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THE UNIVERSITY OF ALBERTA

MATERNAL PERCEPTIONS OF POSTPARTUM TEACHING AND ITS USEFULNESS

by

RITA J. SMITH

A THESIS

SUBMITTED TO THE FACULTY OF
GRADUATE STUDIES AND RESEARCH
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FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled **Maternal Perceptions of Postpartum Teaching and its Usefulness** submitted by Rita J. Smith in partial fulfilment of the requirements for the degree of Master of Education in the Faculty of Educational Administration.

Supervisor

Date: Oct. 2, 1989

ABSTRACT

Very little of the nursing research conducted in the postpartum period has been concerned with the teaching about self and infant care that mothers receive in-hospital. The purpose of this descriptive study was to determine if current hospital teaching was meeting the learning needs of primiparous and multiparous mothers, to determine any unmet learning needs and to examine the utilization of in-hospital resources for information provision.

Two research questionnaires by Bull and Lawrence were adapted to suit the study hospital setting. The self-administered questionnaires were given to a stratified convenience sample of 50 primiparous and 50 multiparous mothers. One questionnaire was completed in-hospital prior to discharge and the second after two weeks at home.

Frequencies and percentages were used to describe the data about the learning needs related to mother and infant care. Frequencies were used to describe the data about resource utilization and usefulness of the information. Responses to open-ended questions were grouped as much as possible according to the topic areas on the questionnaire.

There was a tendency for primiparous mothers to be offered more information than multiparous mothers. Both groups received the most information about physical care of the newborn and the least information about social well-being and nutrition. Both groups of mothers referred to the hospital baby book for information but infrequently attended the scheduled classes about breastfeeding or nutrition. More assistance and information about breastfeeding was wanted by slightly more primiparous than multiparous mothers. Both groups also asked for more information about normal infant behaviors and growth and development. Multiparous mothers wanted more information about sibling adjustment.

The nursing implications put forward, based upon the study's findings, included the need for better nursing assessment of mothers' learning needs prior to instruction, keeping the hospital

baby book current and exploring alternate methods of providing information about breastfeeding and nutrition.

Recommendations for further study included the use of the interview technique, documenting the nurse's teaching in relation to what the mother stated she received and performing the study with mothers who experienced a multiple birth or an infant with congenital anomaly or admission to a neonatal intensive care unit.

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The completion of this research project was made possible by the support, guidance, and assistance of many people. To Dr. John Bergen who, as my advisor and Chairperson of my committee, had faith in my ability to complete this project despite my two postpartum experiences, a very sincere thank you. To Dr. Peggy Anne Field I express a special thank you for the assistance with the initial start of the project and the literature review. To Dr. Marg Harrison who offered so much encouragement and support while in the middle of her own research, thank you. Special recognition goes to Doreen Reid and Marilyn Evans for their valuable criticisms of each stage of this project and for their advice and support. Recognition is due to Joan Townend, my typist, who by now must know this material as well as I do. Additionally, I am indebted to the mothers who took the time at a busy time in their own lives to complete questionnaires.

Finally, I would like to extend thanks to my family and friends for supporting my efforts. To my daughters, Caitlin and Megan, whose arrivals in my life during this project infused it with new meaning and interest, and to my husband Paul for the encouragement, support and child care, thank you.

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CHAPTER 1

Introduction

Initially, maternity care in North America was largely the domain of midwives -- women who were experienced in attending births and who had many children of their own. As in the English tradition, midwives were regarded as a separate profession with a unique social role and not as part of the medical establishment (Neeson & May, 1986). After 1800, obstetrical care began to be a part of medical training and practice. Gradually, midwifery began to disappear so that by the end of the 19th century, obstetrical delivery was a specialty that only physicians could practice in many parts of North America (Neeson & May, 1986).

By the end of the 1930s, the hospital became the setting of choice for delivering a baby. It provided support for the physician's increasingly technological approach to obstetrics (Neeson & May, 1986). Advances in analgesia and anesthesia increased safety and comfort for many women while advances in operative and life-support techniques allowed intervention for high-risk mothers and infants.

Both societal changes and changes in medical obstetrical practice have impacted on the nursing role in obstetrical care. Lengths of hospitalization for childbirth have decreased dramatically from a routine ten day stay during the 1950s (Bryant & Overland, 1964; Neeson & May, 1986) to the current routine hospitalization of three days or less (Davis & Rubin, 1966; Bobak & Jensen, 1984; Neeson & May, 1986). As a consequence of shortened hospitalization, mothers who were routinely kept on bedrest for seven days in the 1950s (Fitzpatrick, Eastman, & Reeder, 1966) are now up within a few hours after birth and resuming responsibility for their personal care.

The move from extended to nuclear families and the increased mobility of the nuclear family means that many new parents have never cared for a newborn nor do they have the

assistance of their parents in learning infant care skills (Klaus & Kennel, 1982; Brown, 1982). The postpartal period is a time of transition, stress, and even crisis for many first-time parents. The couple must cope with their own physiological and emotional changes, role transitions and a change in lifestyle (Hiser, 1987). While experienced parents may not be subjected to as big an adjustment in lifestyle and role transitions as first time parents, they will still experience the physiological and emotional changes as they incorporate a new child into their family unit. The responsibility of teaching infant care skills and providing emotional support to new parents but especially to mothers has come to rest with nursing (Brown, 1982; Gorrie, 1986). While this aspect of nursing care is considered to be an important one, little research has been conducted to determine what teaching and emotional support mothers perceive they need.

Background to the Study

Redman (1981) stated that millions of dollars are spent on patient education but little is known about its efficacy. She further stated that while patient education takes much of its basic direction from the fields of teaching and learning, there is a great deal of confusion about the degree to which patient education is similar to or different from education occurring in other settings, namely schools. In particular, evaluation of patient education programs has been relatively non-existent.

In the obstetrical area, most of the past research in the postpartum period has been concerned with specific topics such as breastfeeding or with general satisfaction of the entire postpartum experience. In the studies related to satisfaction with the postpartum experience, mothers have expressed some dissatisfaction with the teaching received from the nursing staff (Ambrose, 1985; Chan & Juzwishin, 1984; Field, Campbell & Buchan, 1985; Filshie, Williams, Osbourne, Senior, Symonds & Brackett, 1981). Only one study could be found that

attempted to look at all of the relevant teaching re self and infant care that a mother might receive while in hospital. In that study, Bull and Lawrence (1985) found that information related to the mother's physical care was rated as less useful after the mother had been home for one week than when it was given in the hospital. Mothers in this study expressed a desire for more information regarding infant care and feeding and especially infant behavior.

Davis, Brucker and MacMullen (1988) attempted to identify the most important post-partum teaching topics from the mother's perspective. Four topics, postpartum complications, episiotomy/stitches, infant illnesses and feeding baby, were given top priority across all age and parity groups while the remainder of the topics varied in priority ratings according to age and parity. These researchers concluded that mothers can delineate their learning needs during the early postpartum period. They suggested, however, that additional research is required to determine the teaching intervention that will meet mothers' learning priorities.

Field and Houston (1987) found that nurses rated information on the topics of advantages of breastfeeding, breastfeeding techniques, breast care, bottlefeeding techniques, normal postpartum feelings and perineal care as a high priority for mothers to receive. Low priority topics included weaning, mother-infant acquaintance, family adaptation, changes in lochia, birth control and the six week check.

Purpose of the Study

The purpose of this study was to identify the information about self and infant care received by both primiparous and multiparous mothers in one large urban teaching hospital. The usefulness of the information to them and any additional information mothers would like to have received in the early postpartum period were also identified.

The following questions were formulated for both primiparous and multiparous mothers to guide the research:

1. What information did the mothers receive about self care and infant care in hospital?
2. What learning needs of the mothers were not being met by the current postpartum teaching?
3. How useful did the mothers perceive the information to be?
4. To what extent did the mothers utilize resources such as films, classes and print materials to meet their learning needs?

Definition of Terms

The Postpartum Period: (Also called the puerperal period or the puerperium) - that period of time during which the body adjusts, both physically and psychologically, to the process of childbirth. It begins immediately after delivery and lasts for approximately six weeks.

Postpartum Teaching: the provision of information to the mother which will assist her to care for herself and her newborn.

Primipara: a woman who has had one pregnancy which resulted in a live birth.

Multipara: a woman who has had two pregnancies or more which resulted in a live birth.

Assumptions

1. All nurses providing teaching to the mothers were following current hospital procedures.
2. All mothers had equal access to the hospital baby book and to baby bath demonstrations.
3. Access to the infant nutrition lecture and the breastfeeding video could be limited by the day of the week on which the delivery occurred.
4. The mothers' reporting of information was accurate.

Significance of the Study

Obstetrical nurses are in an excellent position to assist mothers to adjust to the physical and social changes that the birth of a newborn creates. Information obtained in this study may assist the nurse to make decisions about what to teach mothers in the short time available. It may also serve to remind nurses that experienced mothers continue to have learning needs following the birth of a baby. In addition, information obtained about the use of material resources, may assist nursing administrators who are constantly faced with decisions about how to best allocate their decreasing education budgets.

Summary

Although postpartum teaching is considered an important part of obstetrical nursing care, little research has been conducted to find out what information is most useful to mothers. Also, little is known about what other resources mothers may use to seek information about self and infant care. The purpose of this study was to add to nursing knowledge about the information mothers want and the resources most likely to be used by them.

CHAPTER 2

Literature Review

The literature review is comprised of three topics relevant to this study: the puerperium, patient education and evaluation. The puerperium and patient education sections are divided into a number of subtopics.

The Puerperium

The postpartum period, or puerperium, is the period of recovery from childbirth. The newly delivered mother is usually a healthy patient who is adjusting physically and emotionally from the experience of pregnancy, labor and delivery. McKenzie, Canaday and Carroll (1982) stated that the provision of care for the postpartum woman should consider the needs that arise from the four puerperal tasks of physical restoration, competence in learning to care for and meet the needs of a dependent infant, establishment of a relationship with the infant, and alteration of lifestyle and relationships to accommodate a new family member. Part of the physical restoration included nursing assessment of the mother's need for comfort measures which provide relief from episiotomy or laceration pain, hemorrhoids, uterine contractions, breast engorgement, and muscular soreness (McKenzie, Canaday & Carroll, 1982). They also remarked that descriptions of expected uterine and lochia changes, return of bladder and bowel function, loss of excess weight, return of muscle tone and resumption of menstruation should be discussed so that the mother would have an expected outcome against which she can measure and report progress.

The importance of comfort measures for mothers was emphasized in comments received about nursing care by researchers in separate studies (Ambrose, 1985; Chan & Juzwishin, 1984; Field, Campbell & Buchan, 1985). When comfort measures such as backrubs, breast compresses, sitz baths and perineal care were not offered the patients felt unattended and thought nurses were uncaring. Mothers noted that some nurses appeared rushed with little or no time for the patients.

In a study related to the priority ratings of post partum teaching topics, Davis, et al (1988) found that mothers rated "Postpartum Complications" and "Episiotomy/Stitches" as very important. Bull and Lawrence (1985) found that mothers rated information about physical care as less useful after one week at home. They speculated that this could be due to the healing process.

Postpartum exercise programs are specifically designed to restore muscle tone to abdominal and pelvic areas. Kelter and Shelton (1983) stated that for the best results, exercises should begin within twenty-four hours after delivery but they found that exercise has not been emphasized in nursing literature and was usually omitted in nursing practice. Two studies (Gruis, 1977; Moss, 1981) found that weight loss and return of the figure to normal were among the chief concerns of mothers. Harrison and Hicks (1983) found that women relied on books and pamphlets for their concerns about diet, exercise and the return of their figure.

Bobak and Jensen (1984) and Moore (1983) suggested that mothers avoid fatigue as much as possible by gradually increasing ambulation around the house and delaying full activity until after the postdelivery check. They also recommended that mothers have someone to assist them during the first two weeks at home if possible. Adequate sleep and rest are especially important for breastfeeding mothers since fatigue can adversely affect the secretion of breast milk and interfere with the let down reflex (Bobak & Jensen, 1984; Moore, 1983; Riordan & Countryman, 1980a). In studies of breastfeeding mothers at one month postpartum (Beske & Garvis, 1982; Gruis, 1977), tiredness was reported as a problem by the mothers. In another study of breastfeeding mothers (Chapman, Macey, Keegan, Borum & Bennett, 1985), the mothers reported being tired during the entire four months of the study.

Little is written in nursing journals about postpartum nutrition. Nursing textbooks (Bobak & Jensen, 1984; Moore, 1983) have suggested that the bottlefeeding mothers should have the same diet as the average non-pregnant woman of her size and build whereas the breastfeeding

mother has additional nutritional requirements. For both groups of mothers the use of roughage and an ample fluid intake was suggested to assist with bowel functioning. Riordan and Countryman (1980b) emphasized the importance of a well-rounded diet for all mothers but particularly for breastfeeding mothers. They stated that a continued, long-term poor diet and subsequent malnourishment of the mother eventually affects both the quantity and quality of the breast milk. They further stated that no foods needed to be avoided by breastfeeding mothers because of spicy or gas-producing qualities unless the mothers found a particular food to be a problem for her infant. The use of cigarettes, alcohol and caffeine should be limited by breastfeeding mothers (Lawrence, 1985).

Infant Care

In a number of studies (Ambrose, 1985; Chan & Juzwishin, 1984; Field et al., 1985; Filshie et al., 1981), mothers felt that they did not receive enough help and support from nursing staff with infant care activities. Ambrose (1985) and Field et al., (1985) found that having a nurse present for the first diaper change or bath made the mother feel more secure. Conflicting advice from nursing staff caused the mothers to feel confused and anxious (Ambrose, 1985; Field et al., 1985). Mothers in the Filshie et al. study (1981) felt that they would have liked more lectures, demonstrations, films and videos on infant care.

Bull (1981) found that after one week at home mothers had decreased concerns about the physical care of the infant and more concerns related to infant behavior. In 1985, Bull and Lawrence found that changes in infant behavior are likely to increase the mother's concerns about her mothering capability. Crying behavior in particular was upsetting to mothers once they were at home (Adams, 1963). In a study of concerns of breast-feeding mothers, infant concerns included infant behaviors such as fussiness, being sleepy or having day and night mixed; rashes; rate of

weight gain too rapid or too slow; and upper respiratory infections (Chapman et al., 1985). Another study (Sumner & Fritsch, 1977) which encompassed the first six weeks following delivery found that the majority of questions were related to infant feeding. Other concerns were bowel problems, skin rashes, sleeping and crying. Infant care topics "Infant Illness" and "Feeding Baby" were rated as very important by mothers in a study which attempted to priorize teaching topics (Davis, Brucker & MacMullen, 1988).

A recent aspect of infant care is the use of an infant car seat. Statistics show that automobile accidents are one of the major causes of death of Americans less than 35 years of age (Krozy & McColgan, 1985). Restraint systems may offer as much as a 90% reduction in potentially fatal injuries and a 78% reduction in serious injury (Krozy & McColgan, 1985). The safety of newborn and child auto travel has been improved by provincial legislation mandating usage of federally approved, age-appropriate restraints. However, many people continue to travel in automobiles either unrestrained or with improperly applied restraints (Goebel, Copps & Sulayman, 1984; Krozy & McColgan, 1985; Nachem & Bass, 1984). Goebel et al. (1984) found that mothers who received information about child restraints prenatally and again postpartum had the highest usage rate. They felt that incorporation of infant auto safety in the hospital teaching capitalized on a new mother's eagerness to provide the best care for her infant. Nachem and Bass (1984) stated that the person discharging the infant must make sure that the child is correctly restrained in order to break the image of the newborn riding home in its mother's arms.

Infant Feeding

Breastfeeding. Since the late 1970s, an increasing number of mothers have been attempting to breastfeed their babies. Fieldhouse (1984) found that rates for both full and partial breastfeeding began to drop immediately after discharge from hospital. In his study, only 66% of

the mothers were still fully breastfeeding after one month and at the conclusion of the study, 26 weeks post-partum, only 7 mothers were still fully breastfeeding. The highest rate of introduction of bottlefeeding, either as a supplement or as a replacement for breast milk, occurred during the first month. Fieldhouse suggests two possible explanations for this rapid decline in breastfeeding following discharge from hospital. The first is the loss of support from nursing staff which helped the mother to persevere with breastfeeding. Bottlefeeding may appear to be less demanding when faced with the need to cope with the other demands of family, economic and social life. The second explanation may be that the mother has reverted to her own personal preference of bottlefeeding once removed from any perceived institutional pressures to breastfeed.

Because the majority of births take place in hospital, the nurse is in a key position to instruct the new mother about breastfeeding. Gulick (1982) found that successful breastfeeding mothers, that is, mothers who breastfed beyond one month, had significantly more information regarding breastfeeding than unsuccessful mothers. Chapman et al. (1985) concluded that mothers need assistance and support from birth to sixteen weeks postpartum to help them resolve breastfeeding concerns as they occur.

Solberg (1984) stated that the type of nursing care that the mother-infant pair receives can influence success or failure in breastfeeding. Nurses working in the postpartum setting have developed their own biases and attitudes toward breastfeeding through educational preparation and working experience, and partly as a result of life experiences which may include personal experience with breastfeeding (Hayes, 1981; Solberg, 1984). Hayes (1981) examined the inconsistencies regarding breastfeeding knowledge and counselling among nurses working in postpartum areas. She found that the level of correct breastfeeding knowledge varied considerably among the participants. Crowder (1981) found that neither the length of experience in maternity nursing nor the frequency of contact with breastfeeding mothers appeared to increase nurses'

knowledge of breastfeeding success. Thus rather than getting sound basic advice from the professionals she looks to for help, the new mother may be exposed to many different opinions and suggestions.

Postpartum hospital environments have been criticized as being incompatible with conditions necessary to foster successful breastfeeding (Solberg, 1984). Through her literature review Solberg singled out such practices as separation of mother and infant, supplementary feedings, 4-hour feeding schedules and poor support for the mother as being detrimental. According to Ellis and Hewat (1983), other practices which interfered with breastfeeding physiology and resulted in breastfeeding failure came about when nurses attempted to combine the "modern" with the traditional practices.. These "modern" practices arose during the "scientific era" of the 1920s and included restricting sucking time on the breast, using both breasts at each feeding and not allowing night feedings (Fisher, 1984). Schlegel (1983) contended that nurses need to examine accepted breastfeeding concepts and practices to determine whether they were still valid or useful.

Solberg's (1984) literature review revealed that women with their infants rooming-in less frequently discontinued breastfeeding in the hospital and tended to breastfeed their infants for a longer period of time, when compared to a group of women who had their infants cared for in a central nursery. Howie (1985) stated that the common practice of having the baby in the nursery during the night in order to give the mother a good sleep may be socially kind but physiologically inappropriate since levels of the hormone prolactin are higher during night suckling. The production of prolactin is essential in the maintenance of an adequate milk supply. Howie (1985) also discussed the importance of the release of oxytocin which acts on cells in the breast to eject or "let down" the milk. He stated that sensory inputs such as seeing the baby or hearing it cry can

stimulate the release of oxytocin. Thus he concluded that keeping the mother and child close together makes physiological sense as well as having been shown to be effective in practice.

Four hourly feeding schedules and the use of supplementary feedings have been common practices in "modern" breastfeeding advice (Schlegel, 1983; Solberg, 1984). Ellis and Hewat (1983) stated that breastfed babies need to be breastfed whenever they indicate hunger (on demand), which is frequently two to three hourly and occasionally hourly. The rationale for demand feeding is that breastmilk is readily digested and leaves the stomach in about two hours and that infant-led feeding regulates the supply of milk, stimulating prolactin to meet the demand (Ellis & Hewat, 1983; Riordan & Countryman, 1980 a).

Supplementation of breast milk with bottles of glucose, sterile water or formula have been advised when it seemed as if the mother was not producing enough milk (Ellis & Hewat, 1983). However, these feeds are contraindicated if the mother wishes to persevere with breastfeeding since they interfere with the principle of supply and demand (Ellis & Hewat, 1983; Riordan & Countryman, 1980 a). Another problem with supplementary feedings is the nipple confusion which may result for some infants who are unable to make the switch between the sucking pattern needed for the breast versus that needed on the bottle (Riordan & Countryman, 1980 a). This can be a source of frustration for mother and infant which leads to discontinuation of breastfeeding (Riordan & Countryman, 1980 a).

Reiff and Essock-Vitale (1985) found that 85% of the nursing staff in their study counselled mothers that breastfeeding is best for infants, 94% of them agreed that there are situations in which supplemental feedings might be necessary and 81% of the nursing staff felt that certain mothers should be encouraged to bottlefeed. The researchers concluded that modeling of formula during the hospital stay was related to a rapid decline in commitment to breastfeeding

and that learning through modeling was more effective in shaping mothers' early infant - feeding choices than learning through verbal teaching.

Limiting the initial breastfeedings to three to five minutes per side and then gradually increasing the length of feeding by various increments was a practice advised to prevent sore nipples. However, a literature review done by L'Esperance and Frantz (1985) revealed that time limitations on breastfeeding did not prevent sore nipples but merely delayed the times at which soreness occurred. Riordan and Countryman (1980 a) stated that limitations of feeding time have other negative effects. They stated that with a strictly limited feeding time the let-down of milk may not occur which prevents the newborn from receiving full benefits of the colostrum. As well, engorgement may result from fluid left in the ducts and ductiles. When the breast is engorged it becomes hard and the nipples become inelastic making it difficult for the infant to grasp the areola (Lawrence, 1985; L'Esperance & Frantz, 1985; Riordan & Countryman, 1980 b). To initiate let-down of milk the infant would have to pull hard or bite down on the nipple with the jaws which traumatizes the nipple and could result in cracking of the stretched areolar tissue (Countryman & Riordan, 1980; Lawrence, 1985; L'Esperance & Frantz, 1985). Improper positioning during breastfeeding, use of only one position for feeding and failure to break the baby's suction on the nipple can also be causes of sore nipples (Riordan & Countryman, 1980 b; Schlegel, 1983; Lawrence, 1985).

Prenatal preparation of nipples has not been found to be effective in preventing nipple pain during breastfeeding (Hewat & Ellis, 1987). However, the use of lubricants such as lanolin, pure cocoa butter, Vitamin E oil and vegetable oil on dry skin can help condition the skin by making it less prone to cracking in response to infant sucking (Lawrence, 1985; L'Esperance & Frantz, 1985). Postnatally, cleansing the nipples with water only during the mother's daily bath

or shower and air drying the nipples following feeding is recommended to prevent excessive drying of the skin (Lawrence, 1985; L'Esperance & Frantz, 1985).

The application of various substances to the nipples postnatally has been suggested as a way to prevent or at least reduce nipple pain. Lawrence (1985) suggests that expressed breastmilk or colostrum applied to nipples after breastfeeding is beneficial for healing cracked nipples. Ointments such as lanolin are useful as they do not have to be removed prior to feeding unless the baby objects to the taste or smell and refuses to nurse (Bobak & Jensen, 1984). However, neither of these methods prevented pain in the study done by Ellis and Hewat (1987).

Sumner and Fritsch (1977) studied postnatal concerns during the first six weeks of life and found that the highest percentage of maternal questions related to infant feeding with the greatest number focused on breastfeeding. Reported postnatal concerns about breastfeeding included: an adequate amount of milk, sore nipples, infant having a preferred breast, and expressing and saving milk (Chapman et al., 1985). In-hospital concerns about breastfeeding have also been reported (Beske & Garvis, 1982). These included a sleepy baby, tenderness of the breast and nipple, baby not able to take hold of the nipple correctly, being clumsy, and difficulty finding a comfortable position.

A number of researchers have found that mothers were dissatisfied with the amount of information and help they received with breastfeeding (Ambrose, 1985; Chan & Juzwishin, 1984; Field et al., 1985; Filshie et al., 1981; Sheehan, 1981). The mothers' comments were as follows:
more assurances and privacy given to me when I first started nursing my baby would have been helpful;
nothing was explained or shown to me about breastfeeding;
information about flat nipples and other problems should be more available; sometimes the different opinions on what and how the baby should be fed can be confusing;

more consistency about practices from shift to shift would be helpful.

These comments are supportive of Gulick's findings (1982) that mothers need information about the breastfeeding process to successfully nurse their babies.

Just as important as having correct information about breastfeeding is the need for encouragement and support. A study done by Beske and Garvis (1982) found that the baby's father and the baby itself were the predominant sources of encouragement for breastfeeding mothers. Harrison and Hicks (1983) found that the women in their study most frequently relied on their husband for support. They concluded that including husbands in postpartum teaching whenever feasible would assist the husbands in supporting their wives.

Bottlefeeding. Very little is written about bottlefeeding an infant in nursing journals. Howie (1985) found that there was a high mortality rate among babies in developing countries who were bottle fed. This was due in part to making up the formula with infected water and partly because of improper modification of the milks. He noted a Canadian study done by Chandra (1979) which compared thirty breast and bottle feeding mothers to find that the incidences of diarrhea, respiratory infections, and ear infections were greater in those babies that had been bottle fed.

Health and Welfare Canada (1986) published a booklet with guidelines for infant feeding which health professionals can use when teaching mothers. All of the information is based on research studies as well as recommendations from both the Canadian and American Pediatric Societies. The booklet covers both breast and bottlefeeding topics as well as introduction of solids, the need for vitamins, safe water supply, homemade versus commercial baby food and foods to be avoided. As well it offers advice for a number of other topics such as colic, constipation,

regurgitation and food refusal which could be of concern to mothers. Also included are suggestions for diets of vegetarian infants.

A study done by Aberman and Kirchhoff (1985) found that proportionally more breastfeeding mothers had discussions with nurses about infant feeding than did bottlefeeding mothers.

Introduction of solids to the infant's diet. Broussard (1984) stated that mothers needed information about helping the infant to develop a positive attitude about food by establishing a pleasant atmosphere for eating, avoiding inappropriate use of food and by providing appropriate amounts of food at each stage. Bobak and Jensen (1984) stressed that solids should be given by a spoon and not added to a bottle.

Social Well-Being

Postpartum or "baby blues" have been found to affect as many as 50-60% of maternity patients. The "blues" occur between one to seven days after birth and are characterized by tearfulness, anxiety, depression, restlessness and irritability (McGowan, 1977). "Baby blues" on the third or fourth day are so common as to be considered normal (Ball, 1982). Bobak and Jensen (1984) suggested that the prevalence of these "blues" has deprived many women of the support they need. The cause of the "blues" has been attributed to the precipitous fall in estrogen and progesterone or to an imbalance of the two hormones (McGowan, 1977) or to a lowered level of circulating glucocorticoids or a condition of subclinical hypothyroidism (Bobak & Jensen, 1984). Following an anthropological review of childbirth customs in many cultures, Stern and Kruckman (1983) hypothesized that the negative outcomes of depression and baby blues in North America

result from the lack of social structuring of post partum events, social recognition of a role transition for the new mother and

instrumental assistance to the new mother.

Donaldson (1981) agreed that there is an absence of postpartum sources of help. She further speculated that the lack of use of community resources/agencies may be due to the American core values of autonomy and independence.

Changes in Patterns of Living

The first two weeks after the birth of a child is a time of many adjustments. The new parents are expected to assume added responsibilities, adapt to new roles, and adjust to changes in daily routine. Emotions range from an extreme high immediately after the birth, to a crisis low if an imbalance occurs between stressors and the parents' ability to cope with the changes (Hiser, 1987). In a study of expectant fathers, Fishbein (1984) found that there was less anxiety for the father when the couple agreed on the role the father would play in relation to the child.

Over 70% of the women in a study done by Harrison and Hicks (1983) were concerned about regulating the demands of husband, housework and other children, fatigue, emotional tension and finding time for personal interests. Bobak and Jensen (1984) believed that particular coping strategies such as setting priorities for tasks, having help with housework, getting plenty of sleep and rest and getting out of the house would be helpful to parents in readjusting their lives.

Mercer (1981) implied that the nurse has the responsibiltiy to intervene with the father to stress how important it is that he realize his wife's body is not yet back to normal and that she is not yet ready to resume all of the household tasks, entertain visitors, cook, etc. and get up for night feedings.

Sibling Rivalry/Emotional Tension

The most common concern of multiparous mothers is family relationships (Hiser, 1987; Moss, 1981). The complexity of the multipara's family unit is increased explosively (Mercer, 1979). Whereas the primipara, upon the birth of her child, moves from one interrelationship or dyad to three, the multigravida encounters four or more depending on the number of previous children. Furthermore, the repeat mother may worry about how she will relate to and love each additional child and how she can manage everyone's care (Mercer, 1979).

A study of repeat mothers (Knox & Wilson, 1978) found that having the first child was a big adjustment in terms of loss of freedom, loss of privacy and the new experience of parenthood and the second child did not alter these things that much. The mothers did, however, find that there was slightly more work, less time for themselves and for their husbands and more noise. Dealing with sibling rivalry was the biggest change in having two children.

Ways to prepare a child for a new baby can be suggested by nurses (Moore, 1983) or learned from other parents (Bobak & Jensen, 1984). Children need to be told about the new baby by the fourth month of pregnancy at the latest (Moore, 1983) so that the child has time to become accustomed to changes in the environment such as a different room or a different bed and to mother's absence from home when the baby is born. Books about new babies, either purchased or borrowed from a public library, may help the child to find someone like himself with similar problems (Gates, 1980).

One way of getting mother's attention away from the baby and back to himself is for an older child to regress in behavior and skills (Bobak & Jensen, 1984; Gates, 1980; Moore, 1983). Plans must be undertaken to divert aggressive behavior directed toward the baby. Bobak and Jensen (1984) suggested that the older child can be made to feel that he is still "special" by having certain times set aside for additional attention just for him, by going on outings with his parents while

the baby remains with a sitter and by pointing out that the older child has special food and toys that the baby doesn't have. Relatives and friends should be encouraged to concentrate some of their attention on the older child.

Bobak and Jensen (1984) stated that to expect a young child to accept automatically and love a rival for parents' affection is assuming a too mature response. Sibling love grows as does other love, that is, by being with another person and sharing experiences.

Changes in Sexual Relationships/Family Planning

Discussions about sexual relationships and family planning are necessary for new parents but may be difficult for parents and nurses to discuss. In a British study done by Filshie et al (1981), women admitted to being irritated or upset by questions about family planning. Others felt that the early postpartum period was not the best time and complained about the lack of privacy when advice was given. Bull and Lawrence (1985) were surprised that while mothers in their study requested a greater emphasis on teaching in the psychosocial area none of them explicitly asked for information about family planning. They suggested three reasons why this might be so: mothers participated in the study during the first three weeks postpartum, physicians often advise mothers to refrain from sexual intercourse until their four-to-six week checkup, and the study hospital was Catholic so mothers may not have expressed concerns about birth control because of religious beliefs. However, Fischman, Rankin, Loekin and Lenz (1986) found that 43% of the women in their study resumed sexual intercourse before six weeks postpartum. Sullivan and Bieman (1981) found that 30% of the mothers would have liked a health care worker to visit them at home to discuss a number of topics including resuming sex and birth control. Because many couples resume intercourse before the six week check is done by a physician, they should be counselled to wait until all bleeding has stopped and to express their love, affection and

appreciation for one another through kissing, holding, talking and touching (Bobak & Jensen, 1984). A coital position in which the woman has control over the depth of penile penetration and the use of a lubricant may make intercourse more comfortable for the woman (Bobak & Jensen, 1984; Moore, 1984). Couples need to be instructed that ovulation and conception are possible without having a period following the prior pregnancy. Temporary contraception such as condoms, gel or foam can be used until the first postdelivery examination by the physician (Bobak & Jensen, 1984).

Postnatally, libido and enjoyment have been found to decline more for the women than for the men (Ellis & Hewat, 1985; Fischman et al., 1986). Reasons for the decline included maternal fatigue, mood swings and depression and lingering pain in episiotomies. Breastfeeding mothers experienced discomfort from lack of vaginal lubrication, tender breasts and milk ejection with orgasm. Patience, understanding and open communication are essential if mothers and fathers are to adjust to their differing sexual desires and needs with a minimum of stress and tensions (Fischman et al., 1986).

While all of the preceding information may be worthwhile for mothers to receive, it is highly unlikely that all of it can be given to a mother during her hospital stay. One way of providing nursing care after hospital discharge was instituted in Edmonton (Juzwishin & Paddon, 1985). Community health nurses visited each postpartum patient individually in hospital to let her know what services were available. She could ask for a nurse to see her within the first week after discharge or wait for the later routine visit. Hospital nurses could also suggest to the community health nurse mothers who would benefit from an early visit.

Timing of Teaching

Knowing when a mother is ready to receive instruction in self and infant care is difficult. With shortened stays of only two or three days, most nurses feel that they must begin teaching as soon as the mother is admitted to the postpartum unit. However, Ambrose (1985) found that many mothers in her study were unable to take in information during the first 24 hours after delivery. The day of discharge is often rushed with information not previously covered. Aberman and Kirchhoff (1985) found that nurses tended to discuss infant feeding as part of the discharge instructions. One mother in Bull and Lawrence's study (1985) commented that it would be helpful to receive information before the morning of discharge as it was difficult to assimilate so much information at such a busy time.

Both Wiles (1984) and Sullivan (1976) found that prenatal breastfeeding education was beneficial. The third trimester mothers in Wiles' study had the motivation to learn about and prepare for breastfeeding as well as the time needed to receive and digest the information given to them.

Satisfaction With Nursing Care

Mothers felt more satisfied with the care and teaching received in hospital when the nursing staff were friendly, courteous and knowledgeable, took time to listen to the mother and answer her questions, and treated her as an individual (Ambrose, 1985; Field, 1985). Elements that detracted from a supportive environment included: sleep disturbances at night due to admissions and hearing other women's babies, and routine early morning awakening (Filshie, et al, 1981); inadequate information about hospital routines and lack of continuity of nursing care (Ambrose, 1985), lack of classes for mothers who delivered over a week-end, and nurses who appeared rushed and had no time for the mother (Field, 1985). All three researchers reported that conflicting advice

was given to the mothers by nursing staff, especially in the area of infant feeding. Field (1985) suggested that conflicting advice and criticism serve to increase feelings of inadequacy and to lower a woman's self-esteem. Ellis and Hewat (1984) stated that rather than taking over care of infants, giving unsolicited advice and incorrect information, nurses need to collaborate with the mother in her care which in turn will lead to a satisfying outcome for the mother, the infant, and the nurse.

Patient Education

The literature related to patient teaching seems to be based on two distinct foundations, the Health Belief Model and Adult Learning Theory. The Health Belief Model, developed in the 1950s, suggested that a major motivation to undertake preventive health behavior is the desire to avoid the perceived threat of disease (Broussard, 1984; Jenny, 1978). A belief in one's personal susceptibility to the threat and the seriousness of the threat, coupled with the benefits perceived from the recommended behavior, plus a cue or stimulus that triggers the recommended behavior result in preventive health behavior.

The Adult Learning Theory by Malcolm Knowles (1977) is based on four assumptions: adults are self-directed, adults have a reservoir of past experiences which influence their learning, their readiness to learn is related to the developmental tasks of their social roles, and that the learning should be problem-centered and immediately applicable.

Regardless of which of the two foundations is used for planning patient education, the underlying hypothesis is that people want and will positively use information, skills and perspectives regarding their health toward a safer and higher quality of life (Redman, 1981).

Definition of Teaching

Almost all of the literature on patient education begins with a definition of teaching. While each definition is worded differently, the concepts within the definition are in agreement. The first concept is that teaching is a systematic, planned action. The second concept is that after the action is undertaken a change in an individual's behavior will result (Fylling, 1981; Narrow, 1979; Redman, 1980). One commonly held belief in our society is that an act of "telling" is the same as teaching (Megenity & Megenity, 1982) and will result in learning taking place. This model of teaching is inadequate but widely used. Very little or no consideration is given to the principles of teaching and learning.

Principles of Teaching and Learning

Assessment of the Learner

Before teaching begins it is essential for the nurse to know what perceptual limitations her patient might possess (Narrow, 1979; Smith, 1987). It is also important to remember that people do not necessarily read at the level of their completed education. Research has shown that about 40% of the population reads at about a fifth to sixth grade level (Glazer-Waldman, Hall & Weiner, 1985; Miller, 1985). For that reason it has been suggested that health education materials be written at the sixth to eighth grade level for ease of comprehending the content (Smith, 1986).

A time of great emotional or physical stress is not an appropriate time for extensive teaching (Holden, 1985; Narrow, 1979; Smith, 1986). The amount of energy available for learning is closely related to the patient's physical condition, the current number of stressors in his life, and the degree of situational or maturational crises (Narrow, 1979).

Assessment of past learning and previous experiences is also important. Past experience can give patient-confidence that they can learn what is necessary to manage in his current situation

(Smith, 1987). By assessing past learning, the nurse discovers whether or not the patient has the basic concepts and facts needed in order to understand new material (Bille, 1981; Narrow, 1979; Chaisson, 1979-80; Taylor, 1984). As well, it may become apparent that the patient has a number of misconceptions which need to be corrected before new learning takes place (Bille, 1981; Taylor, 1984; Smith, 1987). Miller (1985) and Leff (1986) found that what the nurse considers to be a misconception may be a cherished value or belief in another culture. Such items may not be open to change. Knowles (1977) claimed that adults define themselves in terms of their occupation, where they have worked, where they have traveled, their achievements, etc. In a situation where past experiences are not used, or its worth is minimized, the adult may feel rejected as a person.

Readiness to Learn

Learning is thought to be most effective when an individual is ready to learn, that is, when a need to know something is felt (Miller, 1985; Narrow, 1979; Petrowski, 1981). Assessment of readiness to learn must include observations of the patient's physical condition, since discor fort and/or high anxiety, manifested by restlessness, distraction, inability to concentrate or remember, will prohibit the necessary patient engagement (Jenny, 1978). Patient behaviors indicating readiness to learn include questions about their condition and treatment, statements indicating anxiety about the situation and willingness to respond to the nurse's inquiries (Jenny, 1978; Miller 1985).

Reva Rubin (1961) related readiness to learn for postpartum patients to that of puerperal change. This theory has provided a major theoretical base for nursing care and continues to do so in current maternity textbooks (Bobak & Jenson, 1984; Moore 1983; Reeder, Mastroianni & Martin, 1980). Rubin delineated three postpartum phases with particular maternal behaviors

associated with each one. The "Taking-In Phase" was thought to last for one to two days during which the mother was passive and dependent and focused on her own physical needs. The "Taking-Hold Phase lasted for about ten days postpartum so much of it took place after discharge. At this time the mother was beginning to become independent and would respond enthusiastically to opportunities to learn and practice caring for herself and her baby. The final "Letting-Go" phase calls for two separations to be accomplished by the mother. One is to realize and accept the physical separation from the baby and the other is to relinquish her former role of a childless person. While Rubin's three phases are not disputed, the time limits for them are. Since the 1960s many aspects of maternity care have changed as have women's expectations about the postpartum period. Contemporary nurse researchers find that most women progress through these phases much more rapidly than Rubin suggested (Martell & Mitchell, 1984; Neeson & May, 1986).

The Learning Environment

Ideally, the environment should be quiet, free of interruptions and a place where normal speaking voices can be used in the teaching interaction (Smith, 1987). Items such as lighting, room temperature, odors and the number of people present can be distracting (Nursing 78 Skillbook). Beds and chairs used during the teaching session should be adjusted for comfort as individuals who are comfortable can listen longer and people who can see all of the instructional tools will comprehend more (Smith, 1987).

Part of the learning environment is the development of a positive climate in which learning can take place. The level of the patient's learning may be related to the level of trust and rapport developed through interactions between the nurse and the patient (Bille, 1981). Conveying respect for the patient by introducing yourself, asking about her comfort and concerns and

enhancing her self-confidence by encouraging her active participation help to create a positive climate (Smith, 1987). The critical factor in the patient's acceptance of the teaching offered will be her perception of the nurse's credibility as an authentic, authoritative source (Jenny, 1978). The determinants of credibility include expertness, trustworthiness and power or social status. The nurse's credibility will be a product of her professional knowledge, positive self-concept, willingness to embrace the role of teacher-facilitator, her initiative in establishing rapport with the patient and demonstrating her ability to help, her skill in maintaining a supportive nurse-patient relationship and her teaching skills (Jenny, 1978).

Time for Teaching

Fralic (1981) notes that unless specific teaching requirements are identified at the time of admission, it is unlikely that the nurse will find the time to teach. A trend towards shorter hospital stays means that more care procedures must be accomplished in a single day, leaving the patient little time or energy for learning (Bille, 1981). This means using every patient encounter as an opportunity to teach, or to perform one aspect of the teaching process such as assessing readiness or reinforcing teaching that has already taken place. Thus teaching is not a separate intervention but an integral and deliberate part of almost every nursing activity (Miller, 1985). Whenever possible, it is best to choose a time at the patient's convenience, especially when family members are to be included (Holden, 1985; Smith, 1987). The length of the teaching session is also important. Short sessions are often more effective in promoting memory of what is said (Miller, 1985). Wilson-Barnett (1985) suggested that sessions of 20-30 minutes are optimum. If the patient perceives the nurse as being busy, rushed or unconcerned, he or she may resort to seeking information from someone who seems to have the time to talk but who may be less qualified to provide information (Narrow, 1979).

Barriers to Teaching and Learning

Language and Terminology

Medical terminology may sound like a foreign language to a patient. By using words the patient can understand, the nurse will save time since further explanations may not be necessary and the patient will not have to imagine meanings of words (Bille, 1981; Miller, 1985; Narrow, 1979). By using layman's words to explain medical concepts, the nurse will not make the patient feel ignorant (Holden, 1985).

Information Overload

Bille (1981) and Currie (1985) found that there is a tendency for instructors to provide too much information in a short time interval. Health care personnel often err on the side of teaching too much detail in terms of pathophysiology, and medical terminology. These same teachers may then give too little detail in terms of expected side-effects of therapy, self-care management, coping strategies, or anticipation of the psychosocial impact of the health problem (Smith, 1987). Narrow (1979) stated that minimal teaching effectively done, is better than presenting extensive material, little of which is learned or even necessary.

Lack of Continuity

One of the problems in hospital is the number of different personnel who interact with a patient each day. Each nurse may have her own idea of what the patient should learn or may approach the patient in a different way (Chaisson, 1979-80; Bille, 1981). This can result in anxiety and confusion for the patient (Ambrose, 1985; Field, 1985).

Combined care is a method of providing care for obstetrical patients which decreases the number of interactions with personnel because one nurse cares for both the mother and her baby

(Watters, 1986). Watters stated that parent education and opportunities for role modelling and support are maximized in a combined care setting. Other benefits of combined care were noted by Vezeau and Hallsten (1987). They felt that this system allowed nursing staff to interact more easily with the rest of the family. As well, staff responsibilities for care and teaching were streamlined and nursing skills became more diversified which often led to greater job satisfaction.

The Teacher

Chaisson (1979-80) stated that a common mistake in patient education is teaching provided by individuals who are untrained in educational principles, methodology and evaluation. Bille (1981) argued that skill in the art of teaching is not the result of an advanced college education, but the result of actual practice. The nurse needs to be knowledgeable about the topic to be taught and to be able to perform any skills involved (Bille, 1981; Narrow 1979). Feelings and attitudes about a subject, such as birth defects, or about a patient, will affect the nurse's approach and may interfere with effective teaching (Narrow, 1979).

The Use of Audiovisual Aids

People learn better when more than one of their body's senses is involved in the learning process (Bille, 1981; Holden, 1985). Audiovisual materials such as posters, charts, print material, films, slide-tape presentations and videos can be useful supplements. It should be made quite clear however, that these aids or media are tools of the program and not the program itself (Kinsey & Schaffner, 1981; Narrow, 1979). The job of the educator is to find technology that works, both with groups and individuals. The proper use of tools can provide the content in a variety of modalities, at varying rates, at any time of the day, with exact repetition, and in some cases with built in feedback and reinforcement (Smith, 1987).

Print materials are the most often available aid to the patient educator (Smith, 1987). As previously noted, readability of print materials can be a problem and they are not cheap if patients don't utilize them (Smith, 1987). Field and Houston (1987) found that 95% of the hospital respondents in their study used printed material on a range of topics in postpartum care.

Teaching Methods

Individual teaching is probably done the most frequently in hospital simply because so many activities are performed on a one-to-one level. The nurse can give explanations, demonstrate a manual skill or answer questions while performing physical care for the patient (Bille, 1981; Miller, 1985; Smith; 1987). This allows time for teaching to be tailored to the patient's unique circumstance, experiences, abilities, etc.

Group teaching is useful when a number of people require the same information. Group teaching can be economical of a nurse's time and effort because it limits the need for endless repetition (Lewis, 1984). It can also provide an opportunity for people to learn from each other. Sometimes hearing from someone with a similar problem who has found an answer provides better social support than just talking to a nurse (Groog & Zigrossi, 1983; Holden, 1985; Lewis, 1984; Narrow, 1979). One drawback of a group is that participation by individuals can be hampered if there is a great variance in socio-economic levels (Groog & Zigrossi, 1983). The group leader's skills and past experiences together with her personal style of leadership, will also influence how well members interact and respond to each other (Lewis, 1984).

Evaluation

Worthen and Sanders (1973) defined evaluation as "the determination of the worth of a thing." Judgments about worthiness are made every day of an individual's life but usually without awareness of the process or the criteria used to arrive at that judgment (Ruzicki, 1987). Program

evaluation involves the systematic collection of information about the activities, characteristics, and outcomes of programs, personnel, and products for the purpose of diagnosing problems, weaknesses, and strengths. According to the American Joint Committee for Standards of Evaluation, each evaluation should have four features: utility, feasibility, propriety, and accuracy (Patton, 1981). Utility is of highest priority for if there is no prospect for the evaluation to be useful to some audience, it should not be undertaken.

Before undertaking an evaluation, a few key questions can help clarify the process. The first question is 'why do a program evaluation?' (Patton, 1981; Price & Vincent, 1976). One reason is the need to justify teaching especially when there is competition for scarce health care resources (Ruzicki, 1987). Poteet and Pollok (1986) stated that "a sound program evaluation plan as a method for measuring accountability, can lead to both organizational effectiveness and efficiency." Evaluation of practice is the practitioner's way of determining whether or not his work is good (Block, 1975). Evaluations are done to eliminate poor programs and improve adequate ones (Maxwell & Maxwell, 1983). And finally, program evaluation may be mandated by an outside agency such as the federal government or a credentialing board (Betz, 1984).

Secondly, 'when a program should be evaluated' depends mainly on the purpose of evaluation (Sohn, 1987). Evaluation should be included at the beginning of developing a new, or revising an old, curriculum. Evaluation of a new, or revised curriculum demands on-going assessment before and during the implementation of the program, as well as after the implementation and at the end of it.

The third key question is 'what do we really want to study?' A number of different items could be the focus of study. One of the most common of course is learner outcome (Betz, 1984; Block, 1975; Meleis & Benner, 1975; Ruzicki, 1987; Sohn, 1987). In this case, the evaluator wants to know the effects of the teaching strategies on the learner's knowledge, attitudes and

psychomotor skills. Or it may be important to determine if the program content and resources are appropriate. Betz (1984) stated that the scheduling of the program should be such that it reaches as many learners as possible. Costs of program materials, audiovisual equipment and teaching time might be examined (Ruzicki, 1987).

'Who should be involved in performing the evaluation?' Experts in program evaluation may be difficult to find. However, people with preparation in research design could be of assistance in designing the study (Price & Vincent, 1976). Sohn (1987) remarked that nursing faculty should be capable of doing program evaluation but could contact a consultant for assistance. In hospital, however, there may be few personnel with formal training in the foundations of education (Maxwell & Maxwell, 1983) and few nurses or physicians may have the time required to plan, conduct, and evaluate instructional programs (Sullivan, 1976). Whenever feasible all of the people involved in a program -- learner, teacher, administrator -- should be involved in the evaluation process (Munro, 1983).

The final question is concerned with 'what methods and tools are to be used during the evaluation.' A number of different predeveloped models and tools are available for use but a tool unique to a particular situation may need to be developed. In this event, pilot studies would be used to test instruments for reliability and validity (Poteet & Pollock, 1986). The best method for data collection needs to be selected, e.g., patient charts, patient interview. Are the data available without too much trouble or cost? Most agencies have an abundance of data. However, to put the data into the necessary shape for a program evaluation may be a tremendously complex and expensive undertaking (Price & Vincent, 1976). Too many data as well as too few data compromise the worth of the results (Poteet & Pollock, 1986).

Evaluation methodology, including potential benefits and designs, has been relatively undeveloped for patient education (Redman, 1978). Ruzicki (1987) has speculated that patient

education programs are not evaluated for a number of reasons: evaluation may be too complicated and too technical to be realistic for the average health care provider who has little knowledge or experience of research and statistics; the act of evaluating may be anticlimactic after a program is in operation: or, the provider may be wary of finding out the intended results were not achieved.

One form of patient education evaluation that does occur with some regularity is the patient satisfaction survey. The underlying assumption is that if we want to know how well patient needs are met, patients must be given the opportunity to report on and evaluate the basic nursing care they received during their stay (Simpson, 1985; Ferguson & Ferguson, 1983). Patients are asked to evaluate what they are best qualified to know: if their own basic physiological, comfort, safety, and emotional needs were met (Ferguson & Ferguson, 1983).

French (1981) undertook a thorough literature review of hospital patient opinion surveys to answer the questions when, where, and how it is most productive to ask hospital patients for their opinions. She found that overall, interviews obtain substantially higher response rates than self-completion questionnaires. However, where there had been a personal approach to the patient and where the topic was salient to the patient, response rates on questionnaires were as high as 85%. Insufficient evidence existed to establish whether patients were more honest in hospital or after discharge but the tendency seems to be for patients to be more critical while they are still in hospital. French (1981) concluded that the details of a study such as the wording of questions must not be neglected. There is little point in undertaking a study if the individual questions fail to elicit the patients' opinions or misrepresent them.

The final part of any evaluation is the reporting of the findings. Simpson (1985) stated that positive comments serve to enhance the provider's morale and motivation, negative comments to initiate change. In general, the recommendation sections of evaluation reports tend to focus on program deficiencies, things that need to be changed or improved, and areas in which a program is

weak (Patton, 1981). However, program developers also need to be told what is good about the program, that is, strengths upon which they can build, and assets they can use for program improvement (Munro, 1983; Patton, 1981).

A final reminder about evaluations is given by Patton (1981). "Because of limited time and resources it is never possible to look at everything. . . . Decisions have to be made about what is worth looking at. . . . That information that would be of greatest use for program improvement and programatic decision-making becomes the focus of the evaluation".

Summary

The majority of postpartum studies have been directed towards identifying women's concerns about self and infant care. There has been a heavy emphasis placed on matters pertaining to breastfeeding. Only a few studies have attempted to examine the mothers' learning priorities or the usefulness of the information she received. As well, most of the studies are directed at primiparous mothers. As a consequence, there is very little literature about the concerns of multiparous mothers.

There is extensive patient education literature available. Here the greatest emphasis is on the need for assessment. Nurses are advised to assess their patients for physical limitations and past learning and previous experiences prior to beginning instruction. As well, nurses need to be aware of factors that may affect the patient's ability to absorb information and to be aware of how they as teachers may affect the learning environment. Knowing how and when to use audiovisual aids to augment instruction is also important.

There is very little literature available about evaluation of patient education programs. Reasons why this is so are suggested with the most likely reason being a lack of qualified personnel. The importance of evaluation's role in program improvement and decision-making is

emphasized. Questions to be considered prior to undertaking an evaluation are suggested as a means of clarifying exactly what will be studied, how the study will be conducted and personnel required to conduct the study. The program evaluation report needs to include both positive and negative findings so that program developers know both the strengths and the deficiencies of the program.

CHAPTER 3

Methodology

A descriptive study was conducted to identify the information received by postpartum mothers about self and infant care, its usefulness to them and to identify additional items about which mothers would like to have received information. Data were collected between September, 1987 and December, 1987 in a large urban hospital through the administration of two questionnaires.

Setting

The study hospital was a perinatal referral center with fifty-four postpartum beds serving a wide socioeconomic population in Central and Northern Alberta. This hospital had the second highest number of births per annum of any Canadian hospital.

The beds were distributed over three nursing units. One unit consisted of only private rooms and another of only wards (4 beds), while the third unit was a mixture of private rooms, semiprivate rooms (2 beds) and wards.

Nursing care was provided via a system called combined care, which meant that the same nurse cared for both the mother and her baby. Rooming-in, whereby the mother could keep her baby beside her and care for it herself was also practiced. The actual number of hours of rooming-in varied from one unit to another. Mothers who delivered vaginally could expect to be discharged on their third or fourth day postpartum. However, because of the way in which postpartum days were calculated, some mothers who had delivered vaginally and were being discharged on their third day were in actual fact only forty-eight hours post delivery. Mothers who had delivered via a Cesarean section were discharged on their fifth to seventh post operative day.

Much of the teaching offered to mothers was done individually at the bedside. However, scheduled sessions were offered for some topics. These included a baby bath demonstration usually offered at 9:30 a.m. daily, the breastfeeding video which was offered Monday, Wednesday and Friday at 11:00 a.m. and an infant nutrition lecture given by the dietitian on Monday and Friday at 1:00 p.m.

Study Instrument

Two questionnaires were used to collect the data for this study, one in hospital and one at home. The original questionnaires were developed by Bull and Lawrence (Appendix A) and permission was granted by them to adapt the questionnaires for use in this study. (Appendix B)

Bull and Lawrence (1985) determined the questionnaire items through a literature review related to mother's concerns about self and infant, and teaching needs of new mothers. They also examined teaching flow sheets developed by nurses on local maternity units, as well as drawing on their own experiences from working with mothers.

To establish content validity for the instrument they asked a panel of ten nurse experts to comment on item clarity, format, and content. Only two items did not receive 100% agreement from this panel -- self breast examination and wearing a support bra. However, these items remained in the questionnaire since 70% of the panel agreed they were appropriate.

The researchers used Cronbach's alpha to establish the reliability of the questionnaire (Bull & Lawrence, 1984). Consistently high content reliability was found in two aspects of self-care: peri-care and activity, and in all categories related to infant care. Increased reliability was noted on the At-Home Questionnaire in elimination, food and fluids, and social interaction categories. One category, breast care, showed a decrease in reliability from hospital to home. No

further details were provided by Bull and Lawrence to show the measures used to establish reliability.

Questionnaire One was to be completed by the mother prior to leaving hospital. On it the mother was to indicate whether or not she already knew the information, whether or not the information had been offered during her stay and whether a nurse or someone else had provided the information. The mothers were asked whether or not they received any information that was not included in the items on the questionnaire and if so what was it. Demographic data were also gathered on this questionnaire.

Questionnaire Two was to be completed by the mothers after one week at home. In this particular tool mothers were asked to rate how frequently they carried out aspects of self-care practices and infant care and to rate the usefulness of the other information they received. One open ended question which asked "What other information would have been helpful to you" was also included.

Adaptation of the Questionnaires For This Study

Bull and Lawrence's questionnaire was distributed to three unit supervisors, four educators and twenty general duty registered nurses from the postpartum units. They were asked to remove any items that were not taught in the study hospital and to add any items which were not on the questionnaire but were taught here. The areas of pericare, breast care and care of baby were very high in agreement. Social well-being had the least agreement on items but at least 50% of the nurses agreed with these items so they were left in the questionnaire. Two items, "self breast exam" and "use of bulb syringe" were removed from the questionnaire as all of the nurses were unanimous in recommending deletion of these items. The item "use of ointment and spray" was also deleted because the majority stated that it was used only on orders from the physician.

These nurses recommended the addition of three items to the questionnaire - pumping of breasts, manual expression of breast milk and use of the infant car seat. A few nurses stated that they taught mothers about infant stooling and voiding patterns and birth control. However the numbers were not great enough to warrant adding them to the questionnaire.

Since the hospital's dietary department was responsible for giving an infant nutrition lecture twice a week, the dietitian was asked to review the nutrition component of the questionnaire. She recommended the addition of several items, a number of which had also been mentioned by the nurses reviewing the questionnaire. These items were:

factors affecting the quality of breastmilk
breast milk storage/freezing
vitamin D supplements
cleaning and preparation of equipment for milk storage
schedule for introduction of solids, juices and cow's milk
recommended baby foods vs. preparing your own baby food
storage of baby food
sterilization of bottles and nipples
use of microwaves to heat formula
recommended bottles and nipples
water supply (well water, distilled water, fluoride supplementation)

The adapted questionnaire also included questions about the mother's attendance at the group teaching sessions such as the bath demonstration, the breastfeeding video and the infant nutrition lecture. If the mother did not attend these classes, she was asked to state a reason. As well, this section asked questions about the mother's use of printed materials to gain information and whether or not she had enough assistance from a nurse during her first attempts to feed and bathe her baby.

The section on the original instrument which asked the mother who provided the information for her was deleted because the answers would not have been utilized in this particular study.

There were several additions to the demographic data. Mothers were asked about occupations, employment status and preparation for childbirth and child care as a means of more

fully describing the sample. Occupations were arbitrarily categorized by the researcher into five groupings. "Professional" was used to describe any occupation which required extensive preparation at the university or college level. "Technical" was used for any occupation requiring preparation at a technology institute. "Skilled" was used for occupations such as hairdresser and secretary, where training of a year or less would be required. "Semi-skilled" was used where the occupation required some on the job training such as a clerk-cashier. "Housewife" was used for those mothers who so designated themselves and for anyone not listing an occupation. "Student" was used for any mother involved in educational pursuits regardless of the level of study.

Questionnaire Two was changed so that the mothers were asked to rate the usefulness of all items. Frequency of practicing self or infant care items was not asked. Open ended questions were asked to gather mothers' opinions about gaps in the information given.

Following adaptation of the questionnaires, some of the nurses who had reviewed the original questionnaire were asked to review the revised one to check for clarity of instructions and clarity of the additions to the instrument. A number of lay people were also asked to review the questionnaires and comment on any perceived difficulties.

The Pilot Study

Permission to proceed with the study was obtained from the University of Alberta and the study hospital's Clinical Investigation Committee and the Director of Nursing.

The pilot study was conducted over July and August of 1987. The start of the study was delayed due to a postal strike. A total of twelve mothers were involved -- two primiparous and two multiparous mothers from each of the three postpartum units.

Names of eligible mothers were obtained from the unit supervisor or team leader on each unit. The mother was personally approached on the day before the anticipated discharge by the

researcher who explained the study to her. If the mother agreed to participate, she was asked to sign a consent. All participants were assured that their involvement was totally voluntary, that all responses would remain anonymous and that only pooled responses would be reported.

Two questionnaires were given to the mother. She was asked to fill out the first one before she left the hospital. A special collection box was placed on each unit in which the mother was to place her completed questionnaire.

The second questionnaire was sent home with the mother along with a stamped, self-addressed envelope. She was asked to complete this questionnaire after her second week at home and mail it back to the researcher. As part of the consent, permission was asked to telephone her just prior to the end of the second week to remind her to complete the questionnaire. The two-week time frame was chosen because a study by Adams (1963) indicated that the first ten days after discharge is the critical period for postnatal anxieties to occur. It was hoped that this time frame might therefore result in more responses to the questions about information that should be emphasized in hospital or information that the mothers would like to have been given.

Two multiparous mothers and one primiparous mother did not return Questionnaire Two. One primiparous mother did not leave Questionnaire One on the unit and could not be contacted by telephone. None of the mothers reported any difficulties with the instructions or item clarity so no changes were made to the questionnaires. The time to complete the questionnaires varied according to the amount of response to open ended questions. Most mothers needed about twenty minutes to complete it.

Data Collection

Data collection for the study took place from September to December of 1987. The same procedure of obtaining names of eligible mothers as in the pilot study was initially used.

However, it became apparent that the mothers obtained through this method were perceived as being "good subjects" for the study so the procedure was modified. The researcher searched the patient list and Kardex to list all the potentially eligible mothers and then confirmed with the nurse in charge that they did meet eligibility requirements. Following this change, a wider assortment of mothers was approached than with the initial method.

Each mother was individually approached, the study was explained to her verbally as well as through a written letter, and the questionnaires were left with her for approximately fifteen minutes so that she could look at them and decide whether or not to participate in the study. If she agreed to proceed, a consent was obtained, the questionnaires were coded and entered on a master list. Instructions about completion and disposal of the questionnaire were then reviewed with the mother. Completed in-hospital questionnaires were removed from the box on each unit, each day Monday through Friday by the researcher and checked against the master list. Some of the questionnaires were lost because the mothers left them at the bedside. Presumably they were put into the garbage by housekeeping staff who cleaned the discharge unit. Some mothers did not seal the envelopes provided for return of the questionnaire and left them at the nursing desk rather than placing them into the box provided. On one unit where this occurred, staff read negative comments about the nursing care received by a mother and were quite concerned about the use of this information by the researcher. A number of mothers who were approached to participate in the study, decided against it after they examined the questionnaires, feeling that they would not have enough time to complete it.

The unit with all public rooms seemed to be the most difficult one from which to obtain subjects. During the time of data collection, this unit seemed to have a larger number of mothers who did not meet the criteria for the study than the other two units. The last month of data collection was spent trying to complete the sample on this unit.

The mothers were phoned after two weeks at home to remind them to complete questionnaire two and mail it back to the researcher. If the questionnaire had not been received after a week to ten days, a second phone call was made to the mother. This was necessary in only a small percentage of cases. One problem during this phase was the advent of a second postal strike. Possibly a few questionnaires were lost during this time as some mothers stated they had mailed them back but they were never received by the researcher. As well, it was more difficult to get the questionnaires returned from the mothers obtained near the end of November due possibly to the busyness associated with the approaching Christmas season.

The Sample

A convenience sample of 50 primiparous and 50 multiparous mothers was drawn from the three postpartum units. The sample was stratified in that an attempt was made to obtain a certain number of subjects from each unit relative to its size. Ten primiparous and ten multiparous mothers were obtained from the unit with private rooms. Twenty primiparous and twenty multiparous mothers were obtained from each of the other units. Mothers were included in the study as they became available and consented to participate.

Eligibility Criteria

Primiparous and multiparous mothers were included in the study if:

1. they were 18 years of age or over
2. they were able to speak, understand and write English
3. they consented to take part in the study
4. they had a singleton birth
5. their baby was admitted to the normal newborn nursery and remained there throughout its stay

6. their baby had no known congenital anomalies

7. they resided within areas where long distance charges would not apply

8. they had spent their postpartum stay on only one unit.

Mothers who delivered via a Cesarean section or who had postpartum surgery were included in the study providing they met the eligibility criteria.

Characteristics of the Primiparous Mothers

A total of 48 mothers completed questionnaire one. Thirty-nine of the mothers were breastfeeding and nine were bottlefeeding. Their ages ranged from 18 to 36 with a mean age of 25. The majority of the mothers were educated at the high school (19) or technical college level (17). A few mothers were educated at the grade school (2), university (8), or postgraduate levels (1). Forty-three mothers were employed outside of their home and four were not. One mother chose not to respond. Of those employed, 37 were engaged in full-time work and six in part-time work. The majority of these working mothers were employed in skilled (20) or professional (12) occupations. The remainder of the mothers were in semi-skilled employment (8), or classified themselves as housewife (3) or student (1). Most of the mothers were married (33) and the rest were either living common-law (9), or were single (6). The majority of mothers prepared for childbirth by attending prenatal classes (41) and/or by reading books about infant care (45). Their length of stay in hospital following delivery ranged from 36 to 168 hours with an average stay of 84 hours.

Characteristics of the Multiparous Mothers

Forty-four mothers completed questionnaire one. Thirty-two of the mothers were breastfeeding and 12 were bottlefeeding. Their ages ranged from 19 to 37 with a mean age of 27.5 years. The majority of these mothers were educated at the high school (21) or technical/college level (16). The remainder were at the grade school (3), university (3) or post graduate level (1). Twenty-seven mothers were employed outside of their home. Of these 11 worked part-time and 17 full-time. These figures add up to one more than the number who stated they worked outside their home. It may be that one mother worked from a home business or was working both full and part-time. Most of these mothers worked in skilled (15) or semi-skilled (8) occupations. The remainder were in professional employment (5) or classified themselves as housewives (14) or students (2). The majority of the mothers were married (36) with a few living common-law (4) or being single (4). Most of the mothers (36) prepared for childbirth by reading infant care books before delivery. Only a few mothers (8) attended prenatal classes. However a number of them commented that they had taken prenatal classes during a previous pregnancy. The majority of the mothers (31) had two previous children. Eleven mothers had three previous children and the other two mothers had one and four previous children. Their length of stay in hospital following delivery ranged from 40 to 168 hours with an average stay of 72 hours.

Data Analysis

All data were coded and put into a SPSS-X file. Data were entered separately for breastfeeding and bottlefeeding mothers as well as for primiparous and multiparous mothers.

For Questionnaire One all responses to the items under Care of Yourself and Infant Care were reported as frequencies followed in brackets by percentages. On all items common to both the breast and bottlefeeding mothers, the numbers of each were added together and the percentages

were recalculated by the researcher. In each case the percentage was based only on the number of mothers choosing to answer that item as some mothers left some questions blank or answered only the "already knew this" category or only the "information given this hospital stay" category. All responses were the mothers' perceptions of what she already knew and what information was given during hospitalization.

Responses to questions about use of resources were reported only as frequencies. An attempt was made to categorize comments made by the mothers in response to the invitation to make additional comments about the care and teaching received.

In Questionnaire Two, the mothers were asked to rate the usefulness of the information they received about caring for themselves and their infants. In this case there were four categories from "not useful" to "extremely useful" and a column "not discussed" for any item about which the mother had received no information. In many cases the number of mothers who had not received information about an item was greater than the number rating the usefulness of the item. Therefore, a decision was made to report only frequencies of responses.

Responses to the four questions about further information, emphasis on teaching and the hospital baby book were categorized, as much as possible, into the headings used on the questionnaire, for example social well-being.

Summary

In this study, two self-administered questionnaires were adapted from a previous study to identify the hospital teaching being given to postpartum mothers re self and infant care, its usefulness to them and any additional items mothers would like to have been taught. The face and content validity of the instrument was established in a pre-test, and then administered to a stratified convenience sample of 50 primiparous and 50 multiparous mothers.

Frequencies were used to describe the sample in terms of the demographic variables. Frequencies and percentages were used to report the numbers of mothers who already knew the information prior to hospitalization and those who received the information in hospital. Frequencies were used to describe the usefulness of the information received. Responses to open-ended questions were grouped into categories which corresponded with those on the questionnaire whenever possible.

CHAPTER 4

Data Analysis of In-Hospital Information Received by Postpartum Mothers

The data collected in this study are presented and discussed according to the categories as they appeared on the questionnaires completed by the mothers. Each questionnaire had two main categories "Care of Yourself" and "Care of Baby" which were further divided into pertinent groupings of items. For each of these items mothers were asked two questions: whether or not they knew about the item prior to hospitalization and secondly, whether or not they received information about the item in-hospital. All responses were the mothers' perceptions.

In addition, Questionnaire One asked questions regarding the use of resources such as the classes, books, demonstrations, etc. available to the mothers while in hospital. Demographic data were also collected on the first questionnaire. Data for primiparous and multiparous mothers are presented separately. Forty-eight primiparous mothers and forty-four multiparous mothers completed Questionnaire One.

Primiparous Mothers

Care of Mother

Personal care. Prior to any instruction from nursing staff, a varying percentage of mothers already knew information about each item in Table 1.1 Four of the items were known by at least half of the mothers.

Sixty percent or more of the mothers received instruction during the hospital stay in five of the seven items. Two items "watch for decrease in vaginal flow" (55%) and "return of menstrual cycle" (41%) were less frequently taught by nursing staff.

No comments about the need for further instruction in personal care were received when additional comments about the care and teaching received were solicited.

Table 1.1
Personal Care for Primiparous Mothers

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
1. cleanse from front to back	26(57%)	20(43%)	39(84%)	7(16%)
2. use of sitz bath	11(23%)	36(77%)	40(85%)	7(15%)
3. watch for change in color of vaginal flow	13(28%)	33(72%)	29(60%)	19(40%)
4. watch for decrease in vaginal flow	19(43%)	25(57%)	26(55%)	21(45%)
5. normal after-pains	24(51%)	23(49%)	30(65%)	16(35%)
6. normal episiotomy pain	24(52%)	22(48%)	28(63%)	16(37%)
7. return of menstrual cycle (period)	29(62%)	18(38%)	18(41%)	26(59%)

n=48

Breastfeeding Breast Care. There were 39 primiparous mothers who chose to breastfeed. Of these mothers, 38 -- 97% of them reported that they already knew something about breastfeeding (Table 1.2). Of the ten items in this category, only three items -- "change position of baby with each feeding","manual expression of milk" and "pumping of breasts" -- were known by less than 60% of the mothers. Two items, "wear a support bra" and "use comfortable positions for breastfeeding" were reported to be known by 97% of the mothers prior to any in-hospital instruction by nursing staff.

The percentage of mothers who had information about the three previously low items improved in-hospital. Of interest, are the two items known by most mothers. Both of them were less frequently offered in-hospital but remained the most frequently offered information. Nine to 39% of the mothers indicated that they were not offered any instruction in items pertaining to breast care for breast-feeding mothers.

Table 1.2
Breast Care for Breastfeeding Primiparous Mothers

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
1. Wash hands before handling breasts	29(74%)	10(26%)	28(77%)	8(23%)
2. wash breasts once a day in shower with water only	30(76%)	9(24%)	25(69%)	11(31%)
3. wear support bra	38(97%)	1(3%)	32(91%)	3(9%)
4. use of ointment on nipples	27(69%)	12(31%)	31(84%)	6(16%)
5. air dry nipples after nursing	23(62%)	14(38%)	27(71%)	11(29%)
6. change position of baby with each feeding	16(42%)	22(58%)	23(61%)	15(39%)
7. use comfortable positions for breast-feeding	37(97%)	1(3%)	32(86%)	5(14%)
8. start feeding on alternate breasts	26(68%)	12(32%)	32(86%)	5(14%)
9. manual expression of milk	20(55%)	16(45%)	24(63%)	14(37%)
10.pumping of breasts	14(38%)	23(62%)	26(67%)	13(33%)

n=39

Bottlefeeding breast care. Only nine mothers chose to bottlefeed their babies. In each of the three categories (Table 1.3) at least 50% of the mothers already knew the information. The percentage of mothers offered information was less than for those who already knew about washing breasts once a day.

Table 1.3
Breast Care for Bottlefeeding Primiparous Mothers

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
1. wash breasts once a day in shower with water only	5(58%)	4(42%)	4(50%)	4(50%)
2. wear support bra	9(100%)	–	8(100%)	–
3. measures to relieve discomfort	4(50%)	4(50%)	6(86%)	1(14%)

n=9

Bowel care. The three items in this category (Table 1.4) were reported to be known by 52% or more of the mothers prior to hospitalization. From 45 to 65% of the mothers received in-hospital information on each of the items.

Table 1.4
Bowel Care for Primiparous Mothers

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
1. eat foods that prevent constipation	38(81%)	9(19%)	25(54%)	21(46%)
2. increase activity	24(52%)	22(48%)	21(45%)	26(55%)
3. drink extra fluids	34(72%)	13(28%)	30(65%)	16(35%)

n=48

Nutrition. Ninety-seven percent of all mothers in the study reported that they already knew they should eat a balanced diet (Table 1.5). However, only 67% reported receiving the

information in hospital. Of the mothers who were breastfeeding, 63% reported that they already knew about eating more calories, liquids and proteins than during pregnancy and 43% already knew about factors affecting the quality of breast milk. Information given about these two items in-hospital was reported to be 45% and 65% respectively. Of the nine mothers who chose to bottlefeed, seven reported that they already knew about decreasing portion sizes, sugar and fat in the diet if weight loss was desired. Only one mother reported receiving this information while in-hospital.

Table 1.5
Nutrition for Primiparous Mothers

	Already knew this		Information given this stay	
Item	Yes	No	Yes	No
All mothers (n=48)				
1. eat a balanced diet	47(97%)	1(3%)	30(67%)	15(33%)
Breastfeeding mothers (n=39)				
1. eat more calories, liquids, proteins than in pregnancy	24(63%)	14(37%)	21(55%)	17(45%)
2. factors affecting the quality of breast milk	16(43%)	21(57%)	13(35%)	24(65%)
Bottlefeeding mothers (n=9)				
1. if weight loss desired, decrease portion sizes, sugar and fat in diet	7(78%)	2(22%)	1(13%)	7(87%)

Rest and activity. All items in this category (Table 1.6) were reported to be known by most mothers. All of the mothers knew that they should avoid getting too tired. Ninety-four and 98% of the mothers knew they should plan to rest during the day and if possible, have help at home for the first few days. Although fewer mothers knew about doing Kegel exercises to tighten the pelvic floor and to limit heavy lifting, the percentages were still relatively

high at 85% and 81%. For all items in this category, fewer mothers reported being offered the information while in hospital. The most frequently talked about item was to plan rest during the day (62%) and the least frequently mentioned item was Kegel exercises (32%).

Table 1.6
Rest and Activity for Primiparous Mothers

	Already knew this		Information given this stay	
Item	Yes	No	Yes	No
1. Kegel exercises (tightening pelvic floor)	40(85%)	7(15%)	11(32%)	33(68%)
2. limit heavy lifting	39(81%)	9(19%)	18(49%)	27(51%)
3. plan rest during the day	45(94%)	3(6%)	28(62%)	17(38%)
4. avoid getting too tired	47(100%)	--	26(59%)	18(41%)
5. if possible, have help at home for first few days	45(98%)	1(2%)	26(59%)	18(41%)

n=48

Social well-being. The majority of mothers (92% and 96% respectively) already knew about the "blues" or mood swings and changes in patterns of living (Table 1.7). Eighty-three per cent knew to expect changes in their sexual relationship. Fewer mothers reported knowing how to handle "advice" (56%) or how to deal with emotional tensions (67%). In general the frequency of in-hospital information being given was low for all of these items. The most frequently discussed item was changes in patterns of living (33%) and the least frequently discussed item was how to handle "advice" (4%).

Table 1.7
Social Well-being for Primiparous Mothers

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
1. "blues", mood swings	44(92%)	4(8%)	13(29%)	32(71%)
2. changes in patterns of living	46(96%)	2(4%)	15(33%)	30(67%)
3. preparation of other children for new baby	20(43%)	26(37%)	2(5%)	42(95%)
4. how to handle "advice"	27(56%)	21(44%)	2(4%)	43(96%)
5. emotional tensions	32(67%)	16(33%)	9(20%)	36(80%)
6. changes in sexual relationship	40(83%)	8(17%)	10(22%)	35(78%)

n=48

Care of Baby

Infant feeding. Four items under infant feeding pertained to all primiparous mothers in the study. Eighty-five percent of the mothers reported that they already knew how to burp a baby and 68% knew to space feedings every 2-6 hours (Table 1.8). Slightly less than one-third of the mothers knew how to tell when a baby was finished a feeding (28%) or if the baby was getting enough milk for growth (31%). This information was reported to be given to only 37% and 33% of mothers respectively. Information about the other two items was offered to 80% or more of the mothers.

Table 1.8
Infant Feeding for Primiparous Mothers

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
All mothers (n=48)				
1. spacing feedings every 2 - 6 hours	32(68%)	15(32%)	41(89%)	5(11%)
2. burping baby	40(85%)	7(15%)	36(80%)	9(20%)
3. signs when baby is finished with feeding	13(28%)	33(72%)	17(37%)	29(63%)
4. signs that baby is getting enough milk for growth	15(31%)	33(69%)	15(33%)	31(67%)
Breastfeeding mothers (n=39)				
1. getting baby to take nipple	16(42%)	22(58%)	33(89%)	4(11%)
2. use of finger to break suction	28(72%)	11(28%)	32(86%)	5(14%)
3. breast milk storage/freezing	25(64%)	14(36%)	19(51%)	18(49%)
4. vitamin D Supplements	3(8%)	34(92%)	8(24%)	26(76%)
5. cleaning and preparation of equipment for milk storage	11(30%)	26(70%)	13(34%)	25(66%)
Bottlefeeding mothers (n=9)				
1. getting baby to take nipple	5(56%)	4(44%)	6(75%)	2(25%)
2. keeping nipple full of milk during feeding	5(56%)	4(44%)	4(57%)	3(43%)
3. types of formula available (ready-to-feed, concentrate, powdered)	7(78%)	2(22%)	6(75%)	2(25%)
4. preparation of formula according to directions on container	6(67%)	3(33%)	2(29%)	5(71%)
5. storage of formula according to directions on container	6(67%)	3(33%)	2(25%)	6(75%)
6. sterilization of bottles and nipples	9(100%)	-	3(38%)	5(62%)
7. use of microwaves to heat formula	4(44%)	5(56%)	3(38%)	5(62%)
8. recommended bottles and nipples	5(63%)	3(47%)	4(57%)	3(43%)
9. water supply (well water, distilled water, fluoride supplementation)	4(44%)	5(56%)	2(25%)	6(75%)

Five items in infant feeding pertained to breastfeeding mothers only. How to get the baby to take the nipple was known by less than half of the mother prior to hospitalization and by 89% of the mothers following their stay. Two items, use of finger to break suction (72%) and breast milk storage/freezing (64%), were already known by a high percentage of mothers. Information about breaking suction was given to 86% of the mothers but only 51% were told about breast milk storage and freezing. Almost one-third of the mothers knew about cleaning and preparation of equipment for milk storage (30%) and a little over that (34%) were given the information in-hospital. Only 8% knew about vitamin D supplements and 24% were told about it in-hospital.

Infant feeding for bottlefeeding mothers included nine items (Table 1.8). Only five mothers knew how to get the baby to take the nipples and six were given the information in hospital. All nine of these mothers knew about sterilization of bottles and nipples but only three received the information in-hospital. The types of formula available were known to seven of the mothers and was the item most frequently discussed in hospital. The water supply to be used for formula preparation was known by four mothers and only two received the information in-hospital. Overall, the number of mothers getting information during their stay tended to be low.

Infant nutrition for later months. Slightly more than one-third to one-half of the mothers knew about these items (Table 1.9). These items tended to be infrequently discussed in-hospital with only 20-30% of the mothers receiving information.

Table 1.9
Infant Nutrition for Later Months - Primiparous Mothers

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
1. schedule for introduction of solids, juices, and cow's milk	21(45%)	26(55%)	14(30%)	32(70%)
2. recommended nutrition resources	17(36%)	30(64%)	11(24%)	35(76%)
3. Commercial baby foods vs. preparing your own baby food	25(53%)	22(47%)	9(20%)	37(80%)
4. storage of baby food	21(45%)	26(55%)	9(20%)	37(80%)

n=48

Nursing assistance during infant feedings. Thirty of the 48 mothers had a nurse present during the first feeding. Of the 18 mothers who did not have a nurse present, 10 of them would have liked a nurse to be with them. Eleven out of 45 mothers (24%) felt that they received conflicting information from nurses about infant feeding.

Use of the breastfeeding video.

Of the 39 mothers who chose to breastfeed only nine attended the breastfeeding video when it was scheduled. Of these mothers, six felt the information was useful to them, three felt that they had already received the information from nursing staff and two stated that there was conflict between what a nurse had told them and the information in the film.

Reasons offered for why mothers did not attend the class included seeing a film in prenatal class, being busy with baby or personal care at the scheduled time, and lack of awareness of the video. Another group of reasons included the timing of the delivery and subsequent stay and not

feeling well enough to attend due to surgery. A few mothers reported a lack of interest or the presence of visitors at the scheduled time.

Use of the nutrition lecture.

Of the 48 mothers in the study, only five attended the nutrition lecture given by the dietitian. All five of these mothers found the information useful to them and only one felt that she had already received the information from nursing staff.

The reasons given for not attending the lecture tended to be the same ones given for not attending the breastfeeding video. The three most frequently cited reasons were not realizing there was a lecture, being busy with the baby and the lecture not being offered during the mother's stay.

Conflicting information about infant feeding. Mothers were asked to describe any conflicting information they were given about infant feeding. Breastfeeding mothers had the most comments beginning with how often to clean the breasts. The way to begin feeding the baby, what positions to use and how to hold the breast, the length of feeding time and whether or not to supplement with formula following breastfeeding were all sources of conflicting information.

The main source of confusion for bottlefeeding mothers was how much formula the baby should take. Some nurses suggested that the baby would take various amounts depending on its hunger while others told the mothers they were not feeding the baby enough.

Both groups of mothers complained about signs in the nursery that had scheduled feeding times and then being told to feed at the baby's demand.

Physical care. The majority of the mothers already knew about dressing baby for weather conditions and comfort (83%) and the use of an infant car seat (90%). The other four items

(Table 1.10) were already known by 30-48% of the mothers. The frequency with which information was given to mothers by the nursing staff was relatively high. All mothers received information about bathing baby and cord care, 96% were told about genital care and 83% and 79% were told about shampooing baby's hair at least once a week and combing or brushing the hair daily. The two items that the mothers most frequently knew -- dressing baby and use of car seats -- were the least frequently discussed in hospital. Two-thirds of the mothers were told when to cut baby's nails, which is just over double the number who already knew this information.

Table 1.10
Infant Care for Primiparous Mothers

	Already knew this		Information given this stay	
Item	Yes	No	Yes	No
1. bathing	20(43%)	26(57%)	48(100%)	--
2. shampooing at least once a week	19(42%)	26(58%)	38(83%)	8(17%)
3. combing/brushing hair daily	21(47%)	25(53%)	38(79%)	10(21%)
4. cord care	22(48%)	24)52%)	48(100%)	--
5. genital care	18(41%)	26(59%)	45(96%)	2(4%)
6. cut nails when sleeping (after 2 weeks of age)	14(30%)	32(70%)	31(66%)	16(34%)
7. dressing baby for weather conditions and comfort	38(83%)	8(17%)	25(54%)	21(46%)
8. use of infant car seats	43(90%)	5(10%)	25(57%)	19(43%)

n=48

Bathing the newborn. During the bath demonstration given by a nurse, 28 of the mothers were in groups of one to four mothers besides themselves. Fourteen mothers had

individualized instruction and the remaining six were in larger groups. Forty-one of the mothers said the demonstration took place in a patient room, four in the lounge and three in the nursery. The majority of the mothers (46) were able to see and hear everything during the demonstration and all felt free to ask questions about the bath procedure.

When the mothers bathed their own babies for the first time, 33 of them did not have a nurse present. Of these, only 10 mothers felt that they wanted a nurse present. Those mothers who wanted a nurse with them wanted the reassurance that they were doing the bath properly. Those mothers who said they did not want a nurse present commented that it was intimidating with a nurse present and that "it makes me nervous when they look over my shoulder." Still other mothers felt that having the demonstration on the day prior to them actually bathing their own baby was a poor practice. They suggested that if this practice continued, the mothers should at least be given a verbal refresher of the bath procedure. Another suggested alternative, was to watch the demonstration and then go immediately to their own baby and perform the bath.

Abilities of the newborn. The majority of the mothers (83%) knew that babies can see, hear and smile (Table 1.11). Three-quarters of them (77%) knew about the baby's reflexes but only slightly over one-third (38%) were aware that babies can block out noises and light. In all three items, fewer mothers were given the information in-hospital in comparison with those who already knew about infant abilities.

Table 1.11
Abilities of the Newborn-Primiparous Mothers

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
1. baby can see, hear, smile	40(83%)	8(17%)	18(40%)	27(60%)
2. baby's reflexes (sucking, rooting, startle)	37(77%)	11(23%)	25(56%)	20(44%)
3. baby can block out noises and light	18(38%)	29(62%)	12(27%)	33(73%)

n=48

Detecting signs of illness. Only 30% of the mothers knew what signs would indicate illness in a baby and only 23% were given the information during their stay (Table 1.12). Again only 30% of the mothers knew how to take a baby's temperature but this time 98% of them received in-hospital information on how to do it.

Table 1.12
Detecting Signs of Illness in the Infant - Primiparous Mothers

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
1. signs that baby is sick	14(30%)	33(70%)	10(23%)	34(77%)
2. taking baby's temperature	14(30%)	33(70%)	46(98%)	1(2%)

n=48

The Hospital Baby Book as a Source of Information.

Thirty-eight mothers indicated that they had read the hospital book or at least parts of it during their stay. Thirty-six of them thought it contained useful information.

Use of Pamphlets.

Only 18 of the mothers used the pamphlets stocked in the patient lounges. Some of the mothers who did not use them stated it was because they did not wish to enter an area where smoking was occurring.

Confidence.

Mothers were asked if they felt confident in their ability to care for themselves and their babies at home. Forty-two of the primiparous mothers were confident and six were not. They were asked to describe what further information they felt would be needed to make them feel confident. For some, it was a need for more practice and experience under nursing supervision. A few felt that they still hadn't had enough assistance to get the breastfeeding working as well as it should. One mother felt she had insufficient knowledge of what to look for in case problems arose.

Additional Comments About the Care and Teaching Received.

Mothers were given the opportunity to make comments about any aspect of their care or teaching received in hospital. The majority of comments were related to nurse attitudes and teaching with negative comments outweighing the positive ones.

Some mothers who felt that the care and teaching was good and that they were free to ask questions whenever they wanted to know something, commented as follows:

"I appreciated the nurses' concerns and visits to my room to see how things were going."

"Except for one or two nurses, they were very friendly and helpful whenever you asked questions."

"I was impressed with most of the nurses."

One patient felt that she had received tremendous care but found "the small rules known to hospital staff but not to patients were a constant annoyance." These included such items as no fathers allowed in the nursery and not walking in the hallway carrying the baby. Other mothers expressed similar comments about these "unknown rules." Frustration was expressed with the number of caretakers and the varying advice:

"I had too many nurses tell me too many things and all different."

"The nurses are good but get you confused with their conflicting advice."

Mothers were also very aware of the differences between nurses:

"Some nurses are not as diligent as others in explaining things and paying attention to patients' needs. I'm glad I had the baby book for information."

"Some nurses didn't take enough time to teach properly and weren't present long enough during the first feeding, first wash, etc."

"Nurses seemed to be so busy you often had to ask twice for help or wait a long time for help."

One mother who was also a registered nurse found she was expected to know a lot of simple things:

"I have never been [illegible] before so being treated as ignorant would have helped." Another mother sometimes felt that she was an "idiot" because:

"I seemed to ask a "dumb" question or do something the nurses thought was dumb."

"A smile once in a while would be nice."

A few of the primiparous mothers were so upset by nursing attitudes and actions that they made two or three pages of comments when they completed the questionnaire.

Multiparous Mothers

Care of Mother

Personal care. Four of the seven items in this category (Table 1.13) were already known by 84-93% of the mothers. Watching for changes in the color of vaginal flow was the least frequently (47%) known item. Two items, use of sitz bath (90%) and normal after pains (75%) were the most frequently discussed in-hospital. The least frequently discussed item at 17% was the return of the menstrual cycle.

No mothers remarked on the need for more information on personal care when additional comments were solicited.

Table 1.13
Personal Care for Multiparous Mothers

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
1. cleanse from front to back	37(84%)	7(16%)	27(69%)	2(31%)
2. use of sitz bath	41(93%)	3(7%)	36(90%)	4(10%)
3. watch for change in color of vaginal flow	21(47%)	23(53%)	21(53%)	19(47%)
4. watch for decrease in vaginal flow	28(64%)	16(36%)	18(45%)	22(55%)
5. normal after-pains	31(70%)	13(30%)	30(75%)	10(25%)
6. normal episiotomy pain	38(86%)	6(14%)	16(40%)	24(60%)
7. return of menstrual cycle (period)	38(88%)	5(12%)	11(17%)	29(73%)

n=44

Breastfeeding breast care. Thirty-two of the multiparous mothers chose to breastfeed their babies. On all but one item under breastcare (Table 1.14), over 80% of the mothers

already knew the information. The low item at 72% concerned manual expression of milk. In contrast to this is the information given in-hospital where only 4 items were discussed with more than 50% of the mothers. Manual expression of milk was the least frequently discussed item with only 25% of the mothers receiving information about it during their stay.

Table 1.14
Breast Care for Breastfeeding Multiparous Mothers.

	Already knew this		Information given this stay	
Item	Yes	No	Yes	No
1. wash hands before handling breasts	29(91%)	3(9%)	13(46%)	15(54%)
2. wash breasts once a day in shower with water only	26(81%)	6(19%)	13(45%)	16(55%)
3. wear support bra	32(100%)	--	19(68%)	9(32%)
4. use of ointment on nipples	28(88%)	4(12%)	18(64%)	10(36%)
5. air dry nipples after nursing	27(84%)	5(16%)	12(40%)	18(60%)
6. change position of baby with each feeding	25(81%)	6(19%)	12(39%)	19(61%)
7. use comfortable positions for breastfeeding	30(94%)	2(6%)	17(59%)	12(41%)
8. start feeding on alternate breasts	32(100%)	--	15(52%)	14(48%)
9. manual expression of milk	23(72%)	9(28%)	8(25%)	24(75%)
10. pumping of breasts	26(81%)	6(19%)	10(32%)	21(68%)

n=32

Bottlefeeding breast care. Twelve multiparous mothers chose to bottlefeed All of the items under breastcare (Table 1.15) were known to at least 58% of them. All of them were

told to wear a support bra but fewer mothers than those that already knew were given information about the other two items.

Table 1.15
Breast Care for Bottlefeeding Multiparous Mothers.

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
1. wash breasts once a day in shower with water only	7(58%)	5(42%)	6(54%)	5(46%)
2. wear support bra	12(100%)	–	11(100%)	–
3. measures to relieve discomfort	9(75%)	3(25%)	8(67%)	4(33%)

n=12

Bowel care. From 66 to 93% of the mothers already knew about bowel care (Table 1.16). A little over one-third of the mothers (37%) were told to drink extra fluids and the other two items were less frequently offered in-hospital.

Table 1.16
Bowel Care for Multiparous Mothers

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
1. eat foods that prevent constipation	40(91%)	4(9%)	14(33%)	28(67%)
2. increase activity	29(66%)	15(34%)	11(26%)	31(74%)
3. drink extra fluids	39(93%)	3(7%)	15(37%)	26(63%)

n=44

Nutrition. All mothers in the study knew about eating a balanced diet (Table 1.17). However, for the breastfeeding mothers just 58% and 65% knew about the other two factors. Little information was given in-hospital about any of these items. Ninety-two percent of the bottle feeding mothers knew how to decrease portion sizes, sugar and fat in the diet for weight loss. Just a little less than half of these mothers reported being given this information during their stay.

Table 1.17
Nutrition for Multiparous Mothers

	Already knew this		Information given this stay	
Item	Yes	No	Yes	No
All mothers (n=44)				
1. eat a balanced diet	43(100%)	–	21(50%)	21(50%)
Breastfeeding mothers (n=32)				
1. eat more calories, liquids, proteins than in pregnancy	18(58%)	13(42%)	5(16%)	26(84%)
2. factors affecting the quality of breast milk	20(65%)	11(35%)	9(29%)	22(71%)
Bottlefeeding mothers (n=12)				
1. if weight loss desired, decrease portion sizes, sugar and fat in diet	11(92%)	1(8%)	5(45%)	6(55%)

Rest and activity. The least well known information about the five items in Table 1.18 concerned Kegel exercises (67%). The other four items were known by the majority of the mothers. Discussion about these items was generally fairly low during the hospital stay. Two items, planning rest during the day and avoiding getting too tired, were the information most frequently given to mothers.

Table 1.18
Rest and Activity for Multiparous Mothers

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
1. Kegel exercises (tightening pelvic floor)	29(67%)	14(33%)	7(17%)	35(83%)
2. limit heavy lifting	40(95%)	2(5%)	14(33%)	28(67%)
3. plan rest during the day	42(98%)	1(2%)	21(49%)	22(51%)
4. avoid getting too tired	39(95%)	2(5%)	20(49%)	21(51%)
5. if possible, have help at home for first few days	39(93%)	3(7%)	15(37%)	26(73%)

n=44

Social well-being. The majority of mothers knew about the items in this category (Table 1.19). All of the mothers reported that they knew about the "blues". The least well known item was how to handle "advice" with 86% of the mothers knowing about it. Overall, there was very little information given about these items during the hospital stay.

Table 1.19
Social Well-being for Multiparous Mothers

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
1. "blues", mood swings	43(100%)	–	10(24%)	31(76%)
2. changes in patterns of living	42(98%)	1(2%)	11(26%)	30(74%)
3. preparation of other children for new baby	40(93%)	3(7%)	11(26%)	30(74%)
4. how to handle "advice"	37(86%)	6(14%)	9(22%)	32(78%)
5. emotional tensions	41(95%)	2(5%)	13(32%)	28(68%)
6. changes in sexual relationship	38(88%)	5(12%)	7(17%)	35(83%)

n=44

Care of Baby

Infant feeding. Of the four items pertaining to both breast and bottlefeeding mothers (Table 1.20), the item least known was about signs that baby is getting enough milk for growth (71%). The other items were already known by more than 80% of the mothers. Information on growth was provided less frequently than other information during the mothers' stay.

In the items pertaining to breastfeeding mothers only, the least frequently known items were again the least frequently discussed items during the hospital stay.

Infant feeding for bottlefeeding mothers included nine items (Table 1.20). The least well known item was about the use of microwave ovens to heat formula (67%). The only other low item already known to mothers was about the water supply for formula preparation (75%). Two of these nine items, getting baby to take nipple and keeping the nipple full of milk during feeding, were discussed with 60% and 50% of the mothers respectively. The remainder of the items were discussed with 22 - 45% of the mothers.

Table 1.20
Infant Feeding for Multiparous Mothers

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
All mothers (n=44)				
1. spacing feedings every 2 - 6 hours	40(91%)	4(9%)	31(74%)	11(36%)
2. burping baby	43(98%)	1(2%)	22(56%)	18(45%)
3. signs when baby is finished with feeding	36(82%)	8(8%)	17(43%)	23(57%)
4. signs that baby is getting enough milk for growth	30(71%)	12(29%)	13(33%)	26(67%)
Breastfeeding mothers (n=32)				
1. getting baby to take nipple	27(84%)	5(16%)	19(61%)	12(39%)
2. use of finger to break suction	28(88%)	4(12%)	20(67%)	10(33%)
3. breast milk storage/freezing	28(88%)	4(12%)	13(42%)	18(58%)
4. vitamin D Supplements	16(52%)	15(48%)	7(24%)	22(76%)
5. cleaning and preparation of equipment for milk storage	24(75%)	8(25%)	9(29%)	22(71%)
Bottlefeeding mothers (n=12)				
1. getting baby to take nipple	11(92%)	1(8%)	6(60%)	4(40%)
2. keeping nipple full of milk during feeding	10(100%)	--	4(50%)	4(50%)
3. types of formula available (ready-to-feed, concentrate, powdered)	11(92%)	1(8%)	4(36%)	7(64%)
4. preparation of formula according to directions on container	12(100%)	--	3(27%)	8(73%)
5. storage of formula according to directions on container	12(100%)	--	2(22%)	9(78%)
6. sterilization of bottles and nipples	12(100%)	--	5(45%)	6(55%)
7. use of microwaves to heat formula	8(67%)	4(33%)	2(22%)	9(78%)
8. recommended bottles and nipples	10(83%)	2(17%)	5(45%)	6(55%)
9. water supply (well water, distilled water, fluoride supplementation)	9(75%)	3(25%)	4(36%)	7(64%)

Infant nutrition for later months. Three of the four items were known by 86% of the mothers (Table 1.21). The least frequently known item, concerning recommended nutrition resources (67%) was the most frequently discussed item in-hospital (26%). Overall, there was little in-hospital discussion about any of these items.

Table 1.21
Infant Nutrition for Later Months - Multiparous Mothers

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
1. schedule for introduction of solids, juices, and cow's milk	39(87%)	5(13%)	9(21%)	33(79%)
2. recommended nutrition resources	29(67%)	14(33%)	11(26%)	31(74%)
3. Commercial baby foods vs. preparing your own baby food	37(86%)	6(14%)	7(17%)	35(83%)
4. storage of baby food	38(86%)	6(14%)	8(19%)	34(81%)

n=44

Nursing assistance during infant feeding. Sixteen of the 44 mothers had a nurse present during the first feeding. Of the 28 mothers with no nurse present, only three felt that they would have liked someone to be there. Only six out of 43 mothers felt that they received conflicting information from nurses about infant feeding.

Use of the breastfeeding video.

Of the 32 breastfeeding mothers, only two attended the video. One of the mothers thought the information in the video was useful, while the other felt that she had already received

the information from nursing staff and that there was conflict between what a nurse had told her and the information in the film.

The most common reasons given for not attending the video was that the mother had seen it with a previous child or felt no need to see it due to past successful breastfeeding experiences. A few mothers stated that they were too busy, did not feel well enough to attend or were not aware of it.

Use of the nutrition lecture.

Only one of 43 mothers attended the class given by the hospital dietitian. She felt the information was useful to her but that she had already received it from nursing staff. The majority of mothers felt no need to attend the class because of their past experiences as a mother. A few did state that they were unaware of the class, or were too busy or too unwell to attend.

Conflicting information about infant feeding. Mothers were asked to describe differences in infant feeding information they received:

"They all have a little different advice. Sometimes it's confusing but there is always one nurse who will spend extra time with you and help get the breastfeeding going well."

It was suggested by a third time mother that breastfeeding should be started in the delivery room as she felt there were fewer problems turning up later when this was done. She also thought that nurses who are helping new mothers start breastfeeding could benefit by attending some La Leche League Meetings.

"It has become obvious to me that there are a lot of things about breastfeeding that you cannot learn from books."

When to breastfeed seemed to be a source of problems as well: "The nurse seemed to want to force the baby to nurse when I felt he was still too sleepy to want to. In another hour and a half the baby started to suck just fine."

When and how much to feed was a problem area for bottlefeeding mothers. Scheduled feeding times were posted in the nursery. With one group of nurses observing these times and another saying to feed when the baby was hungry, mothers were uncertain as to what they should do. How much to feed was a source of anxiety. "One nurse would tell me to make my baby eat, when another realized that it only made him spit up."

Physical care. Only one of the eight items in this category, cutting nails when the baby is sleeping, was known by less than 89% of the mothers (Table 1.22). Even so, with 73% of the mothers reporting to know about it, the item was relatively well-known. Overall, these items were fairly frequently discussed during the hospital stay. Information on the two least discussed items, dressing baby for weather conditions and comfort and use of infant car seat, were provided for about one-half of the mothers.

Table 1.22
Infant Care for Multiparous Mothers

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
1. bathing	43(98%)	1(2%)	40(93%)	3(7%)
2. shampooing at least once a week	39(89%)	5(11%)	32(74%)	11(26%)
3. combing/brushing hair daily	40(91%)	4(9%)	35(83%)	7(17%)
4. cord care	42(95%)	2(5%)	40(93%)	3(7%)
5. genital care	39(89%)	5(11%)	37(88%)	5(12%)
6. cut nails when sleeping (after 2 weeks of age)	32(73%)	12(27%)	28(65%)	15(35%)
7. dressing baby for weather conditions and comfort	43(98%)	1(2%)	22(51%)	21(49%)
8. use of infant car seat	43(98%)	1(2%)	21(49%)	22(51%)

n=44

Bathing the newborn. The multiparous mothers were fairly evenly divided into groups of one to six other mothers for the bath demonstration. Eight mothers had individualized sessions and one mother was in a group of eight mothers. There were 33 demonstrations in patient rooms, six in the lounge and two in the nursery. Forty of the mothers were able to see and to hear everything during the demonstration and 41 felt free to ask questions during the procedure.

When the mothers bathed their own babies for the first time, 31 of them did not have a nurse present. Of these, only four mothers would have liked a nurse to be with them. These mothers felt that repeat mothers forget "how to tend to such a little person" and could benefit from having a nurse with them. Again, the idea of bathing immediately following a demonstration rather than waiting until the next day surfaced. The other mothers felt that they were comfortable

from their past experiences and did not require a nurse's presence. Some felt that they would be less nervous or awkward on their own. One mother felt that the bath demonstration she received was very superior to that of the one she had with her first child. "I feel if this quality is maintained throughout all education programs a very good job will be done."

Abilities of the newborn. The majority of the mothers knew about the first two abilities (Table 1.23) but only 64% knew that babies can block out noises and light. About one-third of the mothers received this information during their hospital stay.

Table 1.23
Abilities of the Newborn - Multiparous Mothers

	Already knew this		Information given this stay	
Item	Yes	No	Yes	No
1. baby can see, hear, smile	43(98%)	1(2%)	12(40%)	30(60%)
2. baby's reflexes (sucking, rooting, startle)	42(95%)	2(5%)	14(33%)	28(67%)
3. baby can block out noises and light	28(64%)	16(36%)	14(33%)	28(67%)

n=44

Detecting illness in the newborn. A high percentage of the mothers already knew how to tell if a baby is sick and how to take a temperature (Table 1.24). Only 2% more of the mothers were told how to take a temperature in-hospital. A low number of mothers (38%) were told about signs indicating illness in the infant.

Table 1.24
Detecting Illness in the Newborn - Multiparous Mothers

Item	Already knew this		Information given this stay	
	Yes	No	Yes	No
1. signs that baby is sick	35(80%)	9(20%)	16(38%)	26(62%)
2. taking baby's temperature	37(84%)	7(16%)	37(86%)	6(14%)

n=44

The Hospital Baby Book as a Source of Information.

Thirty-nine mothers indicated that they had read the book or parts of it during their stay. Thirty-one thought the information was useful. Those that didn't commented that it was the same book used during their previous stays and contained no new information.

Use of Pamphlets.

Only 14 mothers used the pamphlets stocked in the patient lounges. Some mothers indicated that they did not go into the lounges during their stay.

Confidence.

Mothers were asked if they felt confident in their ability to care for themselves and their babies at home. Forty-three of the multiparous mothers were confident and one was not. However, this mother did not make any comments about the information she would need to increase her confidence.

Additional Comments about the Care and Teaching Received.

Mothers were given the opportunity to make additional comments about any aspect of the care or teaching they received during their stay. About one-half of the multiparous mothers chose to make comments. The comments were divided into categories of nurse attitudes, teaching, environment and nutrition.

Nurse attitudes. Many of the comments contained both positive and negative aspects about nursing staff attitudes. For example:

"Most nurses are very helpful and try to make your stay very comfortable. However, there are a few nurses to whom it's just a job."

"Some nurses give excellent care and some don't."

A number of the multiparous mothers felt they were left to their own resources more than new mothers would be. Some were happy with this situation and others were not: "This is my second child and I can honestly say that all I have really been shown is a bath demonstration. I would have really liked some help with breastfeeding because I didn't have much luck the first time I tried."

Teaching. Several mothers were happy with the amount of teaching they had received. They commented that they felt they just needed a brushup course and could get what information they needed by questioning the nursing staff. Others felt that a review of all the information pertaining to mother and baby care was necessary as "it's surprising how much one forgets". Another mother felt that basically it was good teaching but far too regimented and scheduled. Other mothers were less pleased with the quality or quantity of information they received as evidenced by the following statements:

"Perhaps more information is supplied to first-time mothers?"

"A nurse eventually comes around and helps you but sometimes it takes a long time."

"I got a lot of information from th baby book rather than from the nurse."

"One nurse would ask if you needed information and before you could answer, she'd always b gone."

One mother was upset when the information she got from nursing staff was consistent. She felt that a variety of opinions would have been more helpful to her.

Environment. A few mothers did not receive any orientation to the location of showers, sitz baths, etc. - or received it later than they would have liked. One mother was concerned that "none of the nurses I confronted about the heat in the lounge seemed to care. Myself and others felt weak and uncomfortable jus[illegible]g in there. We may smoke but we have as much right to a comfortable atmosphere as the [illegible]"

Nutrition. The menu for breastfeeding mothers and the hallway nourishment cart did not find favor with some of the mothers. The mothers thought their menu should have "an addition of good nutritional foods and fluids." Mothers were upset when nurses recommended a decreased caffeine intake and then the only readily available fluid choices on the hallway wagon were all caffeine type drinks. They felt juices should be available at all time.

Summary of the Findings of Questionnaire One

For each item in Questionnaire One at least a small percentage of the 48 primiparous mothers felt that they already knew the information before their hospital stay. The majority of these mothers had prepared for childbirth by attending prenatal classes or through reading books

about infant care. The highest percentage of information already known occurred in the areas of breast care and rest and activity. Reports of teaching received in the hospital indicate that mothers received the least information in the areas of social well-being and infant nutrition. Overall, primiparous mothers expressed confidence in their ability to care for themselves and their infants upon discharge. While there were many positive comments about the care and teaching received in hospital, there did seem to be slightly more emphasis on the negative aspects of the care and teaching received.

Forty-four multiparous mothers completed Questionnaire One. Information already known was generally reported at fairly high levels with 47% being the lowest percentage. Many items were already known by all mothers. Mothers reported receiving little in hospital information in the areas of bowel care, social well-being and infant nutrition for later months. Few of these mothers used the breastfeeding video or the nutrition lecture because they felt they already knew the information from past experiences. Both positive and negative comments were made about the care and teaching received in hospital. However, these mothers tended to offset critical comments of perceived deficiencies in their care and teaching by supposing that the nurses viewed these mothers as experienced and therefore less in need of nursing time and attention. These mothers expressed willingness to approach nursing staff for any assistance that they required. Some of their negative comments were directed towards environmental and dietary concerns over which nursing has no direct control. However, nursing can present the patients' viewpoints to try to effect changes.

Overall, more multiparous mothers indicated that they already knew information which is probably due to their previous postpartum experiences. Except for an occasional item, primiparous mothers were more likely than multiparous mothers to receive information about an item in-hospital. This held true even in the areas of social well-being and nutrition which were least discussed with both sets of mothers. For both groups of mothers, the numbers attending the

breastfeeding video and the nutrition lecture are similar. Of interest too, is that the number of primiparous mothers who felt confident bathing their baby without a nurse present, is very similar to that of the multiparous mothers.

CHAPTER 5

Data Analysis of Usefulness of In-Hospital Information Received by Postpartum Mothers

Questionnaire Two was to be completed two weeks after discharge from the hospital. At this time the mother was asked to rate each item about which she received information for its usefulness to her. Four open-ended questions were asked to solicit the mothers' ideas about additional informational needs. A finding of interest to note is that despite the smaller N, on several items more mothers indicated that the topic was not discussed on this questionnaire than on the in-hospital questionnaire. As well, for some items, there were more mothers rating usefulness of items on questionnaire two than there were mothers receiving information about that item on questionnaire one. With the two week time interval between questionnaires, mothers may have obtained information through other sources such as the community health nurse, pediatrician or friends and relatives. In which case, they may have been rating the usefulness of information rather than the usefulness of information obtained in the hospital. Again, data for the two groups of mothers are presented separately.

Primiparous Mothers

Of the 48 primiparous mothers who completed Questionnaire One, 42 of them completed the second questionnaire after 2 weeks at home for a return rate of 87%. In this case the mothers were asked to rate the usefulness of the information they had received. For any item for which information was not received in hospital, they were asked to mark the not discussed choice. Answers to open ended questions were grouped by categories. Since the answers are spread out through several ratings of the usefulness of the information only the frequency of each response is presented in this section. Data are represented separately for primiparous and multiparous mothers.

Care of Mothers

Personal care. For most of the seven items under Care of Yourself (Table 2.1) mothers chose to rate the information received as useful or extremely useful. However for two items, normal episiotomy pain and return of the menstrual cycle, the number of mothers who did not receive information was higher than the number of mothers rating its usefulness. A number of items were rated as not useful or only slightly useful by a few mothers.

Table 2.1
Personal Care for Primiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. cleanse from front to back	1	1	17	18	5
2. use of sitz bath	–	2	4	25	10
3. watch for change in color of vaginal flow	1	4	14	7	16
4. watch for decrease in vaginal flow	1	3	17	6	15
5. normal after-pains	–	4	14	5	19
6. normal episiotomy pain	–	2	14	3	23
7. return of menstrual cycle (period)	1	1	7	2	30

n=42

Breast care for breastfeeding. The majority of the mothers rated the items in this category as either useful or extremely useful. One item, changing the position of the baby with each feeding, was the most frequently discussed with the mothers. Again, a number of items were not useful or only slightly useful to a few mothers.

Table 2.2
Breast Care for Breastfeeding Primiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. wash hands before handling breasts	1	1	20	6	6
2. wash breasts once a day in shower with water only	–	2	19	7	5
3. wear support bra	1	2	15	13	3
4. use of ointment on nipples	1	1	10	14	7
5. air dry nipples after nursing	–	1	16	14	3
6. change position of baby with each feeding	–	3	9	7	15
7. use comfortable positions for breastfeeding	1	3	12	16	2
8. start feeding on alternate breasts	1		12	18	3
9. manual expression of milk	2	3	12	9	8
10. pumping of breasts	3	3	12	12	4

n=34

Breast care for bottlefeeding. The three items in this category (Table 2.3), were slightly more often rated as extremely useful than useful. One item was rated not useful by one respondent.

Table 2.3
Breast Care for Bottlefeeding Primiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. wash breasts once a day in shower with water only	1	–	2	3	2
2. wear support bra	–	–	2	6	–
3. measures to relieve discomfort	–	–	2	4	2

n=8

Bowel care. Two items in this category (Table 2.4) were more frequently not discussed than rated. For each of the three items a few mothers found the information to be of only slight use to them. For the mothers who did receive the information, the items were rated as useful or extremely useful.

Table 2.4
Bowel Care for Primiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. eat foods that prevent constipation	-	2	9	8	23
2. increase activity	-	1	11	6	23
3. drink extra fluids	-	2	13	16	11

n=42

Nutrition. For all of the items under nutrition (Table 2.5) quite a high frequency of mothers stated they never received the information in hospital. The mothers who remembered receiving the information most frequently rated one of the items as useful and rated the other item as useful or extremely useful.

Table 2.5
Nutrition for Primiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
All mothers (n=42)					
1. eat a balanced diet	–	–	15	9	18
Breastfeeding mothers (n=34)					
1. eat more calories, liquids, proteins than in pregnancy	–	1	13	7	13
2. factors affecting the quality of breast milk	1	–	6	6	21
Bottlefeeding mothers (n=8)					
1. if weight loss desired, decrease portion sizes, sugar& fat in diet	–	1	1	1	5

Rest and activity. More mothers did not receive information about Kegel exercises than were able to rate it (Table 2.6). The numbers of mothers able to rate the usefulness of the information regarding limiting heavy lifting was equal to the number who received no information. The other three items were most frequently rated as extremely useful.

In this particular table, there are more mothers rating the usefulness of the information than those who received information on Questionnaire One. As well, there are fewer mothers marking not discussed here than on the first questionnaire.

Table 2.6
Rest and Activity for Primiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. Kegel exercises (tightening pelvic floor)	1	2	8	5	26
2. limit heavy lifting	–	2	15	4	21
3. plan rest during the day	1	1	14	22	4
4. avoid getting too tired	–	1	15	20	6
5. if possible, have help at home for first few days	1	–	14	17	10

n=42

Social well-being. This category has the highest frequency of information not being discussed with mothers under the Care of Yourself section (Table 2.7). Mothers who did receive the information were most likely to rate it as useful. One item, preparation of other children for new baby, was rated as not useful by four mothers which is reasonable as is the high frequency of the item not being discussed given that these are first time mothers. Two mothers did rate this item as useful to them.

Items 3, 4, and 5 have more mothers rating "usefulness" than originally received information. There are fewer mothers reporting items as "not discussed" on Questionnaire Two than on the first questionnaire.

Table 2.7
Social Well-Being for Primiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. "blues", mood swings	–	1	4	8	29
2. changes in patterns of living	–	2	7	5	28
3. preparation of other children for new baby	4	–	2	-	36
4. how to handle "advice"	–	2	6	3	31
5. emotional tensions	1	–	8	5	28
6. changes in sexual relationship	–	2	5	3	32

n=42

Care of Baby

Infant feeding. Four items pertained to all of the mothers in the study. Two items had a high number of mothers who did not receive the information. Those mothers receiving the information most frequently rated it useful and extremely useful. A few mothers chose to rate some items slightly useful or not useful.

The grouping of items specific to breastfeeding contained two items where high numbers of mothers did not get any information. Again the majority of mothers rated the information as extremely useful or useful.

Bottlefeeding items were most frequently not discussed. Those that were discussed were most frequently rated as either useful or extremely useful. Three items were rated not useful.

There are only slight discrepancies between the numbers on the two questionnaires for this topic.

Table 2.8
Infant Feeding for Primiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
All mothers (n=42)					
1. spacing feedings every 2-6 hours	1	1	20	16	4
2. burping baby	–	2	15	15	10
3. signs when baby is finished feeding	–	1	7	4	30
4. signs that baby is getting enough milk for growth	–	1	7	10	24
Breastfeeding mothers (n=34)					
1. getting baby to take nipple	1	1	16	13	3
2. use of finger to break suction	–	1	8	20	5
3. breast milk storage/freezing	–	4	6	13	11
4. vitamin D Supplements	–	3	4	2	24
5. cleaning and preparation of equipment for milk storage	1	–	4	7	22
Bottlefeeding mothers (n=8)					
1. getting baby to take nipple	1	–	3	2	2
2. keeping nipple full of milk during feeding	–	–	1	4	3
3. types of formula available (ready-to-feed, concentrate, powdered)	–	–	2	1	5
4. preparation of formula according to directions on container	1	–	2	1	4
5. storage of formula according to directions on container	1	–	1	1	5
6. sterilization of bottles and nipples	–	–	1	2	5
7. recommended bottles and nipples	–	–	1	1	6
8. water supply (well water, distilled water, fluoride supplementation)	–	–	1	1	6

Infant nutrition for later months. The majority of the mothers stated that they did not discuss infant nutrition in-hospital (Table 2.9). Mothers who received the information most frequently rated it as useful.

Table 2.9
Infant Nutrition for Later Months - Primiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. schedule for introduction of solids, juices, and cow's milk	–	–	8	3	31
2. recommended nutrition resources	–	–	9	3	30
3. Commercial baby foods vs. preparing your own baby food	–	–	7	2	33
4. storage of baby food	–	–	7	1	34

n=42

Physical care. The majority of mothers rated infant care items as extremely useful (Table 2.10). One item, dressing baby for weather conditions and comfort, was not discussed with the majority of mothers. A number of items were rated as only slightly useful by a few mothers and two items were rated not useful.

Table 2.10
Infant Care for Primiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. bathing	1	–	9	32	–
2. shampooing at least once a week	–	1	12	20	9
3. combing/brushing hair daily	1	2	12	21	6
4. cord care	–	2	9	29	2
5. genital care	–	3	11	25	3
6. cut nails when sleeping (after 2 weeks of age)	–	2	11	18	11
7. dressing baby for weather conditions and comfort	–	2	7	7	26
8. use of infant car seat	–	–	12	16	14

n=42

Abilities of the newborn. A number of mothers did not receive any information in this category (Table 2.11). Those that did receive information were most likely to rate it as useful and extremely useful. However a few mothers rated all three items as being of only slight use to them.

There is quite a big discrepancy between Table 1.11 and this one for items two and three. Twenty-five mothers stated they received information about reflexes but 38 mothers rated the usefulness of it. Twenty mothers indicated that they did not receive information in-hospital compared to 14 here. For item three, there were 12 mothers who received information in-hospital and 33 who did not as compared to 26 mothers who rated this item and only 15 stating they did not receive information.

Table 2.11
Abilities of the Newborn - Primiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. baby can see, hear, smile	-	2	13	4	23
2. baby's reflexes (sucking, rooting,startle)	-	2	16	10	14
3. baby can block out noise and light	-	3	13	10	15

n=42

Detecting signs of illness in the infant. The majority of mothers were not told how to determine if a baby was sick (Table 2.12). Those that were rated the information as useful. The majority of mothers rated learning how to take baby's temperature as extremely useful.

Table 2.12
Detecting Signs of Illness in the Infant - Primiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. signs that baby is sick	-	-	9	6	27
2. taking baby's temperature	1	3	7	31	-

n=42

Responses to open-ended questions.

The first question asked was whether or not mothers had read any of the hospital baby book since going home. Twenty-seven of the mothers had read the book and fifteen had not. Mothers were also asked if there was a specific part of the book that had been most helpful to

them. Almost all areas of the book were listed by at least one mother. Reference was made most commonly to areas dealing with breastfeeding and breast care, followed by those concerning infant care, and personal care and hygiene for the mother.

The second open-ended question asked the mothers what additional information should be included in the hospital baby book. A number of mothers felt there should be more information about how to tell if baby is unwell, what to do about skin rashes, how to deal with babies who do not burp easily and how to cope with a colicky baby. Some mothers wanted more information about breastfeeding concerns such as engorgement, how often to pump, how to store breast milk, how to deal with engorgement and how to wean a baby once feeding of solids had started. Areas related to social well-being were also identified. These included emotional changes such as crying and fear of being alone, the need to repeatedly talk about the labour and delivery experience, sexual relationships and birth control methods. Some mothers felt the hospital telephone number should be included so that they could call back to ask questions.

The third question asked if there were a particular area of teaching that should have been emphasized more during the hospital stay. Twenty-four mothers responded with ideas. Most of the comments were directed at breastfeeding concerns. Mothers felt the need to have more assistance while they were in hospital. They also wanted to know what was normal in demand feeding and how a baby works into his own pattern. Mothers also felt that they didn't know what to do to increase their milk supply or how to cope if the milk let-down reflex occasionally didn't work. Others felt that they needed more information about how to express breast milk and about foods not recommended when breastfeeding.

Bottlefeeding mothers were concerned with a normal amount of formula intake per day. Both bottle and breastfeeding mothers felt that how long to feed, normal weight gain and spitting

up should be emphasized more in-hospital. Some mothers felt that the hospital did not clearly inform the mothers of its expectations about mothers being responsible for night feedings.

Cesarean section mothers felt that how to care for the incision at home and the need to have assistance during the first week at home should have been emphasized more during their hospital stay.

All mothers suggested more emphasis be placed on normal patterns of infant feeding, sleeping and crying.

The final question asked the mothers what other information would have been useful for them. Fewer ideas were put forward in response to this question. The use of postpartum classes or a person from the hospital who visited in the mother's home were suggested as ways to answer questions arising once discharged from the hospital. More information was wanted about infant stages of development and care, normal stool patterns, changes in the digestive system, when to tub bath, how to tell if the baby is getting enough breast milk for growth, and how to tell if the baby is ill. Some mothers felt that a list of supplies for infant needs at home would have been helpful. The Cesarean section mothers suggested a need for more information on Cesarean births and physical care and concerns for postpartum. A few mothers wanted more information on social well-being, especially the "blues," and a few wanted to know more about physical items such as normal afterpains and getting baby latched onto the nipple.

Some of the mothers made critical comments:

"Nurses could have been more helpful and understanding as postpartum is a very emotional and mixed period."

> I have no more use for the staff at this hospital for I was very disappointed in my stay. I hope the hospital would change in attitude, cut-backs and moody

nurses. It's bad enough the patient being moody and then getting a moody nurse. It really makes your day and/or night.

The nurses should list all of the things parents aren't allowed to do in hospital and post them on the washroom door. It would save moms and dads from getting into trouble for something we didn't know was wrong.

"I was not told how to properly clean the cord. I was just told to dab alcohol on it. My baby's cord started to rot. A friend showed me how to clean it."

One mother did end her comments on a positive note.

"I think the hospital did a fine job educating me. Most of baby care is common sense anyway."

Multiparous Mothers

Thirty-eight multiparous mothers returned questionnaire two for a response rate of 86%. Twenty-seven of these mothers were breastfeeding and eleven were bottlefeeding.

Care of the Mother

Personal care. The majority of mothers chose to rate most of the items under personal care (Table 2.13) as useful. Two items were rated as extremely useful by the majority. However, there were a few mothers rating each item as not useful or slightly useful and as many as 17 mothers stating one item had not been discussed. In comparing this table to the one in Questionnaire One, a discrepancy is noted. There are fewer mothers here stating that the information was not discussed than on the first questionnaire. As well, there are more mothers rating the usefulness of the information than those who stated that they originally received the information.

Table 2.13
Personal Care for Multiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. cleanse from front to back	1	2	18	13	3
2. use of sitz bath	1	1	13	21	2
3. watch for change in color of vaginal flow	2	4	11	15	6
4. watch for decrease in vaginal flow	2	2	15	11	7
5. normal after pains	2		20	7	8
6. normal episiotomy pain	1	1	18	5	11
7. return of menstrual cycle (period)	1	2	13	5	17

n=38

Breast care for breastfeeding. The mothers rated four items under breast care (Table 2.14) as useful and four items as extremely useful. A number of items were rated as not useful or slightly useful by a few mothers. For each item, two to ten mothers stated that they did not receive information during the hospital stay. Again, there were fewer mothers indicating information was not discussed on this questionnaire than on the first one. As well, there were more mothers rating the usefulness of an item than mothers receiving information on Questionnaire One.

Table 2.14
Breast Care for Breastfeeding Multiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. wash hands before handlingbreasts	–	2	18	5	2
2. wash breasts once a day in shower with water only	–	–	14	7	6
3. wear support bra	–	–	8	16	3
4. use of ointment on nipples	1	4	9	8	5
5. air dry nipples after nursing	2	–	10	11	3
6. change position of baby with each feeding	1	4	8	7	7
7. use comfortable positions for breastfeeding	–	1	10	10	6
8. start feeding on alternate breasts	–	–	9	13	5
9. manual expression of milk	–	5	5	7	10
10. pumping of breasts	1	4	7	6	9

n=27

Breast care for bottlefeeding. Two of the three items in this category (Table 2.15) were rated extremely useful and one as useful by the majority of mothers. A few mothers rated two items as only slightly useful and two items as not having been discussed in-hospital. Item two is consistent with the first questionnaire while the other two are not.

Table 2.15
Breast Care for Bottlefeeding Multiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. wash breasts once a day in shower with water only	–	–	5	3	3
2. wear support bra	–	–	1	1	9
3. measures to relieve discomfort	–	1	3	6	1

n=11

Bowel care. The mothers who received information about bowel care (Table 2.16), chose useful as the preferred rating slightly more often than extremely useful. One-third or more of the mothers reported not discussing the information in-hospital and a few mothers rated the information as only slightly useful. Fewer mothers reported the information as not discussed here than on Questionnaire One. And fewer mothers reported receiving information on the first questionnaire than rated usefulness on the second one.

Table 2.16
Bowel Care for Multiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. eating foods that prevent constipation	–	1	12	10	15
2. increase activity	–	2	9	9	18
3. drink extra fluids	–	1	14	11	12

n=38

Nutrition. For the first three items under nutrition (Table 2.17), approximately one-third of the mothers did not receive information in-hospital. Half of the bottlefeeding mothers did not receive information on the item pertaining to them. The received information was most often rated as useful. The items related to bottlefeeding mothers is similar for both questionnaires but the other items show discrepancies similar to the other tables.

Table 2.17
Nutrition for Multiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
All mothers (n=38)					
1. eat a balanced diet	-	1	17	10	10
Breastfeeding mothers (n=27)					
1. eat more calories, liquids, proteins than in pregnancy	-	2	11	4	10
2. factors affecting the quality of breastmilk	-	-	11	4	12
Bottlefeeding mothers (n=11)					
1. if weight loss desired, decrease portion sizes, sugar & fat in diet	2	-	1	3	5

Rest and activity. The majority of mothers rated the information in this category as either useful or extremely useful. Approximately one-third of the mothers never received any information about any of the items and a few rated the information they did receive as being only slightly useful.

In this area on Questionnaire One, 17-49% of the mothers indicated that they received information about these items. Significantly, there were almost double the number of mothers rating "usefulness" on Questionnaire Two and about one-half the number of "not discussed"

responses on Questionnaire Two as compared to the first questionnaire. On Questionnaire One, the majority of mothers indicated that they already had information about these items prior to hospitalization so it is likely that they rated overall usefulness of the information rather than only the information given in-hospital.

Table 2.18
Rest and Activity for Multiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. Kegel exercises (tightening pelvic floor)	1	2	8	7	20
2. limit heavy lifting	–	3	11	9	15
3. plan rest during the day	–	1	17	11	9
4. avoid getting too tired	–	2	13	13	10
5. if possible, have help at home for first few days	–	3	8	15	11

n=38

Social well-being. Slightly less than two-thirds of the mothers did not receive any information related to social well-being (Table 2.19). Those that did receive information tended to rate it as useful or extremely useful. A few mothers found some of the items to be of no use or only of slight use to them. Again in this category, there were more mothers rating "usefulness" on Questionnaire Two than the number who originally reported receiving information. As well, about one-third fewer mothers reported information as "not discussed" on Questionnaire Two than on the first questionnaire.

Table 2.19
Social Well-Being for Multiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. "blues', mood swings	1	2	9	5	21
2. changes in patterns of living	–	3	9	7	19
3. preparation of other children for new baby	–	–	10	6	22
4. how to handle "advice"	2	–	9	4	23
5. emotional tensions	1	2	10	3	22
6. changes in sexual relationship	2	2	6	2	26

n=38

Care of baby

Infant feeding. Four items pertinent to all mothers in the study (Table 2.20) were most frequently rated as useful. Two of these items were not discussed in hospital for more than one-third of the mothers.

The items related to breastfeeding mothers were again most frequently rated as useful. Here, three items were not discussed in-hospital for more than one-third of the mothers. As many as half of the bottlefeeding mothers stated that they did not receive any information about a number of the items. Five of the items were most frequently rated as extremely useful with the rest as useful. A few mothers did find some of the items to be not useful or only slightly useful.

The same discrepancies as noted for other topic areas exist here as well. For example, more mothers rated "usefulness" and fewer recorded "not discussed" on Questionnaire Two as compared to the numbers of mothers receiving information and recording "not discussed" on Questionnaire One.

Table 2.20
Infant Feeding for Multiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
All mothers (n=38)					
1. spacing feedings every 2-6 hours	–	3	19	11	5
2. burping baby	1	–	13	12	12
3. signs when baby is finished with feeding	–	3	14	6	15
4. signs that baby is getting enough milk for growth	–	1	14	6	17
Breastfeeding mothers (n=27)					
1. getting baby to take nipple	1	1	12	6	7
2. use of finger to break suction	–	–	13	10	4
3. breast milk storage/freezing	1	–	14	2	10
4. vitamin D Supplements	–	1	9	2	14
5. cleaning and preparation of equipment for milk storage	–	2	11	1	13
Bottlefeeding mothers (n=11)					
1. getting baby to take nipple	1	1	1	4	4
2. keeping nipple full of milk during feeding	1	–	2	5	3
3. types of formula available (ready-to-feed, concentrate, powdered)	1	–	3	4	3
4. preparation of formula according to directions on container	1	–	3	3	4
5. storage of formula according to directions on container	–	1	3	3	4
6. sterilization of bottles and nipples	–	1	2	5	3
7. use of microwaves to heat formula	–	–	2	3	6
8. recommended bottles and nipples	–	–	2	3	6
9. water supply (well water, distilled water, fluoride supplementation)	–	–	1	4	6

Infant nutrition for later months. About two-thirds of the mothers reported not receiving any infant nutrition information during the hospital stay (Table 2.21). Those that did receive information tended to rate it as useful and extremely useful. Again discrepancies in numbers between the two questionnaires exist.

Table 2.21
Infant Nutrition for Later Months - Multiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. schedule for introduction of solids	–	2	7	7	22
2. recommended nutrition resources	–	–	9	4	25
3. Commercial baby foods vs. preparing your own baby food	–	–	8	4	26
4. storage of baby food	–	–	8	3	26

n=38

Physical care. Of the eight items in this category, (Table 2.22), four were rated useful and four were extremely useful. A few mothers did rate some items as not useful or slightly useful. The last two items were the least likely to be discussed in-hospital.

For the majority of items in this category there is fairly close agreement between the mothers who received information and the numbers rating the usefulness. The only item in which a notable exception exists is the seventh one, "dressing the baby for weather and comfort." Fewer mothers recorded the information as "not discussed" here than on Questionnaire One.

Table 2.22
Infant Care for Multiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. bathing	–	1	17	20	–
2. shampooing at least once a week	1	4	16	11	6
3. combing/brushing hair daily	–	4	20	12	2
4. cord care	1	–	10	27	–
5. genital care	–	–	16	19	3
6. cut nails when sleeping (after 2 weeks of age)	–	1	19	12	6
7. dressing baby for weather conditions and comfort	–	2	12	10	14
8. use of infant car seat	–	1	10	14	13

n=38

Abilities of the newborn. About one third of the mothers reported receiving no information regarding infant characteristics while in-hospital (Table 2.23). Mothers receiving information about these three items most frequently rated it as useful.

There were almost twice as many mothers rating "usefulness" as the number who originally reported receiving information. As well, about one-half of the original number of mothers responding "not discussed" on Questionnaire One recorded "not discussed" on Questionnaire Two.

Table 2.23
Abilities of the Newborn - Multiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. baby can see, hear, smile	–	2	15	7	14
2. baby's reflexes (sucking, rooting,startle)	–	2	15	9	12
3. baby can block out noises & light	–	1	13	8	16

n=38

Detecting signs of illness The majority of mothers found information about infant illness to be extremely useful to them (Table 2.24). However, about one-third of the mothers had not discussed signs that indicated illness. A few mothers found information about taking baby's temperature to be of slight use or no use.

Slight discrepancies exist between the numbers on the two questionnaires for this topic.

Table 2.24
Detecting Signs of Illness in the Infant - Multiparous Mothers

Item	not useful	slightly useful	extremely useful	useful	not discussed
1. signs that baby is sick	–	–	8	12	18
2. taking baby's temperature	1	2	13	22	–

n=38

Responses to open-ended questions.

At the end of Questionnaire Two, the multiparous mothers were asked to respond to four open-ended questions.

The first question asked if the mother had read the hospital baby book since discharge and if so what area(s) had been the most helpful to her. Twenty-seven of the mothers responded that they had read the book since they went home. The section most frequently mentioned was common questions and answers. This particular area covered a number of items such as newborn rash, bruises, forceps marks, head molding, sneezing and hiccoughing. Mothers' personal care and breastfeeding were also mentioned. Some mothers commented that it was all good but they would have liked more detail. In the additional comments a mother stated, "the nurses seemed very busy and because this is not my first baby left me on my own with her. I found the hospital baby book very reassuring and re-educative."

The second question asked if there were any additional information that should appear in the hospital baby book. Only four mothers responded yes to this question. Their suggestions included information about making baby feel secure by being well wrapped and placed in a small bassinet, baby's abilities and personality, sleep patterns, activities that can be done with newborns and recommended additional reading on child growth, care, health, etc. More information on infant feeding such as mixing feedings of formula and breastmilk and infant nutrition for later months was requested.

Was there any information that should have been emphasized more in hospital, was the third question. Fifteen of the mothers responded positively. The majority of the comments were related to breastfeeding. One mother wanted a special nutritional program for breastfeeding mothers. Others wanted to get off to a good start with breastfeeding by "knowing exactly what to do, how long to feed, how long before the next feeding." Others wanted "somebody to help with breastfeeding the first time. This was my third baby so I was left to do it on my own." How to change breastfeeding positions and factors affecting the quality of breast milk were also thought to need more emphasis.

A number of items under social well-being were mentioned as needing more discussion in hospital. The chief one was how to prepare siblings at home for the new baby. Mothers were also concerned with how to get their rest at home. Cesarean section mothers mentioned the need for ideas on how to get rest and to manage no heavy lifting when they already had a child at home.

Physical care of the infant was another area that mothers felt required more emphasis. Cleaning of genitals especially on an uncircumcised boy was an item of concern. One mother felt unsure of how to safely position her baby following feedings.

Finally, the mothers were asked what other information would have been helpful to them. There were fewer comments received in reply to this question. Infant care items were the most frequently cited. These included how much stimulation to give to a baby when it's awake, sleeping/waking patterns, more information on nail care - specifically what to do for hangnails - and sibling adjustment. One mother commented that an emotional program was a good idea but did not elaborate as to precisely what she meant. Topics mentioned under mother's care included nipple care and foods to avoid when breastfeeding.

A few additional comments were made by the multiparous mothers:

"Little or no information was given to me. I could have used more guidance in a few areas."

"Second time mothers need the same information as first time mothers."

"The hospital is wise to have mothers care for their own babies during the night after the first night. It makes the adjustment to home life a lot easier."

Summary - Questionnaire Two

Eighty-seven per cent of the primiparous mothers returned Questionnaire Two. Thirty-four of these mothers were breastfeeding and eight were bottlefeeding.

Throughout all of Questionnaire Two, the information tended to be rated as useful or extremely useful. A few mothers also rated most of the items as not useful or only slightly useful. In some categories, for example, bowel care and social well-being, there were more mothers not receiving the information than able to rate it. This was also true of individual items throughout the other categories. The category of infant care was the only one in which the majority of mothers rated all items as extremely useful.

In response to the open-ended questions at the end of Questionnaire Two, approximately half of the mothers put forward suggestions. The mothers who had read the hospital baby book found it to be helpful to them particularly in regards to breastfeeding and breast care and infant care. Mothers also suggested a number of topic areas which should be included in the baby book or covered in greater detail. Half of the mothers felt that there were certain areas of the teaching given in-hospital that should have been emphasized more. Again, the topics mentioned related to breastfeeding mechanics and specific areas related to infant feeding for both bottle and breast fed babies.

Cesarean section mothers suggested a need for information which dealt specifically with how to deal with a surgical wound and how to care for themselves in order to get enough rest in addition to coping with a new infant.

The final question which asked the mothers what other information would have been useful for them drew a number of responses which could have been answered through the hospital teaching had all mothers received the information about each item. However, there were a few innovative replies here about having postpartum classes, a hospital home visitor or at least a hospital telephone number to call, for those mothers who did develop questions requiring further information after discharge. A few primiparous mothers made additional critical comments about the general care and teaching received.

Eighty-six percent of the multiparous mothers returned Questionnaire Two. Of these, twenty-seven mothers were breastfeeding and eleven were bottlefeeding.

Throughout Questionnaire Two, "useful" and "extremely useful" were the most frequently chosen ratings. In several categories "useful" was the predominant choice in rating the items. However,there were a few categories where item ratings were fairly evenly split between "useful" or "extremely useful." Again, there were a number of items rated as not useful or only slightly useful by a few mothers. Throughout each category there were a number of mothers who did not receive any information about the items. The categories of social well-being and infant nutrition for later months were most frequently not discussed with the mothers in hospital. For some of the items in this category more mothers had not discussed the information than were able to rate it.

Over half of the multiparous mothers indicated that they referred to the hospital baby book after they were home. The area they most often used covered a variety of common concerns about the baby's appearance and behavior. Mothers suggested a few items they thought would be helpful if such were included in the book. Some of the included items were not as detailed as mothers wanted. The only really new items related to activities that could be done with newborns and to recommended additional readings on child growth and care.

In response to a question about information that should receive more emphasis in hospital, items pertaining to breastfeeding were in the majority. Items pertaining to social well-being, especially preparation of other children for the newborn, were also concerns. Again as with the primiparous mothers, the multiparous cesarean section mothers felt a need for more information on getting their rest and managing other children at home in addition to caring for the new baby.

Mothers' suggestions for additional helpful information were usually about items already included in the hospital teaching. Some of the items, such as how much to stimulate a baby during wakeful times and dealing with infant fingernail problems, were certainly new.

The comments made by multiparous mothers did not seem as critical of the care and teaching as those made by primiparous mothers. There certainly was an indication however, that many of these mothers felt a need to have all of the information reviewed with them.

A discrepancy was found between the number of mothers who reported receiving information in-hospital and the numbers who actually rated usefulness of items. While this phenomenon did occur for both groups of mothers it was more pronounced in the multiparous group.

CHAPTER 6

Discussion

Primiparous Mothers

The information related to each item on Questionnaire One was already known by at least a few of the mothers. The majority of the mothers prepared for childbirth by attending prenatal classes and reading. However, they may have learned about some of the items through friends or relatives who had already experienced childbirth and the subsequent care.

On Questionnaire Two, most items were rated as either "useful" or "extremely useful." However, for a few items there were a small number of mothers choosing "not useful" or "slightly useful" as the rating. For most of the topics, there was a discrepancy between the two questionnaires in the number of mothers who originally received information versus the number who rated it and the numbers reporting items as "not discussed." Why this should be so is not known. However, during the two week time interval between completing the questionnaires the mothers may have had time to get information from the hospital baby book, the public health nurse or friends and relatives. As well, some mothers may have received additional information after they had completed the in-hospital questionnaires.

Personal care. Overall, information about personal care was least likely to be already known by the mothers. This seems reasonable as many of the items would have no relevance to a woman who had not experienced either childbirth or reproductive surgery. None of the items were discussed with all of the mothers. The items related to vaginal discharge and return of the menstrual cycle were discussed with about one-half of the mothers which would seem to support Field and Houston's (1987) finding that nurses rated this as a low priority topic. It may be that nursing staff assume that mothers know what to expect for most of these items and choose not to provide information. Or, if the daily nursing assessment reveals nothing unusual, the nurse may

not think there is any need for discussion. As well, nursing staff may be assuming that mothers will question the staff about any concerns they may have about these items.

Bull and Lawrence (1985) found that mothers rated information about physical care as less useful after one week at home. In this study, while mothers tended to rate information as useful, none of them asked for additional information or thought that it should have been better emphasized in-hospital.

Breast care for breastfeeding. Mothers indicated that they already knew information about breast care. Certainly there is a wealth of information available about breastfeeding and usually some discussion about it in prenatal classes. Again, none of the items were discussed with all of the mothers, which is disappointing since some problems are preventable if mothers know how to care for themselves correctly. As in the studies done by Hayes (1981) and Crowder (1981), it may be that the nursing staff in the study hospital lacked the necessary knowledge and expertise needed to fully inform the mothers. Some mothers did comment to this effect and also indicated that the nurses appeared to be rushed and not have much time to spend with the mothers.

In response to open-ended questions on Questionnaire Two, breastfeeding and breast care concerns predominated which is consistent with Sumner and Fritsch's study (1977). Some of the items about which mothers wanted more information reflected those reported by Chapman, et al in 1985. They were maintaining an adequate supply of milk and how to express and save breast milk. Unlike Chapman's study, mothers in this study did not express concern about sore nipples but did want to know how to deal with engorgement.

Breast care for bottlefeeding. The majority of these mothers were offered information about caring for themselves. Part of the nurse's responsibility in patient care is to

check the mother's breasts each day so the nurse would then be aware of any mothers who needed relief from the discomfort of engorgement due to suppression of lactation.

Bowel care. Slightly less than half of the mothers received information about bowel care in-hospital. This seems to be a surprising finding since a great deal of attention is focused on assuring that the mother restores her bowel function prior to discharge. It may be that nursing staff assume that this information is common knowledge and does not need to be discussed.

Nutrition. Information about maternal nutrition was more likely to be already known than was infant nutrition. In both cases, however, little information was received in-hospital. This is not surprising since this topic is usually covered by a dietitian rather than nursing staff and since few mothers attended the class provided. None of the mothers in this study reported concerns about weight loss and return of their figures to normal which is contrary to the findings of Gruis (1977) and Moss (1981).

Rest and activity. A high percentage of mothers already had the information about the items in this category. About half of them received information in the hospital. It may be that nursing staff do not perceive this category to be a priority for discussion since a number of the items could be termed "common sense."

None of the mothers in this study wanted additional information about this topic. However, rest periods, avoiding fatigue and having help at home were all rated as extremely useful. Tiredness, especially in breastfeeding mothers, has been reported as a problem in a number of other studies (Beske and Garvis, 1982; Chapman, et al, 1985; Gruis, 1977).

Social well-being. Again a number of mothers already had information about these items. This category was one of the least likely to be discussed. This probably stems from the fact that only about half of the nursing staff indicated that they provided any information in this category when the questionnaires were reviewed. As well, nurses may not feel comfortable discussing some of these items with mothers.

Field and Houston (1987) reported that nurses rated information about family adaptation and birth control as a low priority. Bull and Lawrence (1985) reported that none of the mothers in their study asked for birth control information while Filshie, et al (1981) found her subjects were irritated or upset about family planning questions. Some mothers in this study felt that there should be more information about mood changes, sexual relationships and birth control methods. Knox and Wilson (1978) found that having a first child was a big adjustment in terms of loss of freedom, privacy and the new experience of parenthood.

Infant feeding. Information about these items was frequently received for some items and very infrequently for others. The least discussed items tended to be those that mothers would have received during the nutrition lecture. Two items related to determining when a baby had finished feeding and whether or not the baby had enough milk for growth were infrequently discussed in-hospital and tended to be sources of concern when mothers were asked for additional comments. Mothers also noted that nurses had differing advice in relation to how often and how much to feed. Ambrose (1985) and Field et al (1985) found that conflicting advice from nursing staff caused mothers to feel confused and anxious. Nursing staff may be concentrating on the mechanics of getting the baby on the breast or the bottle which is the immediate feeding concern and not finding or making the time during the short stay to discuss other feeding information. Some mothers felt that they needed more assistance with breastfeeding which is consistent with the

findings of other studies (Ambrose, 1985; Chan & Juzwishin, 1984; Field et al, 1985; Filshie et al, 1981). Perhaps more thorough patient assessments would enable the nursing staff to organize their workloads to meet these needs.

Physical care of the newborn. Overall, this category was the most likely to be discussed with the mothers and information received was most frequently rated as extremely useful. It may be that nursing staff generally see this as a high priority topic and consistently offer information.

However, there were areas of infant care such as rashes, colic, normal stool patterns, when to tub bath and how to tell if the baby is ill. Concerns about rashes, bowel problems and fussiness were reported by other researchers (Chapman et al, 1985; Sumner & Fritsch, 1977).

Abilities of the newborn. In general, this area was infrequently discussed. Again, this area may not be seen as a priority for discussion during the time available in hospital. However, questions about infant behaviors and growth and development certainly were concerns of mothers after discharge which supports Bull's findings (1981). It may be that there are too many other immediate concerns in the hospital for these items to be of importance at that time or that until the mother has been with her baby for longer periods of time that these questions do not arise. This may be an area that could be best served by the community health nurse during her home visit to the mother.

Detecting illness in the newborn. Only a few mothers knew what signs and symptoms indicated illness in their baby and even fewer received the information in-hospital. This was an area of great concern for mothers once at home. Many of them commented about rashes

and fussy spells that made the mothers wonder if their baby was alright. Davis, et al, (1988) found that mothers rated "Infant Illness" as a high priority learning need. Because nursing staff are so used to caring for well babies they may simply not think to discuss this area other than to teach the mothers how to take a temperature. Or, nursing staff may assume that illness would be so self evident that a mother could not fail to recognize a problem.

Multiparous Mothers

Overall, these mothers indicated a higher rate of information already known as would be expected of a woman who had previously experienced childbirth. They received less information than primiparous mothers probably on the assumption that they were experienced and would remember how to do everything from the last experience. However, comments from these mothers indicated that at least some of them wanted more instruction and assistance than they received. As well, nursing judgments about items that were common sense or low priority for discussion for primiparous mothers would likely be similar for these mothers.

Two items under infant feeding were of interest. Determining when a baby was finished with feeding and that it was getting enough milk for growth were rated already known by 82% and 71% of the mothers respectively. This seems to be low considering that the majority of the multiparous mothers already had two other children at home. Some of the breastfeeding mothers requested additional information about breastfeeding items such as how long to feed which relates back to recognizing cues that indicate the baby is finished with a feeding. This may indicate a need for nursing staff to very deliberately identify infant cues for the mother and to discuss weight gain patterns. Chapman et al., (1985) reported weight gain to be a concern of mothers in their study.

Another interesting area was genital care of the infant. The majority of mothers (89%) indicated that they already knew this but later in the comments section remarked that their present

child was of a different gender than their previous one(s) so that uncertainty as to what to do existed. There also seemed to be some discrepancies in the instructions given about caring for the uncircumcised boys which was a source of confusion for mothers.

Hiser (1987) and Moss (1981) stated that the most common concern of multiparous mothers is family relationships while Knox and Wilson (1978) found that dealing with sibling rivalry was the biggest change for multiparous mothers. A number of mothers in this study commented that the social well-being category needed more discussion in-hospital but the chief concern was how to prepare siblings at home for the new baby. These mothers tended to equate rest with their social well-being and were concerned about how they could get enough rest.

Criticism of Care and Teaching.

Primiparous mothers tended to be more critical of the care and teaching received than did multiparous mothers. The primiparous mothers directed more of the critical comments at nurse attitudes whereas more of the multiparous mothers were critical of environmental and nutritional issues. Since the same nursing staff provided care for both groups of mothers it is interesting that this should occur. It may be that a primiparous mother who is not yet totally confident of her mothering abilities wants more "black and white" answers from the nursing staff whereas a multiparous mother has learned that there are a lot of "gray" areas when dealing with children. Or, a multiparous mother's expectations of care could be more in line with her perceptions of the care she received. As well, the primiparous mother may be dealing with a number of emotional issues that a multiparous mother worked out during her previous experience.

Use of Resources

Both groups of mothers tended to use the hospital baby book for additional information. However the breastfeeding video and nutrition class were poorly utilized. Having a scheduled class

did not seem to meet the needs of mothers who indicated that they were often busy with their own personal care or feeding baby at the scheduled time. Mothers who delivered near or on the weekend also had no opportunity to use these resources. If nursing considers the information contained in these two classes to be important, then alternate methods of providing the information need to be explored.

Summary

A descriptive study was conducted to determine the extent to which current hospital teaching was meeting the learning needs of both primiparous and multiparous mothers and to identify any unmet learning needs. The findings revealed that the majority of learning needs could be met if each mother could receive information about each item on the questionnaire. However, many mothers wanted more assistance with and information about breastfeeding. As well, more information was wanted about infant behaviors and growth and development including stimulation for infants and parent-infant activities.

CHAPTER 7

Conclusions, Limitations and Nursing Implications

The conclusions and limitations of the study are contained within this chapter. Results of the study, implications for nursing practice and suggestions for further nursing research are presented.

Conclusions

The purpose of this study was to determine the extent to which current hospital postpartum teaching was meeting the learning needs of both primiparous and multiparous mothers. Information that mothers wanted but did not receive was to be identified. As well, utilization of learning resources such as classes, videos and reading materials were to be explored. And finally, the usefulness of the information mothers received in hospital was to be determined.

Primiparous mothers indicated that they already knew the information related to a number of the items that were on the questionnaire, especially about breast care and rest and activity. Information about physical care of the newborn was the most frequently discussed topic area. Social well-being and infant nutrition were the least likely to be discussed. The majority of mothers used the hospital baby book as a source of information but did not frequent the nutrition class or see the breastfeeding video.

Mothers tended to rate information received as either "useful" or "extremely useful," although there were a few mothers who did not find some items in each of the topic areas to be useful. Physical care of the newborn was the only topic area where the majority of mothers rated the items as "extremely useful."

Primiparous mothers felt that they wanted more assistance with breastfeeding while they were in-hospital. They also felt that items pertaining to breast care and breastfeeding should have been emphasized better by nursing staff.

More information was wanted about infant care and feeding. Mothers were especially interested in having guidelines for normal patterns of growth and development and for behaviors such as crying and sleeping.

Multiparous mothers indicated that they already knew about a number of items. Overall, they tended to receive information about items less frequently than did primiparous mothers. Physical care of the newborn was the most often discussed topic area while bowel care, social well-being and infant nutrition for later months were the least often discussed. The majority of the mothers did refer to the hospital baby book for information but only a few used the breastfeeding video or attended the nutrition lecture.

Mothers tended to rate most information received as either "useful" or "extremely useful", and also rated a few items in each topic area to be of slight or no use. For several categories, personal care, bowel care, social well-being, and infant feeding, the preferred rating of items was "useful." Breast care for breastfeeding and infant care items were fairly evenly split between "useful" and "extremely useful" ratings. Only one category, detecting signs of illness in the infant, was rated as "extremely useful" by multiparous mothers.

Multiparous mothers felt that items related to breast care and breastfeeding needed better emphasis in-hospital. Preparation of other children for the newborn was also a concern. These mothers also wanted more information on infant growth, development and stimulation, and activities for newborns.

Cesarean section mothers in both groups wanted more information about getting enough rest when caring for a newborn. In addition, multiparous mothers wanted more ideas on how to care for children at home when they had been advised to limit activities, especially those involving heavy lifting.

Primiparous mothers tended to be more critical of the care and teaching they received than did multiparous mothers. Multiparous mothers seemed to feel that since they were experienced as mothers, nursing staff offered them less information and expected them to ask for help as needed. Both groups of mothers commented on the differences amongst nursing staff in both attitude and abilities.

Limitations

The mothers in this study may not be representative of all mothers as a non-random sampling technique was used. Therefore, only with considered discretion may the findings of this study be generalizable to other groups of mothers.

The nature of the research instruments and their administration was another limitation of this study. The measurement of information already known and information received during this stay relied solely on self-reports. No attempt was made to interview the mothers to determine exactly what mothers might know about an item or to check documentation on patient charts to compare what nursing had taught versus what the mothers indicated had been taught.

Establishment of the face and content validity of the in-hospital questionnaire was attempted but reliability was not. A problem with reliability of responses between questionnaire one and two was noted for both groups of mothers but was more pronounced in the multiparous mothers. It may be that the two week interval was too great for mothers to remember exactly which items were discussed in-hospital. However, while this may appear to be a limitation of the study, it can also be viewed positively in that mothers were providing information about the usefulness of all items rather than just those that were discussed with them.

Nursing Implications

The following implications for nursing practice and research are made on the basis of the results of the study.

Every mother in the study already had some knowledge about caring for herself and her infant. It would seem then that assessment of the mother's knowledge prior to any instruction would be an important nursing task. A thorough assessment, although initially time consuming, could prove to be a time saver in the long run if mothers were not given information that they did not need or want. The nurse could then concentrate her efforts in an area such as infant feeding where the mother needed more assistance. A properly done assessment would also eliminate assumptions that a multiparous mother did not require instruction or assistance simply because she had previously experienced motherhood. Where mothers indicate that they already know about a topic area such as rest and activity, it may be important for the nurse to discuss with the mother if she has thought about how to translate the knowledge into actions which would suit her unique home situation.

The majority of the mothers in this study referred to the hospital baby book for information about caring for themselves and their babies. Therefore nursing staff should review the book on a yearly basis to determine if the information is current. Having a reference for the norms of growth and development and of infant behavior seemed especially important to primiparous mothers.

Scheduled classes for breastfeeding and nutrition did not seem to be an effective way of informing this particular group of mothers. Perhaps being able to have the video available in a patient room at the mother's convenience would be more effective. Some of the information about breastfeeding and nutrition could be put into prenatal classes since past research has shown that information given prenatally is retained more readily (Wiles, 1984; Sullivan, 1976).

Nursing staff have a responsibility to keep their knowledge and skills current. To that end, nursing administration can assist with the provision of workshops and inservices. Each individual nurse also has a responsibility to think about how her words and actions may appear to a mother who may be feeling both physically and emotionally low.

Research Implications

A number of ideas for further nursing research arise from this study. The majority of multiparous mothers who participated in this study were having a third child. Many of them made notations on the questionnaires to the effect that they weren't sure if they had received information from this hospital stay or from a previous one. Perhaps if the study were limited to mothers with only one other child at home some different responses might result particularly in the area of sibling adjustment.

This study was based on mothers' perceptions of what they had been taught. An interesting study might be to tape record or videotape a nurse teaching a subject and then return the next day to have the mother relate what she had been taught to see what differences exist between what the nurse has taught and what the patient remembers.

A third suggestion for further study is to repeat the study with fewer subjects using interviews to collect the data. In this way more detailed data about information received in-hospital and needs for further information could be obtained.

A fourth suggestion for research is that the study could be repeated for mothers having multiple births, infants with congenital anomalies or infants in an intensive care unit to determine their unique learning needs about self and infant care.

Finally, a study involving a larger sample might determine whether the educational, experiential, and cultural attributes of mothers are relevant to their learning needs.

Summary

In this study, learning needs of primiparous and multiparous mothers re self and infant care were identified and described. The study was limited by the sampling technique, measurement tool, and method of data collection. Therefore, unqualified inferences cannot be made to other groups of postpartum mothers. The learning need most often met in-hospital was physical care of the newborn. Most mothers wanted more help and information about infant feeding, particularly breastfeeding and infant growth and development.

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APPENDIX A

Original Questionnaires Developed by Bull and Lawrence

Some of the following items refer to things you may have been taught to do while in the hospital. Other items refer to information which may help you to understand your present experiences or know what to expect in the future. For each item circle "yes" or "no" to indicate if you did or did not know this information before this hospital stay. In the second column, circle "yes" or "no" to indicate whether or not someone told you or reviewed he information with you during this hospital stay. In the last column circle "Nurse" if the information was discussed with you by a member of the hospital nursing staff. Circle "Other" if the information was discussed with you be someone else. If no one gave you this information during this hospital stay, leave the last column unmarked.

Care of Yourself:	Already Knew This	Information Given This Hospital Stay	Information Given By
Peri-care:			
cleanse from front to back	yes/no	yes/no	Nurse Other
use of ointment or spray	yes/no	yes/no	Nurse Other
use of sitz bath	yes/no	yes/no	Nurse Other
watch for change in color of vaginal discharge	yes/no	yes/no	Nurse Other
watch for decrease in vaginal flow	yes/no	yes/no	Nurse Other
normal afterbirth pain	yes/no	yes/no	Nurse Other
normal episiotomy pain	yes/no	yes/no	Nurse Other
return of menstrual cycle (period)	yes/no	yes/no	Nurse Other
Breast Care:			
wash breasts with water only	yes/no	yes/no	Nurse Other
wear support bra	yes/no	yes/no	Nurse Other
how to do self-breast exam	yes/no	yes/no	Nurse Other
Care of bowels to prevent constipation:			
drink extra fluids	yes/no	yes/no	Nurse Other

	Already Knew This	Information Given This Hospital Stay	Information Given By
eat foods that prevent constipation	yes/no	yes/no	Nurse Other
increase activity	yes/no	yes/no	Nurse Other
Nutrition:			
eat a balanced diet	yes/no	yes/no	Nurse Other
eat more calories, liquids, protein than in pregnancy	yes/no	yes/no	Nurse Other
Rest and Activity:			
Kegel exercises (tightening pelvic floor)	yes/no	yes/no	Nurse Other
limit heavy lifting	yes/no	yes/no	Nurse Other
plan rest during the day	yes/no	yes/no	Nurse Other
avoid getting too tired	yes/no	yes/no	Nurse Other
Social Well-being:			
"blues", mood swings	yes/no	yes/no	Nurse Other
changes in patterns of living	yes/no	yes/no	Nurse Other
preparation of other children for new baby	yes/no	yes/no	Nurse Other
how to handle "advice"	yes/no	yes/no	Nurse Other
emotional tensions	yes/no	yes/no	Nurse Other
changes in sexual relationship	yes/no	yes/no	Nurse Other
Care of Baby:			
Feeding:			
spacing feedings every 2-6 hours	yes/no	yes/no	Nurse Other
getting baby to take nipple	yes/no	yes/no	Nurse Other

	Already Knew This	Information Given This Hospital Stay	Information Given By	
keeping nipple full of milk during feeding	yes/no	yes/no	Nurse	Other
burping baby	yes/no	yes/no	Nurse	Other
signs when baby is finished with feeding	yes/no	yes/no	Nurse	Other
signs that baby is getting enough milk for growth	yes/no	yes/no	Nurse	Other
types of formula available (ready-to-feed, concentrate, powdered)	yes/no	yes/no	Nurse	Other
preparation of formula according to directions on container	yes/no	yes/no	Nurse	Other
storage of formula according to directions on container	yes/no	yes/no	Nurse	Other
Care:				
bathing	yes/no	yes/no	Nurse	Other
shampooing at least once a week	yes/no	yes/no	Nurse	Other
brushing hair daily	yes/no	yes/no	Nurse	Other
cord care	yes/no	yes/no	Nurse	Other
genital care	yes/no	yes/no	Nurse	Other
dressing baby for weather conditions and comfort	yes/no	yes/no	Nurse	Other
use of bulb syringe	yes/no	yes/no	Nurse	Other
cut nails when sleeping	yes/no	yes/no	Nurse	Other
Baby's abilities and personality:				
baby can see, hear, smile	yes/no	yes/no	Nurse	Other
baby's reflexes	yes/no	yes/no	Nurse	Other
baby can block out noises and light	yes/no	yes/no	Nurse	Other

	Already Knew This	Information Given This Hospital Stay	Information Given By
Illness:			
signs that baby is sick	yes/no	yes/no	Nurse Other
taking baby's temperature	yes/no	yes/no	Nurse Other
Did you receive any information that was not included in the above items?	yes/no		
If yes, please state what information you received in the space below.			

The following information would be appreciated for statistical purposes.

Age _____

Last year of education completed (please circle):

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17+

Marital status (please circle):

single married divorced widowed

Number of children including this baby _____

Date of delivery _____

Today's date _____

POSTPARTUM SELF CARE and INFANT CARE - AT HOME

Mothers receive a lot of information about care of themselves and their baby. Some of this information may have been useful to you; other information may not have been useful. We are interested in the information that you found useful after being at home with your baby. The following items relate to things some mothers do in caring for themselves.

Please indicate how often you do the following using the rating scale:

NEVER (0); RARELY (1); SOMETIMES (3); USUALLY (4); ALMOST ALWAYS (5).
NOT DISCUSSED (6).

Peri-Care

_____ cleanse from front to back

_____ use ointment or spray

_____ use sitz bath

Breast Care **BOTTLE FEEDING**

_____ wash breasts with water only

_____ wear support bra

Care of Bowels to Prevent Constipation

_____ drink extra fluids

_____ eat foods that prevent constipation

_____ increase activity

Rest/Activity

_____ limit heavy lifting

_____ take a rest period during the day

_____ avoid getting over tired

_____ do Kegel exercise (tightening pelvic floor)

Nutrition

_____ eat a balanced diet

_____ if breastfeeding, eat more calories, liquids and protein than in pregnancy

The following items relate to information that may have helped you know what to expect during the first week at home.
Please indicate the word that most describes how USEFUL the information was at home using the following rating scale:

NOT USEFUL (7); SLIGHTLY USEFUL (8); USEFUL (9); EXTREMELY USEFUL (10)
NOT DISCUSSED (6).

_____ normal changes in color of vaginal discharge

_____ expected decrease in vaginal flow

_____ decrease in discomfort from stitches (episiotomy)

_____ normal discomfort from afterbirth pains

_____ return of menstrual flow

_____ how to do self-breast exam

_____ normal to experience mood swings ("blues")

_____ how to prepare other children for new baby

_____ how to handle "advice"

_____ how to decrease emotional tension

_____ changes in sexual relationship

_____ changes in patterns of living

The following items relate to things some mothers do in caring for their baby.
Please indicate the word that most nearly describes how often you do the following using the rating scale:

NEVER (0); RARELY (1); SOMETIMES (3); USUALLY (4); ALMOST ALWAYS (5).
NOT DISCUSSED (6).

Infant Care

_____ bathing

_____ shampoo at least once a week

_____ brush hair daily

_____ cord care

_____ genital care

_____ cut nails when sleeping

NEVER (0); RARELY (1); SOMETIMES (3); USUALLY (4); ALMOST ALWAYS (5). NOT DISCUSSED (6).

Infant Feeding (bottle feeding)

_____ burp baby

_____ space feeding every 2 to 6 hours

_____ keep nipple full of milk during feeding

_____ prepare formula according to directions on container

_____ store formula according to directions on container

_____ getting baby to take nipple

_____ knowing types of formula available (ready-to-feed, concentrate, powdered)

The following items relate to information about your baby that may have helped you during the first week at home.
Please indicate the word that most describes how USEFUL the information was at home using the following rating scale:

NOT USEFUL (7); SLIGHTLY USEFUL (8); USEFUL (9); EXTREMELY USEFUL (10) NOT DISCUSSED (6).

Knowing:

_____ signs that baby is getting enough milk for growth

_____ when baby is finished with feeding

_____ how to get baby to take nipple

_____ baby's reflexes

_____ baby can block out noises and light

_____ baby can see, hear, smile

_____ how and when to use bulb syringe

_____ signs of illness in baby

_____ how to take baby's temperature

_____ how to dress baby for comfort and weather conditions

How old is your baby today?

What other information would have been helpful to you?

Some of the following items refer to things you may have been taught to do while in the hospital. Other items refer to information which may help you to understand your present experiences or know what to expect in the future. For each item circle "yes" or "no" to indicate if you did or did not know this information before this hospital stay. In the second column, circle "yes" or "no" to indicate whether or not someone told you or reviewed he information with you during this hospital stay. In the last column circle "Nurse" if the information was discussed with you by a member of the hospital nursing staff. Circle "Other" if the information was discussed with you be someone else. If no one gave you this information during this hospital stay, leave the last column unmarked.

	Already Knew This	Information Given This Hospital Stay	Information Given By
Care of Yourself:			
Peri-care:			
cleanse from front to back	yes/no	yes/no	Nurse Other
use of ointment or spray	yes/no	yes/no	Nurse Other
use of sitz bath	yes/no	yes/no	Nurse Other
watch for change in color of vaginal discharge	yes/no	yes/no	Nurse Other
watch for decrease in vaginal flow	yes/no	yes/no	Nurse Other
normal afterbirth pain	yes/no	yes/no	Nurse Other
normal episiotomy pain	yes/no	yes/no	Nurse Other
return of menstrual cycle (period)	yes/no	yes/no	Nurse Other
Breast Care:			
wash breasts with water only	yes/no	yes/no	Nurse Other
wear support bra	yes/no	yes/no	Nurse Other
use of ointment on nipples	yes/no	yes/no	Nurse Other
leaving nipples open to air after nursing	yes/no	yes/no	Nurse Other
change position of baby with each feeding (cradle, football hold)	yes/no	yes/no	Nurse Other

	Already Knew This	Information Given This Hospital Stay	Information Given By
use comfortable positions for breastfeeding (lying, sitting)	yes/no	yes/no	Nurse Other
start feedings on alternate breasts	yes/no	yes/no	Nurse Other
how to do self-breast exam	yes/no	yes/no	Nurse Other
Care of bowels to prevent constipation:			
eat foods that prevent constipation	yes/no	yes/no	Nurse Other
increase activity	yes/no	yes/no	Nurse Other
drink extra fluids	yes/no	yes/no	Nurse Other
Nutrition:			
eat a balanced diet	yes/no	yes/no	Nurse Other
eat more calories, liquids, proteins than in pregnancy	yes/no	yes/no	Nurse Other
Rest and Activity:			
Kegel exercises (tightening pelvic floor)	yes/no	yes/no	Nurse Other
limit heavy lifting	yes/no	yes/no	Nurse Other
plan rest during the day	yes/no	yes/no	Nurse Other
avoid getting too tired	yes/no	yes/no	Nurse Other
Social Well-being:			
"blues", mood swings	yes/no	yes/no	Nurse Other
changes in patterns of living	yes/no	yes/no	Nurse Other
preparation of other children for new baby	yes/no	yes/no	Nurse Other
how to handle "advice"	yes/no	yes/no	Nurse Other

	Already Knew This	Information Given This Hospital Stay	Information Given By
emotional tensions	yes/no	yes/no	Nurse Other
changes in sexual relationship	yes/no	yes/no	Nurse Other
Care of Baby:			
Feeding:			
spacing feedings every 2-6 hours	yes/no	yes/no	Nurse Other
getting baby to take nipple	yes/no	yes/no	Nurse Other
use of finger to break suction to take baby off nipple	yes/no	yes/no	Nurse Other
burping baby	yes/no	yes/no	Nurse Other
signs when baby is finished with feeding	yes/no	yes/no	Nurse Other
signs that baby is getting enough milk for growth	yes/no	yes/no	Nurse Other
Care:			
bathing	yes/no	yes/no	Nurse Other
shampooing at least once a week	yes/no	yes/no	Nurse Other
brushing hair daily	yes/no	yes/no	Nurse Other
cord care	yes/no	yes/no	Nurse Other
genital care	yes/no	yes/no	Nurse Other
dressing baby for weather conditions and comfort	yes/no	yes/no	Nurse Other
use of bulb syringe	yes/no	yes/no	Nurse Other
cut nails when sleeping	yes/no	yes/no	Nurse Other

	Already Knew This	Information Given This Hospital Stay	Information Given By
Baby's abilities and personality:			
baby can see, hear, smile	yes/no	yes/no	Nurse Other
baby's reflexes	yes/no	yes/no	Nurse Other
baby can block out noises and light	yes/no	yes/no	Nurse Other
Illness:			
signs that baby is sick	yes/no	yes/no	Nurse Other
taking baby's temperature	yes/no	yes/no	Nurse Other

Did you receive any information that was not included in the above items? yes/no

If yes, please state what information you received in the space below.

The following information would be appreciated for statistical purposes.

Age _____

Last year of education completed (please circle):

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17+

Marital status (please circle):

single married divorced widowed

Number of children including this baby _____

Date of delivery _____

Today's date _____

POSTPARTUM SELF CARE and INFANT CARE - AT HOME

Mothers receive a lot of information about care of themselves and their baby. Some of this information may have been useful to you; other information may not have been useful. We are interested in the information that you found useful after being at home with your baby. The following items relate to things some mothers do in caring for themselves.

Please indicate how often you do the following using the rating scale:

NEVER (0); RARELY (1); SOMETIMES (3); USUALLY (4); ALMOST ALWAYS (5). NOT DISCUSSED (6).

Peri-Care

_____ cleanse from front to back

_____ use ointment or spray

_____ use sitz bath

Breast Care **BREASTFEEDING**

_____ wash breasts with water only

_____ wear support bra

_____ use ointment on nipples

_____ leave nipples open to air after nursing

_____ change position of baby with each feeding (cradle, football hold)

_____ found comfortable position for breastfeeding (sitting, lying)

_____ start feedings on alternate breasts

Care of Bowels to Prevent Constipation

_____ drink extra fluids

_____ eat foods that prevent constipation

_____ increase activity

Rest/Activity

_____ limit heavy lifting

_____ take a rest period during the day

_____ avoid getting over tired

_____ do Kegel exercise (tightening pelvic floor)

Please indicate how often you do the following using the rating scale:

NEVER (0); RARELY (1); SOMETIMES (3); USUALLY (4); ALMOST ALWAYS (5).
NOT DISCUSSED (6).

Nutrition

_____ eat a balanced diet

_____ if breastfeeding, eat more calories, liquids and protein than in pregnancy

The following items relate to information that may have helped you know what to expect during the first week at home.
Please indicate the word that most describes how USEFUL the information was at home using the following rating scale:

NOT USEFUL (7); SLIGHTLY USEFUL (8); USEFUL (9); EXTREMELY USEFUL (10)
NOT DISCUSSED (6).

_____ normal changes in color of vaginal discharge

_____ expected decrease in vaginal flow

_____ decrease in discomfort from stitches (episiotomy)

_____ normal discomfort from afterbirth pains

_____ return of menstrual flow

_____ how to do self-breast exam

_____ normal to experience mood swings ("blues")

_____ how to prepare other children for new baby

_____ how to handle "advice"

_____ how to decrease emotional tension

_____ changes in sexual relationship

_____ changes in patterns of living

The following items relate to things some mothers do in caring for their baby. Please indicate the word that most nearly describes how often you do the following using the rating scale:

NEVER (0); RARELY (1); SOMETIMES (3); USUALLY (4); ALMOST ALWAYS (5).
NOT DISCUSSED (6).

Infant Care

_____ bathing

_____ shampoo at least once a week

_____ brush hair daily

_____ cord care

_____ genital care

_____ cut nails when sleeping

Infant Feeding (breastfeeding)

_____ burp baby

_____ space feeding every 2 to 6 hours

_____ use finger to break suction when taking baby off breast

_____ getting baby to take nipple

The following items relate to information about your baby that may have helped you during the first week at home. Please indicate the word that most describes how USEFUL the information was at home using the following rating scale:

NOT USEFUL (7); SLIGHTLY USEFUL (8); USEFUL (9); EXTREMELY USEFUL (10)
NOT DISCUSSED (6).

Knowing:

_____ signs that baby is getting enough milk for growth

_____ when baby is finished with feeding

_____ how to get baby to take nipple

_____ baby's reflexes

NOT USEFUL (7); SLIGHTLY USEFUL (8); USEFUL (9); EXTREMELY USEFUL (10) NOT DISCUSSED (6).

Knowing:

_____ signs that baby is getting enough milk for growth

_____ when baby is finished with feeding

_____ how to get baby to take nipple

_____ baby's reflexes

_____ baby can block out noises and light

_____ baby can see, hear, smile

_____ how and when to use bulb syringe

_____ signs of illness in baby

_____ how to take baby's temperature

_____ how to dress baby for comfort and weather conditions

How old is your baby today?

What other information would have been helpful to you?

APPENDIX B

Letter of Permission From Bull and Lawrence

College of Nursing
MU Marquette University 157
Milwaukee, WI 53233
414-224-3803

June 4, 1986

Rita Burrington
106 Commonwealth Village
Edmonton, Alberta Canada T6J4N4

Dear Rita:

In response to your letter of April 26, 1986 enclosed find the revised tool for the AT HOME which I recently developed. I am most pleased to have you use our tools in your study, with appropriate credit for the original work by Margaret Bull and myself. It is also no problem with respect for your deletions of those areas not taught at your hospital. I have enclosed a zerox of the permission granted to me by Margaret Bull for release of the tool. The revised tool can also be used with credit for my development of same.

Please also send me any statistical data regarding reliability and validity after your study is complete. Good Luck!

Sincerely

Donna M. Lawrence
Associate Professor

May 20, 1986

TO WHOM IT MAY CONCERN:

I authorize Donna M. Lawrence, co-investigator on our study of Mothers' Knowledge of Self Care and Infant Care, to grant permission for use of our questionnaires to other nurse researchers. The "In Hospital" and "At Home" questionnaires include items related to self care and infant care. Permission to use the questionnaires is granted with the provision that appropriate credit will be given to the researchers who developed them. Two of our published manuscripts that report study findings using these questionnaires appear in:

Journal of Community Health Nursing 1984, 1(2), 111-124

JOGNN 1985, 14(4), 313-320.

Signature

Witness

Date

APPENDIX C

Adapted Questionnaires

Code: _ _ _ _ _

Breastfeeding

Questionnaire One
In Hospital Teaching About Self and Infant

The following items refer to things you may have been taught to do while in the hospital. Other items refer to information which may help you to understand your present experiences or to know what to expect in the future.

In the section, **ALREADY KNEW THIS**, circle **YES** if you knew this information before this hospital stay. Circle **NO** if you did not know this information before this hospital stay.

In the section **INFORMATION GIVEN THIS HOSPITAL STAY**, circle **YES** if someone told you or reviewed the information with you during this hospital stay. Circle **NO** if you did not get the information or review it, during this hospital stay.

	ALREADY KNEW THIS	INFORMATION GIVEN THIS HOSPITAL STAY
Examples:		
1. comfort measures for hemorrhoids	YES (NO)	(YES) NO
2. Baby's Sleep Patterns	YES (NO)	YES (NO)
	ALREADY KNEW THIS	**INFORMATION GIVEN THIS HOSPITAL STAY**
CARE OF YOURSELF		
A. Peri-care		
1. cleanse from front to back	YES NO	YES NO
2. use of sitz bath	YES NO	YES NO
3. watch for change in color of vaginal flow	YES NO	YES NO
4. watch for decrease in vaginal flow	YES NO	YES NO
5. normal after pains	YES NO	YES NO
6. normal episiotomy pain	YES NO	YES NO
7. return of menstrual cycle (period)	YES NO	YES NO
B. Breast Care		
1. wash hands before handling breasts	YES NO	YES NO
2. wash breasts once a day in shower with water only	YES NO	YES NO
3. wear support bra	YES NO	YES NO
4. use of ointment on nipples	YES NO	YES NO

	ALREADY KNEW THIS		INFORMATION GIVEN THIS HOSPITAL STAY	
5. air dry nipples after nursing	YES	NO	YES	NO
6. change position of baby with each feeding	YES	NO	YES	NO
7. use comfortable positions for breastfeeding	YES	NO	YES	NO
8. start feeding on alternate breasts	YES	NO	YES	NO
9. manual expression of milk	YES	NO	YES	NO
10. pumping of breasts	YES	NO	YES	NO
C. Care of bowels to prevent constipation				
1. eat foods that prevent constipation	YES	NO	YES	NO
2. increase activity	YES	NO	YES	NO
3. drink extra fluids	YES	NO	YES	NO
D. Nutrition				
1. eat a balanced diet	YES	NO	YES	NO
2. eat more calories, liquids, proteins than in pregnancy	YES	NO	YES	NO
3. factors affecting the quality of breast milk	YES	NO	YES	NO
E. Rest and Activity				
1. Kegel exercises (tightening pelvic floor)	YES	NO	YES	NO
2. limit heavy lifting	YES	NO	YES	NO
3. plan rest during the day	YES	NO	YES	NO
4. avoid getting too tired	YES	NO	YES	NO
5. if possible, have help at home for first few days	YES	NO	YES	NO
F. Social Well-being				
1. "blues", mood swings	YES	NO	YES	NO
2. changes in patterns of living	YES	NO	YES	NO
3. preparation of other children for new baby	YES	NO	YES	NO
4. how to handle "advice"	YES	NO	YES	NO
5. emotional tensions	YES	NO	YES	NO
6. changes in sexual relationship	YES	NO	YES	NO
CARE OF BABY				
A. Feeding				
1. spacing feedings every 2 - 6 hours	YES	NO	YES	NO

	ALREADY KNEW THIS		INFORMATION GIVEN THIS HOSPITAL STAY	
2. getting baby to take nipple	YES	NO	YES	NO
3. burping baby	YES	NO	YES	NO
4. signs when baby is finished with feeding	YES	NO	YES	NO
5. signs that baby is getting enough milk for growth	YES	NO	YES	NO
6. use of finger to break suction	YES	NO	YES	NO
7. breast milk storage/freezing	YES	NO	YES	NO
8. vitamin D Supplements	YES	NO	YES	NO
9. cleaning and preparation of equipment for milk storage	YES	NO	YES	NO
B. Nutrition for later months				
1. schedule for introduction of solids, juices, and cow's milk	YES	NO	YES	NO
2. recommended nutrition resources	YES	NO	YES	NO
3. Commercial baby foods vs. preparing your own baby food	YES	NO	YES	NO
4. storage of baby food	YES	NO	YES	NO
C. Care of baby				
1. bathing	YES	NO	YES	NO
2. shampooing at least once a week	YES	NO	YES	NO
3. combing/brushing hair daily	YES	NO	YES	NO
4. cord care	YES	NO	YES	NO
5. genital care	YES	NO	YES	NO
6. cut nails when sleeping (after two weeks of age)	YES	NO	YES	NO
7. dressing baby for weather conditions and comfort	YES	NO	YES	NO
8. use of infant car seat	YES	NO	YES	NO
D. Baby's abilities and personality				
1. baby can see, hear, smile	YES	NO	YES	NO
2. baby's reflexes (sucking, rooting, startle)	YES	NO	YES	NO
3. baby can block out noises and light	YES	NO	YES	NO
E. Illness				
1. signs that baby is sick	YES	NO	YES	NO
2. taking baby's temperature	YES	NO	YES	NO

USE OF RESOURCES

The following sections ask questions about the breast feeding film, the nutrition lecture, pamphlets and the You and Your Baby Book. Where there is a YES NO question, circle your answer.

1. Did you attend the breast feeding film? YES NO
   If YES,
   a) Was the information in the film useful to you? YES NO
   b) Had the information in the film already been given to you by the nursing staff? YES NO
   c) Was there any conflict between what your nurse told you and the information in the film? YES NO
   If YES, please describe_____
   _____
   If you did not attend the film, please state the reason.
   _____
   _____

2. Did you attend the nutrition lecture given by the dietitian? YES NO
   If YES,
   a) Was the information useful to you? YES NO
   b) Was this information already given to you by the nursing staff? YES NO
   If NO, please state the reason._____
   _____

3. Did you read the You and Your Baby Book during your hospital stay? YES NO
   If YES, was the information useful to you? YES NO
   If NO, please state the reason._____
   _____

4. Did you use any of the pamphlets stocked in the lounges? YES NO

The following questions are asked to find out if you had as much help as you wanted when looking after your baby in hospital.

Bathing

1. When you had your baby bath demonstration, about how many other mothers were in the group?_____

2. Where did your demonstration take place?
   (circle one) patient room lounge nursery
3. Were you able to see and to hear everything during your bath demonstration? YES NO
4. Did you feel free to ask questions about the bath? YES NO
5. When you bathed your baby for the first time did you have a nurse with you? YES NO
   If NO, did you feel that you would have liked a nurse to be with you? YES NO

Feeding

1. Was a nurse present the first few times that you fed your baby? YES NO
   If NO, did you feel that you would have liked a nurse to be with you? YES NO
2. Did you get information about feeding your baby that conflicted with what other nurses had already told you? YES NO
   If YES, could you please state what information was different. _____
   _____

At this time, do you feel you have enough information and skill to care for yourself and your baby at home? YES NO
If NO, what additional information or skills would you like to have?_____

Please use the remaining space to write any additional comments that you might wish to make about the teaching and care you received.

Personal Information:

1. Age_____.

2. Education: Please indicate the highest level of education you have completed. Write in the grades or names of degrees, etc.
   grade school_____
   high school_____
   technical/college_____
   university _____
   post graduate_____

3. Marital Status (please circle)
   single married divorced widowed steady partner

4. Including this baby, how many live children have you delivered? _____

5. Time and day you delivered. _____

6. Time and day of discharge. _____

7. Did you attend prenatal classes? YES NO

8. Did you read any books about child care before your delivery? YES NO
   If YES, how many did you read?_____

9. Prior to your pregnancy, were you employed outside of your home? YES NO
   Please circle: a) part-time
   b) full-time
   Occupation_____

Thank you for taking the time to fill out this questionnaire.

Code: _ _ _ _ _
Breastfeeding

Questionnaire Two
Post Partum Self Care and Infant Care - At Home

The following items refer to things you may have been taught to do while in the hospital. Other items refer to information which may help you to know what to expect in the future.

Circle the number which most closely describes how useful the information was for you.

Circle **NOT DISCUSSED** if you did not get the information in the hospital.

Rating Scale:
NOT USEFUL 1 SLIGHTLY USEFUL 2 USEFUL 3 EXTREMELY USEFUL 4 NOT DISCUSSED 5

	NOT USEFUL	SLIGHTLY USEFUL	USEFUL	EXTREMELY USEFUL	NOT DISCUSSED
Examples:					
1. comfort measures for hemorrhoids	1	2	3	(4)	5
2. Baby's Sleep Patterns	1	2	3	4	(5)

	NOT USEFUL	SLIGHTLY USEFUL	USEFUL	EXTREMELY USEFUL	NOT DISCUSSED
CARE OF YOURSELF					
A. Peri-care					
1. cleanse from front to back	1	2	3	4	5
2. use of sitz bath	1	2	3	4	5
3. watch for change in color of vaginal flow	1	2	3	4	5
4. watch for decrease in vaginal flow	1	2	3	4	5
5. normal after pains	1	2	3	4	5
6. normal episiotomy pain	1	2	3	4	5
7. return of menstrual cycle (period)	1	2	3	4	5
B. Breast Care					
1. wash hands before handling breasts	1	2	3	4	5

	NOT USEFUL	SLIGHTLY USEFUL	USEFUL	EXTREMELY USEFUL	NOT DISCUSSED
2. wash breasts once a day in shower with water only	1	2	3	4	5
3. wear support bra	1	2	3	4	5
4. use of ointment on nipples	1	2	3	4	5
5. air dry nipples after nursing	1	2	3	4	5
6. change position of baby with each feeding	1	2	3	4	5
7. use comfortable positions for breastfeeding	1	2	3	4	5
8. start feeding on alternate breasts	1	2	3	4	5
9. manual expression of milk	1	2	3	4	5
10. pumping of breasts	1	2	3	4	5
C. Care of bowels to prevent constipation					
1. eat foods that prevent constipation	1	2	3	4	5
2. increase activity	1	2	3	4	5
3. drink extra fluids	1	2	3	4	5
D. Nutrition					
1. eat a balanced diet	1	2	3	4	5
2. eat more calories, liquids, proteins than in pregnancy	1	2	3	4	5
3. factors affecting the quality of breast milk	1	2	3	4	5
E. Rest and Activity					
1. Kegel exercises (tightening pelvic floor)	1	2	3	4	5
2. limit heavy lifting	1	2	3	4	5
3. plan rest during the day	1	2	3	4	5
4. avoid getting too tired	1	2	3	4	5
5. if possible, have help at home for first few days	1	2	3	4	5
F. Social Well-being					
1. "blues", mood swings	1	2	3	4	5
2. changes in patterns of living	1	2	3	4	5

	NOT USEFUL	SLIGHTLY USEFUL	USEFUL	EXTREMELY USEFUL	NOT DISCUSSED
3. preparation of other children for new baby	1	2	3	4	5
4. how to handle "advice"	1	2	3	4	5
5. emotional tensions	1	2	3	4	5
6. changes in sexual relationship	1	2	3	4	5

CARE OF BABY

A. Feeding

1. spacing feedings every 2 - 6 hours	1	2	3	4	5
2. getting baby to take nipple	1	2	3	4	5
3. burping baby	1	2	3	4	5
4. signs when baby is finished with feeding	1	2	3	4	5
5. signs that baby is getting enough milk for growth	1	2	3	4	5
6. use of finger to break suction	1	2	3	4	5
7. breast milk storage/freezing	1	2	3	4	5
8. vitamin D Supplements	1	2	3	4	5
9. cleaning and preparation of equipment for milk storage	1	2	3	4	5

B. Nutrition for later months

1. schedule for introduction of solids, juices, and cow's milk	1	2	3	4	5
2. recommended nutrition resources	1	2	3	4	5
3. Commercial baby foods vs.preparing your own baby food	1	2	3	4	5
4. storage of baby food	1	2	3	4	5

C. Care of baby

1. bathing	1	2	3	4	5
2. shampooing at least once a week	1	2	3	4	5
3. combing/brushing hair daily	1	2	3	4	5
4. cord care	1	2	3	4	5

	NOT USEFUL	SLIGHTLY USEFUL	USEFUL	EXTREMELY USEFUL	NOT DISCUSSED
5. genital care	1	2	3	4	5
6. cut nails when sleeping (after two weeks of age)	1	2	3	4	5
7. dressing baby for weather conditions and comfort	1	2	3	4	5
8. use of infant car seat	1	2	3	4	5
D. Baby's abilities and personality					
1. baby can see, hear, smile	1	2	3	4	5
2. baby's reflexes (sucking, rooting, startle)	1	2	3	4	5
3. baby can block out noises and light	1	2	3	4	5
E. Illness					
1. signs that baby is sick	1	2	3	4	5
2. taking baby's temperature	1	2	3	4	5

1. Have you read the You and Your Baby Book since going home? **YES** **NO**
   If **YES**, is there any particular area that has been the most helpful to you? Please specify:

   _____

   _____

   _____

2. Can you suggest additional items that should be included in the You and Your Baby Book? **YES** **NO**
   If **YES**, what are they?

   _____

   _____

   _____

3. Now that you've been caring for yourself and your infant for two weeks, do you think there are any areas that should have been emphasized more in the hospital? **YES** **NO**
   If **YES**, what are they?

   _____

   _____

   _____

Thank you for taking the time to complete this questionnaire. Please use the remaining space to make any additional comments.

Code: _ _ _ _ _

Bottlefeeding

Questionnaire One
In Hospital Teaching About Self and Infant

The following items refer to things you may have been taught to do while in the hospital. Other items refer to information which may help you to understand your present experiences or to know what to expect in the future.

In the section, **ALREADY KNEW THIS**, circle **YES** if you knew this information before this hospital stay. Circle **NO** if you did not know this information before this hospital stay.

In the section **INFORMATION GIVEN THIS HOSPITAL STAY**, circle **YES** if someone told you or reviewed the information with you during this hospital stay. Circle **NO** if you did not get the information or review it, during this hospital stay.

	ALREADY KNEW THIS	INFORMATION GIVEN THIS HOSPITAL STAY
Examples:		
1. comfort measures for hemorrhoids	YES (NO)	(YES) NO
2. Baby's Sleep Patterns	YES (NO)	YES (NO)
	ALREADY KNEW THIS	**INFORMATION GIVEN THIS HOSPITAL STAY**
CARE OF YOURSELF		
A. Peri-care		
1. cleanse from front to back	YES NO	YES NO
2. use of sitz bath	YES NO	YES NO
3. watch for change in color of vaginal flow	YES NO	YES NO
4. watch for decrease in vaginal flow	YES NO	YES NO
5. normal after pains	YES NO	YES NO
6. normal episiotomy pain	YES NO	YES NO
7. return of menstrual cycle (period)	YES NO	YES NO
B. Breast Care		
1. wash breasts once a day in shower with water only	YES NO	YES NO
2. wear support bra	YES NO	YES NO
3. measures to relieve discomfort	YES NO	YES NO

	ALREADY KNEW THIS		INFORMATION GIVEN THIS HOSPITAL STAY	
C. Care of bowels to prevent constipation				
1. eat foods that prevent constipation	YES	NO	YES	NO
2. increase activity	YES	NO	YES	NO
3. drink extra fluids	YES	NO	YES	NO
D. Nutrition				
1. eat a balanced diet	YES	NO	YES	NO
2. if weight loss desired, decrease portion sizes, sugar and fat in diet	YES	NO	YES	NO
E. Rest and Activity				
1. Kegel exercises (tightening pelvic floor)	YES	NO	YES	NO
2. limit heavy lifting	YES	NO	YES	NO
3. plan rest during the day	YES	NO	YES	NO
4. avoid getting too tired	YES	NO	YES	NO
5. if possible, have help at home for first few days	YES	NO	YES	NO
F. Social Well-being				
1. "blues", mood swings	YES	NO	YES	NO
2. changes in patterns of living	YES	NO	YES	NO
3. preparation of other children for new baby	YES	NO	YES	NO
4. how to handle "advice"	YES	NO	YES	NO
5. emotional tensions	YES	NO	YES	NO
6. changes in sexual relationship	YES	NO	YES	NO
CARE OF BABY				
A. Feeding				
1. spacing feedings every 2 - 6 hours	YES	NO	YES	NO
2. getting baby to take nipple	YES	NO	YES	NO
3. burping baby	YES	NO	YES	NO
4. signs when baby is finished with feeding	YES	NO	YES	NO
5. signs that baby is getting enough milk for growth	YES	NO	YES	NO
6. keeping nipple full of milk during feeding	YES	NO	YES	NO
7. types of formula available (ready-to-feed, concentrate, powdered)	YES	NO	YES	NO
8. preparation of formula according to directions on container	YES	NO	YES	NO

	ALREADY KNEW THIS		INFORMATION GIVEN THIS HOSPITAL STAY	
9. storage of formula according to directions on container	YES	NO	YES	NO
10. sterilization of bottles and nipples	YES	NO	YES	NO
11. use of microwaves to heat formula	YES	NO	YES	NO
12. recommended bottles and nipples	YES	NO	YES	NO
13. water supply (well water, distilled water, fluoride supplementation)	YES	NO	YES	NO
B. Nutrition for later months				
1. schedule for introduction of solids, juices, and cow's milk	YES	NO	YES	NO
2. recommended nutrition resources	YES	NO	YES	NO
3. Commercial baby foods vs. preparing your own baby food	YES	NO	YES	NO
4. storage of baby food	YES	NO	YES	NO
C. Care of baby				
1. bathing	YES	NO	YES	NO
2. shampooing at least once a week	YES	NO	YES	NO
3. combing/brushing hair daily	YES	NO	YES	NO
4. cord care	YES	NO	YES	NO
5. genital care	YES	NO	YES	NO
6. cut nails when sleeping (after two weeks of age)	YES	NO	YES	NO
7. dressing baby for weather conditions and comfort	YES	NO	YES	NO
8. use of infant car seat	YES	NO	YES	NO
D. Baby's abilities and personality				
1. baby can see, hear, smile	YES	NO	YES	NO
2. baby's reflexes (sucking, rooting, startle)	YES	NO	YES	NO
3. baby can block out noises and light	YES	NO	YES	NO
E. Illness				
1. signs that baby is sick	YES	NO	YES	NO
2. taking baby's temperature	YES	NO	YES	NO

USE OF RESOURCES

The following sections ask questions about the breast feeding film, the nutrition lecture, pamphlets and the You and Your Baby Book. Where there is a YES NO question, circle your answer.

1. Did you attend the breast feeding film? YES NO
   If YES,
   a) Was the information in the film useful to you? YES NO
   b) Had the information in the film already been given to you by the nursing staff? YES NO
   c) Was there any conflict between what your nurse told you and the information in the film? YES NO
   If YES, please describe_____
   _____
   If you did not attend the film, please state the reason.
   _____
   _____

2. Did you attend the nutrition lecture given by the dietitian? YES NO
   If YES,
   a) Was the information [illegible] to you? YES NO
   b) Was this information [illegible]dy given to you by the nursing staff? YES NO
   If NO, please state the reason._____
   _____

3. Did you read the You and Your Baby Book during your hospital stay? YES NO
   If YES, was the information useful to you? YES NO
   If NO, please state the reason._____
   _____

4. Did you use any of the pamphlets stocked in the lounges? YES NO

The following questions are asked to find out if you [illegible] as much help as you wanted when looking after your baby in hospital.

Bathing

1. When you had your baby bath demonstration, about how many other mothers were in the group?_____

2. Where did your demonstration take place?
   (circle one) patient room lounge nursery
3. Were you able to see and to hear everything during your bath demonstration? YES NO
4. Did you feel free to ask questions about the bath? YES NO
5. When you bathed your baby for the first time did you have a nurse with you? YES NO
   If NO, did you feel that you would have liked a nurse to be with you? YES NO

Feeding

1. Was a nurse present the first few times that you fed your baby? YES NO
   If NO, did you feel that you would have liked a nurse to be with you? YES NO
2. Did you get information about feeding your baby that conflicted with what other nurses had already told you? YES NO
   If YES, could you please state what information was different. _____
   _____

At this time, do you feel you have enough information and skill to care for yourself and your baby at home? YES NO

If NO, what additional information or skills would you like to have?_____

Please use the remaining space to write any additional comments that you might wish to make about the teaching and care you received.

Personal Information:

1. Age_____.

2. Education: Please indicate the highest level of education you have completed. Write in the grades or names of degrees, etc.
   grade school_____
   high school_____
   technical/college_____
   university _____
   post graduate_____

3. Marital Status (please circle)
   single married divorced widowed steady partner

4. Including this baby, how many live children have you delivered? _____

5. Time and day you delivered. _____

6. Time and day of discharge. _____

7. Did you attend prenatal classes? YES NO

8. Did you read any books about child care before your delivery? YES NO
   If YES, how many did you read?_____

9. Prior to your pregnancy, were you employed outside of your home? YES NO
   Please circle: a) part-time
   b) full-time
   Occupation_____

Thank you for taking the time to fill out this questionnaire.

Code: _ _ _ _ _
Bottlefeeding

Questionnaire Two
Post Partum Self Care and Infant Care - At Home

The following items refer to things you may have been taught to do while in the hospital. Other items refer to information which may help you to know what to expect in the future.

Circle the number which most closely describes how useful the information was for you.

Circle NOT DISCUSSED if you did not get the information in the hospital.

Rating Scale:
NOT USEFUL 1 SLIGHTLY USEFUL 2 USEFUL 3 EXTREMELY USEFUL 4 NOT DISCUSSED 5

	NOT USEFUL	SLIGHTLY USEFUL	USEFUL	EXTREMELY USEFUL	NOT DISCUSSED
Examples:					
1. comfort measures for hemorrhoids	1	2	3	(4)	5
2. Baby's Sleep Patterns	1	2	3	4	(5)

	NOT USEFUL	SLIGHTLY USEFUL	USEFUL	EXTREMELY USEFUL	NOT DISCUSSED
CARE OF YOURSELF					
A. Peri-care					
1. cleanse from front to back	1	2	3	4	5
2. use of sitz bath	1	2	3	4	5
3. watch for change in color of vaginal flow	1	2	3	4	5
4. watch for decrease in vaginal flow	1	2	3	4	5
5. normal after pains	1	2	3	4	5
6. normal episiotomy pain	1	2	3	4	5
7. return of menstrual cycle (period)	1	2	3	4	5
B. Breast Care					
1. wash breasts once a day in shower	1	2	3	4	5

	NOT USEFUL	SLIGHTLY USEFUL	USEFUL	EXTREMELY USEFUL	NOT DISCUSSED
2. wear support bra	1	2	3	4	5
3. measures to relieve discomfort	1	2	3	4	5
C. Care of bowels to prevent constipation					
1. eat foods that prevent constipation	1	2	3	4	5
2. increase activity	1	2	3	4	5
3. drink extra fluids	1	2	3	4	5
D. Nutrition					
1. eat a balanced diet	1	2	3	4	5
2. if weight loss desired, decrease portion sizes, sugar and fat in diet	1	2	3	4	5
E. Rest and Activity					
1. Kegel exercises (tightening pelvic floor)	1	2	3	4	5
2. limit heavy lifting	1	2	3	4	5
3. plan rest during the day	1	2	3	4	5
4. avoid getting too tired	1	2	3	4	5
5. if possible, have help at home for first few days	1	2	3	4	5
F. Social Well-being					
1. "blues", mood swings	1	2	3	4	5
2. changes in patterns of living	1	2	3	4	5
3. preparation of other children for new baby	1	2	3	4	5
4. how to handle "advice"	1	2	3	4	5
5. emotional tensions	1	2	3	4	5
6. changes in sexual relationship	1	2	3	4	5
CARE OF BABY					
A. Feeding					
1. spacing feedings every 2 - 6 hours	1	2	3	4	5
2. getting baby to take nipple	1	2	3	4	5

	NOT USEFUL	SLIGHTLY USEFUL	USEFUL	EXTREMELY USEFUL	NOT DISCUSSED
3. burping baby	1	2	3	4	5
4. signs when baby is finished with feeding	1	2	3	4	5
5. signs that baby is getting enough milk for growth	1	2	3	4	5
6. keeping nipple full of milk during feeding	1	2	3	4	5
7. types of formula available (ready-to-feed, concentrate, powdered)	1	2	3	4	5
8. preparation of formula according to directions on container	1	2	3	4	5
9. storage of formula according to directions on container	1	2	3	4	5
10. sterilization of bottles and nipples	1	2	3	4	5
11. use of microwaves to heat formula	1	2	3	4	5
12. recommended bottles and nipples	1	2	3	4	5
13. water supply (well water, distilled water, fluoride supplementation)	1	2	3	4	5
B. Nutrition for later months					
1. schedule for introduction of solids, juices, and cow's milk	1	2	3	4	5
2. recommended nutrition resources	1	2	3	4	5
3. Commercial baby foods vs. preparing your own baby food	1	2	3	4	5
4. storage of baby food	1	2	3	4	5
C. Care of baby					
1. bathing	1	2	3	4	5
2. shampooing at least once a week	1	2	3	4	5

	NOT USEFUL	SLIGHTLY USEFUL	USEFUL	EXTREMELY USEFUL	NOT DISCUSSED
3. combing/brushing hair daily	1	2	3	4	5
4. cord care	1	2	3	4	5
5. genital care	1	2	3	4	5
6. cut nails when sleeping (after two weeks of age)	1	2	3	4	5
7. dressing baby for weather conditions and comfort	1	2	3	4	5
8. use of infant car seat	1	2	3	4	5
D. Baby's abilities and personality					
1. baby can see, hear, smile	1	2	3	4	5
2. baby's reflexes (sucking, rooting, startle)	1	2	3	4	5
3. baby can block out noises and light	1	2	3	4	5
E. Illness					
1. signs that baby is sick	1	2	3	4	5
2. taking baby's temperature	1	2	3	4	5

1. Have you read the You and Your Baby Book since going home? **YES** **NO**
   If **YES**, is there any particular area that has been the most helpful to you?
   Please specify:

   _____
   _____
   _____

2. Can you suggest additional items that should be included in the You and Your Baby Book? **YES** **NO**
   If **YES**, what are they?

   _____
   _____
   _____

3. Now that you've been caring for yourself and your infant for two weeks, do you think there are any areas that should have been emphasized more in the hospital?
   YES **NO**
   If **YES**, what are they?

   _____
   _____
   _____

Thank you for taking the time to complete this questionnaire. Please use the remaining space to make any additional comments.

APPENDIX D

Informed Consent

Cover Letter

Informed Consent Form

This is to certify that I, _____ have agreed to participate in a study to be conducted by Rita Smith, a Master of Education candidate of the University of Alberta, on the maternal perceptions of postpartum teaching received and its usefulness to her. This study will help nurses in the postpartum units to meet the needs of mothers.

It is my understanding that:

1. I will be given two questionnaires; the first questionnaire about the teaching received is to be completed before I leave the hospital and deposited in a special box on the nursing unit. The second questionnaire about the usefulness of the teaching is to be completed after I have been at home for two weeks. I am to return it in the self-addressed, stamped envelope provided.

2. I give permission for the researcher to phone me at home to remind me about the second questionnaire. My number is _____.

3. My participation in the study is voluntary. I may withdraw from the study at any time without any effect to the care of my baby, myself, or my family.

4. My name and/or the name of my family members will not appear in any research report.

5. I may not necessarily directly benefit from participating in this study.

6. I have read the foregoing and agree to participate in the study.

_____ _____

Mother's signature Date

_____ _____

Investigator Date

Dear Mother:

I am a nurse conducting a study on the mother's perception of the teaching she received in hospital and its usefulness to her after being at home for two weeks. I would greatly appreciate your taking time to complete the two questionnaires:

1) In-Hospital, Teaching Received and
2) At Home, Usefulness of Teaching.

Because having a new baby in your home is a busy time for you, I will be calling you at home to remind you about the second questionnaire.

Again, thank you for taking the time to contribute to nurse's knowledge about the teaching that is helpful to mothers.

Sincerely,

Rita Smith
Master of Education Candidate
University of Alberta