care, (b) were 18 years of age or older, (c) delivered vaginally, (d) had temperatures less than 38.0 degrees centigrade, (e) did not experience postpartal hemorrhage, (f) were able to read and speak English and were able to hear, (g) did not have a history of gestational

diabetes, (h) had blood pressures less than 140/90 mmHg, (i) had access to a telephone, (j) were discharged with their infant less than 48 hours following delivery. The selection criteria also included that the subject's infant meet the following criteria (a) gestational age between 38 and 41 weeks, (b) birth weight between 2500-4500 grams, (c) documented normal physical exam, (d) 5 minute Apgar score of greater than 7, (e) stable axillary temperature, between 97.6 and 98.8 degrees fahrenheit, (f) demonstrated ability to feed using either breast or bottle method (intact suck and swallow mechanisms).

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 a drop out of five subjects who might decline to continue the process or not be available for the telephone interview and still have a minimum of 50 subjects from which data and analysis could be obtained.

A proposal for the protection of the rights of human subjects was submitted to the institutional review committee at Grand Valley State University and to the Senior Vice President of Nursing at the study site. Approval was obtained from both prior to data collection.

Instrument

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

about how beneficial the information was to them.

Description. The Discharge Preparation Questionnaire (DPQ) consisted of a total of 64 questions (Appendix A). The tool was used as a telephone interview guide for the mother-infant dyad seven days after discharge. The interview took approximately 15 minutes to complete.

The first 10 questions gathered demographic information plus information about obstetrical care provider and prenatal class attendance. Questions 11-50 were part of another researcher's study (Ritola, 1995) investigating mothers' perceptions of how well they were prepared for self-care after discharge. This information was gathered from the same population group, but not analyzed by this researcher. Data from questions 51-64 was analyzed for this study. These questions pertained to concerns/needs related to self-care, relationships, resources, infant care, infant feeding, and infant safety. Any concerns/needs that did not relate to the categories mentioned were included in the category entitled "other".

The participants refered to a seven-day worksheet that was sent home with them (Appendix B). This worksheet was devised to assist the participant in recording concerns/needs during their first seven days at home. The problem areas included as headings were identified from the literature review as areas of concern. When the telephone interview was conducted the participants were requested to have the 7-day worksheet in front of them as a reference.

When participants were contacted for their interview they were asked if they checked anything on their 7-day worksheet. If the subject responded "yes" she was asked to comment, if "no" the researcher continued the interview. Probe questions

were used to elicit information included in the categories on the 7-day worksheet. The questions that followed identified what was most helpful to the patient regarding discharge preparation. Participants then were asked to address the areas that they would want changed regarding discharge. Additionally, subjects were asked to identify what the nurse could have done to make discharge easier. Probe questions were included, if necessary, to elicit more information in areas identified as a concern/need on the 7-day worksheet.

Validity and reliability. Content validity was established for the DPQ by submitting the questionnaire to three Masters prepared nurses experienced in perinatal nursing as well as research. Each validated the content appropriateness of the tool.

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

Interrater reliability 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. A function of agreements of 93% was obtained which constituted sufficient interrater reliability. Where there was disagreement, conferencing occurred to correct discrepancies. The telephone script developed (see Appendix E) avoided any variations in the way the instrument was administered.

Procedure

All patients who delivered at the study site between December 9, 1994 and

February 10, 1995 and met eligibility criteria were asked to participate in the research study. Participants were told that we were seeking information about how new mothers and their infants get along after going home from the hospital. All potential 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. The study was explained using the structured interview script (Appendix C), and the patient was asked to participate. Once the patient agreed to participate and discharge criteria was met, she was asked to sign two copies of the consent form (Appendix D). One copy, which contained the researchers' names and telephone numbers, was given to the patient. A mutually convenient time for the telephone call was arranged for the seventh day following discharge. Subjects were informed they would receive no direct benefit from participating and that they were free to withdraw from the study at any time. Three subjects moved away and were unable to be reached by telephone. One subject was unable to understand the questions and was thanked for considering participating in the study. One subject who declined to participate in the study was also thanked for her time.

Each subject was given a folder with the date and time to expect the interview call printed on the front. The folder contained the seven-day work sheets pertaining to questions 51 - 64, a copy of the consent which contained the researchers' names and telephone numbers and a blue card which contained the response scale to be used as a reference for the subject during the interview to rate the fourth question in each of the categories for questions #11 - #50. Subjects were instructed to make notes on the seven-day worksheet (Appendix B) that pertained to their concerns each day during

the first week at home. This would assist them in answering questions 51 - 64 during the telephone interview. Subjects were also instructed to have the folder available by the telephone the day of interview. After the consent was obtained and the information pertaining to the telephone call was agreed on, demographic information was gathered by the researcher from the patient and the hospital record. The date and time of the interview was also noted on a master interview schedule for the researcher's reference.

Each subject was called at the scheduled interview date and 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 on. 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 (Appendix E).

Protection of Subjects' Rights

There were minimal risks to subjects participating in the study. Steps were taken to maintain the confidentiality of the subjects 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 choose 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 made arrangements to finish the interview at another time chosen by the subject.

CHAPTER 4

PRESENTATION OF FINDINGS

This study's purpose was to describe the needs and concerns that low income women experience during the first seven days at home following discharge from a postpartum hospital stay of less than forty-eight hours. Telephone interviews were conducted on the seventh day following discharge.

Description of the Sample

Fifty-five postpartum women discharged between December 9, 1994 and February 10, 1995 from the maternity unit at a rural northern Michigan medical center met the study criteria. Three of the women had moved and could not be reached, one was unable to understand the questions and one chose not to participate in the study. Telephone interviews were obtained with the remaining 50 women during the 63 days of data collection. Data were obtained from two sources: the medical record and a structured patient telephone interview seven days after discharge from the hospital. The medical record and patient provided demographic information. In addition to demographic data, parity, length of stay in hours, type of primary care provider and attendance at childbirth education classes was noted. These data are summarized in Tables 1-3. The sample ranged in age from 18 to 43 years (M = 24.5). Only 26% of the subjects were older than 27 years of age. The typical subject had a high school education (68%), stayed in the hospital between 16 and 48 hours

Table 1

Patient Demographic Data (n = 50)

	n	%
Age of Patient		
18 - 21	20	40
22 - 27	17	34
28 - 34	10	20
35 - 43	3	6
Educational Level		
9 - 12th grade	10	20
High school graduate	34	68
Associate degree	1	2
Bachelors degree	3	6
Graduate school	2	4
Primary Care Provider		
Physician	34	68
Certified Nurse Midwife (CNM)	16	32

Table 2

Patient Length of Stay/Prenatal Class Attendance (n = 50)

	n	%
Length of Stay in Hours		
16 - 23	6	12
24 - 36	24	48
37 - 42	11	22
43 - 48	9	18
Prenatal Classes Attended		
Yes	35	70
No	15	30

Table 3

Parity (n = 50)

	n	%
Gravida		
First pregnancy	16	32
Subsequent pregnancy	34	68
Para		
No previous births	20	40
Previous births	30	60

(M = 33.8), and had other children (60%). In addition, 68% of the women were cared for by a physician, 70% had attended some form of childbirth preparation classes, and 78% were breastfeeding their infants. The number of needs and concerns these women experienced (see Table 4) ranged from zero to 18 (M = 3.4).

Concerns/Needs

Research question number one asked "are there differences in the number of needs/concerns of the mothers who have attended prenatal classes and those who have not?" Seventy percent (n = 35) of the mothers attended prenatal classes. Their concerns ranged from 0 to 18 (M= 3.5) during their first week at home. Thirty percent (n = 15) did not attend any form of prenatal class. Their concerns ranged from 0 to 14 (M = 3.1) during the same time period.

The second research question was "are there differences in the number of needs/concerns between women cared for by physicians and those cared for by certified nurse midwives?" Sixty eight percent (n = 34) of the women were cared for by a physician. They experienced concerns ranging from 0 to 18 (M = 3.7) during their first week at home. Thirty two percent (n = 16) of the women were cared for by a CNM. Their concerns ranged from 0 to 7 (M = 2.6) during the same time period.

While the two groups were not equal in number of participants, the two groups were found to be similar. The number of needs for a woman who was cared for by a physician and attended prenatal classes ranged from one to 18 (M = 3.7). The number of needs for a woman who was cared for by a CNM and attended prenatal classes ranged from 0 to seven (M = 3). Thirty percent (n = 15) of the women did

Table 4

Number of Needs/Concerns (n = 169)

n	Frequency	%
0	4	8
1	10	20
2	10	20
3	10	20
4	6	12
5	1	2
6 - 8	7	14
>13	2	4

not attend prenatal classes. Of these women 67% (n = 10) were cared for by a physician. Concerns for this group ranged from 0 to 14. Thirty-three percent of those participants who did not attend prenatal classes were cared for by a CNM. Concerns for this group ranged from 0 to 4. Due to the samll sample size, no conclusions can be drawn from this data.

The participants were given a seven day worksheet (see Appendix B) to assist them in recording any concerns experienced the first seven days at home. The worksheet consisted of six categories: self care, infant care, infant feeding, resources,

infant safety, and other. The categories were derived from the concerns expressed in the literature. Participants recorded concerns under each of these categories for the first seven days at home. The number of subjects identifying concerns is each area is presented in Table 5.

Self-care. The majority of the concerns expressed related to the self care category. Of the concerns expressed, ten (20%) were related to lochia changes and the presence of "large" clots during the first week. Lactation concerns were the most frequent, with fourteen women (28%) indicating that they had questions surrounding breast care, cracked nipples, engorgement, and the nutritional status of the mother. For example one mother commented, "my nipples were cracked and bleeding, my baby was crying, I didn't know what to do so I called my doctor."

Infant-care. There were 36 concerns in the infant care category. Seven mothers (14%) indicated concerns about the umbilical cord. They expressed their anxiety about knowing if it was infected and when it would fall off and heal. One mother was concerned because it was "dangling" and she thought the diaper might pull it off and hurt her infant. Jaundice was a concern for six (12%) mothers. One of the infants was readmitted to the hospital for phototherapy for three days. Three other mothers had to bring their infants to the laboratory for a blood test to check the bilirubin levels.

Under the category "Infant Feeding", 34 mothers (68%) commented about their concerns. Of these concerns, six (12%) mothers indicated they had difficulty latching their baby on for breastfeeding. Five (10%) additional mothers were

Table 5

Relationship of sample to area of concern (n = 50)

	n	%
Self-care		
lochia	10	20
lactation	4	28
Infant-care		
umbilical cord	7	14
jaundice	6	12
Infant-feeding		
latching on	6	12
not enough breastmilk	5	10
Relationships with siblings	3	6
father of baby	1	2
Resources		
no help	1	2
birth certificate	1	2

concerned that their infant was not getting enough breastmilk. Comments such as "he cries after I've fed him for 45 minutes, maybe I don't have enough milk" were common.

The category "Relationships" was designed to elicit information regarding concerns about the father of the baby, siblings' reactions, and the ease with which the infant integrated into the family setting. Six mothers (12%) commented that they had

concerns about relationships, specifically with other siblings. One mother was concerned about the lack of interest the father of the baby displayed toward both herself and the baby. This couple was not married and the father of the infant had not been involved during the pregnancy.

When mothers were questioned about concerns that they might have in regard to their infant's safety, they all expressed competence in this area. All of the mothers indicated they knew not to place their infant on his or her stomach for sleeping and the reasons for not doing so. No one commented that they had any concerns or unmet needs in this category.

The category "resources" was designed to elicit concerns about help from the family or the community. Only two mothers (4%) indicated they had a concern about the lack of resources. One mother had expected help from her mother-in-law and then her family. She was upset and disappointed when both parties cancelled leaving her alone to manage the new infant and two small children.

Under the category "other" two mothers (4%) commented on different concerns they were experiencing. One mother suddenly felt ostracized from her family and friends for being an unwed mother. She did not have other friends in the same situation and suddenly felt insecure with her decision to keep the baby. One mother felt that it was a terrible mistake to have had a tubal ligation during her hospital stay. She now had three children, two boys and a girl and was sure she and her husband wanted more. She stated "I'm going to have to have this reversed."

Help Needed. The researcher asked mothers what was most helpful and what the nurse could do to make the process easier for the mother. The majority of the

respondents answered with regard to what their immediate need was and the assistance that they obtained from the nurse in meeting that need. If it was a breastfeeding need, the mother responded that the most help was from the nurse who helped me get my baby latched on for breastfeeding. In answering the question "what the nurse could do to help make it easier for the mother" only three subjects (6%) responded, and they said "to limit my visitors." When asked what they would change about the discharge process, 18 mothers (36%) responded with the need for more information. The specific information desired focused on infant and self-care needs.

Summary

In summary, the most frequently mentioned concerns were regarding self care for the mother. Themes that emerged were that most women had received needed information either through childbirth preparation or during their hospital stay but lacked the confidence and needed reassurance to adequately apply the information to self-care. This was indicated by statements about being worried about getting an infection or having a bowel movement. Other mothers were unsure if they were cleaning the umbilical cord correctly. Some mothers were concerned that the infant was either not latched on correctly for breastfeeding or that he/she would not get enough breastmilk. The request for more information was a theme that emerged most frequently when mothers were asked what they would like to change about the discharge process. The information requested pertained to self-care and infant-care needs. In addition, 14 (28%) participants contacted a care provider by telephone during the seven days of data collection and 12 (24%) visited a care provider during the same time period.

The data displayed presents a strong argument that mothers who attend prenatal classes do not experience less concerns during the first seven days after discharge than their counterparts. Additionally, the data presents a strong argument that mothers who are cared for by a CNM experience less concerns during the first seven days after discharge, particularly among those who had not attended classes, than those cared for by physicians. In reviewing the data, the researcher found that 48% of the mothers expressed fewer than three concerns over the seven days of data collection. Of the remaining 52%, high numbers of concerns were expressed by mothers who had other children to care for and those who were breastfeeding their infants. Sixteen mothers expressed four or more concerns and fifteen (93.8%) of these mothers either contacted or visited their care provider within the first seven days after discharge.

The data collected from the comments expressed regarding concerns experienced the first seven days at home dealt mostly with a lack of information. While 70% of the mothers attended prenatal classes this did not reduce the number of concerns in the postpartum period. Support for mothers in the postpartum period needs to be further explored. Data from this study revealed that women who are caring for other children and those who are breastfeeding their infants have high numbers of concerns. These mothers are contacting their care providers for unmet informational needs. The results of this study can be utilized when assessing the needs of mothers and designing services which will be beneficial to postpartum mothers and their infants.

CHAPTER 5

DISCUSSION

This chapter contains interpretations of the findings of Chapter 4. Discussions of recommendations for further research, implications for nursing, comparisons to previous research and conclusions will be expressed. The purpose of this study was to provide evaluative information about the needs and concerns of the low income obstetrical patient following a postpartum stay of less than 48 hours. In studying the concerns that patients experienced, the researcher looked at two specific questions. Research Question 1 was, "are there differences in the number of needs/concerns of the mothers who have attended prenatal classes and those who have not?" Research Question 2 was, "are there differences in the number of needs/concerns of the women cared for by a physician and those cared for by a certified nurse midwife?" The researcher used Dorothea Orem's Conceptual Framework to assist in reviewing the data.

Findings

Concerns/needs. In reviewing the data the researcher found that 46 (92%) women had expressed some type of concern or need during the first seven days following discharge. The top three categories of concerns for women were self care (n=29), infant care (n=26), and infant feeding (n=25). Under the category of relationships six women expressed concerns, five of which were concerns with sibling

reactions and one was concerned about the lack of interest the father of the baby expressed toward herself and the infant.

The literature supports findings related to maternal care, infant care, and infant feeding as areas of concern most frequently (Hiser, 1987). Of the 34 concerns expressed in the infant feeding category, 76% were related to breastfeeding. Recent research has indicated that breastfeeding mothers have multiple maternal and infant concerns in the first six weeks postpartum (Hill, Humenick, & West, 1994). In addition, these findings revealed that although women may have attended at least one prenatal education class, the needs still remained high with 72% of the concerns (n=121) in this group. This supports Lemmer's (1987) research that looked at married women who attended prenatal classes and still had multiple concerns about infant feeding and recognizing signs of illness. In Lemmer's study there was a high frequency of contact with health care providers in the postpartum period. While this researcher did not specifically look at provider contact during the seven days following discharge, 14 women (28%) indicated that they called a care provider and 12 (24%) indicated that they visited a care provider with concerns.

The researcher anticipated that by gathering information about the concerns/needs experienced by low-income women, planning for changes and improvements for future women could take place. Data revealed that the concerns expressed by mothers (n=130) were mostly related to lack of information about self care, infant care, and infant feeding. These findings are consistent with the research findings of Norr, Nacion, and Abramson (1989) who compared three different

discharge programs for low-income women. Regardless of the time of discharge, women continued to have unmet informational needs in the postpartum period.

The concerns that address self care (n=50) for the mother, such as passing large clots, cracked nipples, and adequate nutrition for the lactating mother, could be alleviated through supportive-educative nursing systems. Orem's theory (1991) of nursing systems provides an adequate framework for the postpartum dyad. Supportive education by the nursing staff can minimize the concerns verbalized by the mothers in this research. The best time for this supportive education remains unclear.

The majority of concerns about infant care (n=36) identified by mothers were related to the umbilical cord and jaundice. One infant was readmitted for physiologic jaundice and treatment with phototherapy during the first week postpartum. This was the only readmission during the seven days of data collection. Most concerns verbalized were related to lack of information. Mothers sought information from either their care provider or their infant's care provider. Supportive-educative nursing systems could be designed to provide mothers with the knowledge they lack to learn self care and dependent care.

The majority of the women in this study chose to breastfeed (n=39, 78%) their infants. During data collection, the researcher found that 20% of the concerns were in the "infant feeding" category with 15% of them related in some way to breastfeeding. Mothers expressed concerns related to the unique characteristics of breastmilk stools, and the frequency of breastfeeding. This suggests the need for the availability of information to mothers in postpartum period. Recent literature is supportive of these findings regarding infant feeding concerns postpartum (Hill,

Humenick, & West, 1994). Additionally, mothers expressed concerns about sore nipples, engorgement, and difficulty latching infants for breastfeeding. Mothers verbalized distress and anxiety about breastfeeding, especially if the infant was fussy and crying. Supportive-educative care for postpartum mothers could assist by increasing knowledge and confidence as they assume caring for themselves and their infants.

Women who attended prenatal education classes (n=35) verbalized 121 concerns during the first week at home. This would indicate that regardless of the education in the prenatal period, concerns remained high in the postpartum period. Further study needs to be conducted looking at education and its timing, and the relationship to number and types of concerns.

Sixty eight percent (n=34) of the women were cared for by a physician. Of these women, 126 concerns were expressed during the first week following discharge. Women cared for by CNM (n=16) experienced 41 concerns. The researcher looked at the mean number of needs expressed and found it to be higher (M=3.8) for the women cared for by a physician versus those cared for by a CNM (M=2.4). This provides relevant data when looking at ease of accessibility to someone who could answer questions in the postpartum period. While the data collected does give a strong argument that women cared for by CNMs have fewer concerns than those who are cared for by physicians, there is limited research in this area to support or refute this claim. Further study is suggested in this area. What might account for this difference? Is it what CNMs do or is it something about the women who go to a CNM? This finding is supported by a meta-analysis of 54 studies comparing care

given by CNMs and nurse practitioners to the physician standard (Brown & Grimes, 1992). CNM patients were consistently as well or better informed about their health than MD patients.

Most helpful. Mothers identified a variety of things as most helpful to them as they prepared to be discharged from the hospital. Many of the comments dealt with the ability of the nurse to meet the mothers' immediate needs. The item named most frequently was the assistance that they received with breastfeeding (n=11). Ten respondents verbalized how "nice" the nurses were and often gave an example such as "they held my baby while I took a shower" and "they showed me how to change the baby's diaper." Teaching was specifically mentioned (n=5) as being most helpful.

Changes desired. Participants identified lack of information (n=11) most often as something they would like to see changed about the discharge process. Information needs pertained to infant jaundice (n=3), breastfeeding (n=3), lochia changes (n=2), infant stool changes and constipation(n=2). Three mothers stated that "they felt rushed" and "needed more general information about what to expect at home." The researcher noted that the topics mothers identified as areas that they needed more information about were the same areas of concern that they experienced during the first seven days of data collection.

Suggestions for nurses. Suggestions were limited when participants were asked to identify what nurses could do to make their discharge easier. Three mothers (6%) stated that they would like their nurse to limit their visitors. One mother mentioned that her mother-in-law intimidated her and she really did not want to share this special time with her. Another mother mentioned that she didn't want to hurt anyone's

feelings by asking them not to visit. This is valuable information for nurses working in settings which allow open visitation. Nurses must be aware of the need to assess what visitors the mother desires to be present and the timing of those visitors.

Future Direction

Parenthood brings many new challenges and responsibilities. First time mothers experience new adjustments that may produce anxiety and concerns. Second time mothers must learn to juggle other children with the demands of a new baby. Women are now routinely discharged from the hospital following an uncomplicated delivery at 24 to 48 hours. The length of a normal labor, delivery, recover, coupled with the need for rest, leaves little time for addressing educational and informational needs of most mothers. Immediate family members, who once participated with the care of the mother and infant, now live miles apart weakening support systems. Identification of specific areas of concern could facilitate the implementation of the supportive-educative nursing system. Through the identification of maternal concerns in the immediate postpartum period, nurses can design the education, be supportive, and evaluate the effectiveness of the system.

Planning education based upon the individual needs of the mother would have a very positive effect on the outcomes in the immediate postpartum period. Reinforcement and reassurance of the mothers' ability to provide care to herself and her infant is also important.

This study revealed that mothers do experience concerns after discharge following a postpartum length of stay of less than 48 hours. The concerns may be related to lack of information or the need for reassurance in providing the care. This

indicates that mothers need access to the information, support, and reassurance that they are providing necessary care appropriately. Alternative ways for mothers to obtain information in the postpartum period may be helpful to ensure that the quality of care received while in the hospital and education obtained prior to hospitalization is not negated by lack of resources after discharge.

Limitations of Research

The research study was limited by the use of a single study institution and a volunteer sample versus a random sample. The results of the study, therefore, can only be compared to a similar type of study. The study requires replication with a larger sample to substantiate the results.

Further investigation of the needs and concerns of postpartum women needs to be conducted with larger and more diverse samples. This research provided evaluative data on the low income population of women in a rural setting. Exploring diverse populations in different settings is suggested. Identification of anticipated concerns in the prenatal time period would allow the design of supportive-educative nursing systems thus enhancing the quality of outcomes and alleviation of anxiety for the mother.

Recommendations for Future Research

Further studies are required not only to determine the most efficient means of meeting the educational and informational needs of the low income mothers, but also to evaluate the effectiveness of the methods. Nurses must first evaluate the individual needs of the mothers and design appropriate interventions to assist in meeting those needs. Evaluation of the interventions provides valuable information to further direct

the design of supportive-educative nursing systems.

Future research might address the availability of a nurse practitioner to field questions during the first week following discharge. Attendance at prenatal education classes did not reduce the amount of concerns these mothers experienced. Additional research might investigate the timing of classes immediately after discharge. This would not only provide new education and reinforcement of care already learned, but at the same time bring mothers together for a support system.

Results of this study need to be available to prenatal educators at the study site. They are in a position to provide information based upon these results which might address issues before they become concerns in the postpartum period. Collaboration between prenatal educators, nursing staff, and care providers would also assist in providing consistent information to mothers. Continual evaluation of this process is also necessary to identify areas where changes need to be made. Anticipating the concerns based upon this research might assist in the design of educative systems.

The deletion of the 7 day worksheet developed for this study is recommended. The worksheet did not prove to be helpful in data collection. The majority of participants did not use this support tool to assist with telephone responses at home. This may have been influenced by the low income population that was studied and would perhaps warrant an additional trial with a higher income group.

Further investigation into the statements made by mothers regarding items they felt were most helpful or least helpful is also recommended. This would assist the obstetrical nurse during the inpatient stay and provide a more positive birth experience.

Further research might examine the relationship between prenatal education, support for breastfeeding, and the length of time the infant is breastfed. With additional education and support in the postpartum period, longevity of the breastfeeding experience may be enhanced.

Additionally, further examination of the relationship between care providers, prenatal education, and the number of concerns needs to be explored. Although this research is limited, it did provide information indicating less concerns in the participants who were cared for by a CNM. Further research is needed to determine the significance of the care provider to the number and types of concerns experienced by mothers in the postpartum period.

Implications for Nursing

The results of this study support the need for education and information for women during the postpartum period. The need for support, reassurance, and reinforcement of previous education is also evident. Nurses must consider and anticipate these needs and design programs to address the concerns of mothers. As the LOS for the obstetric patient continues to decrease, the importance of identifying specific needs and providing support must be stressed. Nurses skilled in evaluating the self-care agency of the mother, and identifying the self-care deficits, are then in a position to design a supportive-educative nursing system. Orem (1991) contends that the self-care agent has the ability to perform self-care and dependent-care once the knowledge is acquired. Nurses who assess the self-care deficits and design supportive-educative nursing systems, assist the mothers is learning the necessary skills thus promoting the self-care agent. Mothers who become knowledgeable about

their new self-care and dependent-care requisites in the postpartum period are motivated to accept this responsibility (Degenhart-Leskosky, 1988). Through combinations of guidance, support, and teaching, postpartum mothers gain the confidence and skills necessary to perform self-care and dependent-care. The need for services such as lactation consultation, public health nurses, and postpartum follow-up must be addressed. Community-based interventions and support services may be necessary to ensure a smooth transition home and enhance successful outcomes for the mother-infant dyad.

Summary

The results of this study suggest that individual assessment of the self-care agency and self-care deficits of the mothers must be considered. Design and timing of the supportive-educative interventions can then take place with evaluation conducted in the postpartum period. Anticipating the necessity of support for the mother in the postpartum time period can assist in alleviating undue stress and apprehension regarding maternal concerns.

It can be seen from the findings of this study that most women experience some degree of self-care deficits in the postpartum period. This is consistent with previous literature which addresses the same issue. Economics have dictated that early hospital discharge is the norm. As the length of stay becomes shorter, nurses who can identify and address the concerns of postpartum mothers can positively influence their outcomes.

APPENDICES

APPENDIX A

DISCHARGE PREPARATION QUESTIONNAIRE

APPENDIX A

DISCHARGE PREPARATION QUESTIONNAIRE

Phone call completed: yes__ no__

comments_____

Patient's name:_____ Significant other:____

Patient's address:_____

Phone number:_____ Date of phone call:_____

Time of phone call:_____ Second option:_____

Admission date and time:_____

Discharge date and time:_____

_____

Are you involved in Maternal Support Services? yes / no

Id#_____

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___

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 your 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 sooth 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 sooth 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

Id#_____

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:____

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

7 DAY WORKSHEET

APPENDIX B

7 DAY WORKSHEET

Instructions: Use this sheet to make any notes that you feel would be important information.

FIRST DAY:

What concerns have you had about caring for yourself?

_____

Has your family had any concerns getting used to the new baby?

_____

Have you asked anyone to help you?

_____

What are your concerns or questions about taking care of your new baby?

_____

Are you having any problems feeding your baby?

_____

Do you have any concerns about your baby's safety and is he/she sleeping on his/her side?

_____

Is there anything else you want us to know?

_____

SECOND DAY:

What concerns have you had about caring for yourself?

_____

Has your family had any concerns getting used to the new baby?

_____

Have you asked anyone to help you?

_____

What are your concerns or questions about taking care of your new baby?

_____

Are you having any problems feeding your baby?

_____

Do you have any concerns about your baby's safety and is he/she sleeping on his/her side?

_____

Is there anything else you want us to know?

_____

Third Day:

What concerns have you had about caring for yourself?

_____

Has your family had any concerns getting used to the new baby?

_____

Have you asked anyone to help you?

_____

What are your concerns or questions about taking care of your new baby?

_____

Are you having any problems feeding your baby?

_____

Do you have any concerns about your baby's safety and is he/she sleeping on his/her side?

_____

Is there anything else you want us to know?

_____

Fourth Day:

What concerns have you had about caring for yourself?

_____

Has your family had any concerns getting used to the new baby?

_____

Have you asked anyone to help you?

_____

What are your concerns or questions about taking care of your new baby?

_____

Are you having any problems feeding your baby?

_____

Do you have any concerns about your baby's safety and is he/she sleeping on his/her side?

_____

Is there anything else you want us to know?

_____

Fifth Day:

What concerns have you had about caring for yourself?

_____

Has your family had any concerns getting used to the new baby?

_____

Have you asked anyone to help you?

_____

What are your concerns or questions about taking care of your new baby?

_____

Are you having any problems feeding your baby?

_____

Do you have any concerns about your baby's safety and is he/she sleeping on his/her side?

_____

Is there anything else you want us to know?

_____

Sixth Day:

What concerns have you had about caring for yourself?

Has your family had any concerns getting used to the new baby?

Have you asked anyone to help you?

What are your concerns or questions about taking care of your new baby?

Are you having any problems feeding your baby?

Do you have any concerns about your baby's safety and is he/she sleeping on his/her side?

Is there anything else you want us to know?

Seventh Day:

What conerns have you had about caring for yourself?

Has your family had any concerns getting used to the new baby?

Have you asked anyone to help you?

What are your concerns or questions about taking care of your new baby?

Are you having any problems feeding your baby?

Do you have any concerns about your baby's safety and is he/she sleeping on his/her side?

Is there anything else you want us to know?

APPENDIX C

SCRIPT FOR OBTAINING STUDY CONSENT

APPENDIX C

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.

(Hand patient 7 day worksheet) 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 D

INFORMED CONSENT

APPENDIX D

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

_____ _____

Participant's Signature Date

_____

Researcher's Signature

APPENDIX E

TELEPHONE SCRIPT

APPENDIX E

TELEPHONE SCRIPT

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.

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