MATERNAL PERCEPTION OF POSTPARTAL NURSING SUPPORT FOR BREASTFEEDING OFFERED DURING HOSPITALIZATION

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BY

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Abstract

There is wide agreement that breastfeeding mothers require adequate support for their breastfeeding efforts if they are to achieve a satisfying and successful breastfeeding experience. During the critical period immediately following birth, the postpartal nurse has a significant role to play in the initiation and establishment of breastfeeding. The purpose of this research was to describe the nature of postpartal nursing support for breastfeeding in hospital and to assess the maternal perception and satisfaction with the quality of this support. House's (1981) conceptualization of social support was used to provide the framework for the study.

This descriptive, exploratory study surveyed a non-random sample (n=40) of primiparous breastfeeding mothers at an urban hospital over a three month period. Two standardized interview schedules were developed to yield the desired information.

The results revealed that mothers generally felt they received adequate emotional support for breastfeeding, although a substantial proportion reported that the nurses did not spend time with them during their initial breastfeeding sessions. The majority of mothers felt that they received adequate instrumental support in the area of demonstration of techniques of breastfeeding. The results indicated that the

instrumental component of modifying the hospital environment to facilitate a positive breastfeeding experience was inadequate. Practices such as rooming-in, demand feeding and the early initiation of breastfeeding were not encouraged by nurses. The majority of mothers received informational support regarding various topics of breastfeeding. However, several mothers reported that they did not receive information on avoiding formula supplements and criteria for assessing the adequacy of the milk supply. Conflicting advice was a predominant source of complaint. Appraisal support behaviors by nurses were reported less frequently than the other categories of support.

Emotional and instrumental support behaviors by nurses were found to be most helpful to the mothers' early breastfeeding experiences in hospital. Informational support tended to be more helpful to the mothers after discharge from the hospital.

The data indicated that the large majority (95%) of mothers expressed satisfaction with the quality of nursing support received for breastfeeding in hospital. However, their satisfaction with the quality of nursing support was significantly lower when measured in the follow-up at two to three weeks.

The findings from this study suggest that nurses need to have a clear understanding of the various types of support

offered to and perceived as helpful by breastfeeding mothers. Nurses would then be able to prepare mothers for realistic breastfeeding experiences and assist those mothers who without adequate support might otherwise choose to discontinue breastfeeding prematurely.

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CHAPTER I

Although the incidence of breastfeeding following birth has increased in North America during the last decade (Martinez & Krieger, 1985; McNally, Hendricks & Horowitz, 1985; Yeung, Pennell, Leung & Hall, 1981) studies indicate that many women discontinue breastfeeding prematurely (Bloom, Goldbloom, Robinson & Stevens, 1982; Ferris, McCabe, Allen & Pelto, 1987; Goodine & Fried, 1984; Martinez & Krieger, 1985; McIntosh, 1985; Reiff & Essock-Vitale, 1985; Yeung et al., 1981). In examining the 1985 provincial breastfeeding rates for Newfoundland, one observes a similar pattern as above, but with lower rates of initiation. In 1985, the provincial breastfeeding rate at birth for Newfoundland was 33%, however, 26% of these mothers who were breastfeeding upon discharge from hospital had discontinued by one week and 75% by four weeks (Banoub, Mowat, Swanson & Wickham, 1985).

Breastfeeding mothers require adequate support for their breastfeeding endeavors prior to and following the birth of their infant if they are to achieve a satisfying and successful breastfeeding experience. In most cultures throughout the world, particularly those of the rural, developing societies where breastfeeding remains the more prevalent mode of nutrition for the infant, one or more females act as a support or caring person for the new mother. Raphael (1981) refers to this individual as a doula, "someone who literally mothers the new mother and offers continuous encouragement" (p. 13). The role of the doula is to provide

psychological and physical help to the new mother and may be fulfilled by a variety of people including mothers, mothers-in-law, female relatives, nurses and midwives. In western societies such as Canada, breastfeeding mothers often lack a doula during the critical period of initiation and establishment of breastfeeding. Winikoff and Baer (1980) suggest that "with reinforcement for breastfeeding generally lacking in the social system it falls to health care institutions to provide information as well as surrogates for the supportive atmosphere of traditional societies" (p. 108).

Raphael (1981) recommends that nurses assume the role of the doula in western society. Her cross cultural research indicates that "the common denominator for success in breastfeeding is the assurance of some degree of help from some specific person for a definite period of time after childbirth" (p. 15). The nurse is frequently the person who is in an ideal position to enact the doula role during the postpartal hospitalization period. She or he usually has the greatest amount of contact with the mother and infant and therefore can be critical in supporting the mother and in promoting an effective hospital environment conducive to breastfeeding.

Support by nurses in the hospital may be crucial in ensuring that mothers have a good start at breastfeeding in the early postpartal period. Solberg (1984) describes the first four to five days postpartum as a critical period for

nursing assessment and intervention. It is an important time for the nurses to identify the 'at risk' client and assist her to a successful breastfeeding experience. Nichols (1978) agrees that the first three to four postpartal days are crucial to the new breastfeeding mother. Ferris et al. (1987) refer to the immediate postpartum as the "vulnerable period for lactation" (p. 320). It is also important to ensure that a woman's first experience with breastfeeding is successful and rewarding because there is a high incidence of breastfeeding in multiparas whose experience with previous children favoured breastfeeding (LeFevre, Kruse & Zweig, 1987; Winikoff & Baer, 1980).

Although there have been a number of research studies and articles written regarding support for breastfeeding, limited research has focused on the role of the nurse in the immediate postpartum in providing support. Currently, most hospitals have specific breastfeeding protocols for nursing staff to use as guidelines for their interventions. There are, however, a few questions that arise. Are these supportive interventions consistently followed by nurses and are they perceived as being helpful to primiparous breastfeeding mothers? What types of support are perceived as being most helpful? Does the quality of nursing support relate to mothers reported satisfaction with the breastfeeding experience? Furthermore, it is essential that nurses are aware of how helpful the support received by mothers in

hospital is in preparing for the breastfeeding experience at home.

Problem

Many nurses in the hospital setting use relevant and supportive nursing interventions in their interactions with clients. The majority of nurses also believe that their interventions are perceived positively and are of assistance to the breastfeeding mother. However, despite their efforts, the literature suggests that this may not be true (Albers, 1981; Crowder, 1981; Ellis & Hewat, 1983; Hewat & Ellis, 1984; Hayes, 1981; Lawson, 1976; Winikoff, Laukaran, Myers & Stone, 1986). Ellis and Hewat (1983) argue that "inconsistent and conflicting advice from nursing staff...." (p. 281) is still a major weakness in the nursing care to the breastfeeding population.

Personal clinical observations and informal discussion with breastfeeding mothers suggest that this group do not always receive adequate support for their efforts in the hospital. Many nurses in hospitals demonstrate a lack of requisite knowledge of the physiology of lactation and techniques which serve to enhance the process (Crowder, 1981; Ellis & Hewat, 1983). Often nurses are not skilled in carrying out a thorough assessment of the mother-infant breastfeeding relationship to determine problems and deal with

them accordingly. Mothers often complain that they are confused by the differing advice which they have received from nurses and other health professionals. In addition, many nurses still adhere to traditional hospital practices that are thought to be detrimental to the breastfeeding experience.

Mothers who are adequately prepared by nurses before discharge may be better able to continue with breastfeeding even if they encounter difficulties at home. Research has demonstrated that it is frequently in the early postpartum that mothers begin to experience problems and concerns related to breastfeeding (Banoub et al., 1985; Chapman, Macey, Keegan, Borum & Bennett, 1985; Graef et al., 1988; Houston, Howie & McNeilly, 1983; Mogan, 1986). Furthermore, it is critical to identify and resolve these concerns because research suggests that inadequate support throughout the breastfeeding experience frequently results in a decision to discontinue breastfeeding (Houston, 1981).

The primary concerns and reasons cited by breastfeeding mothers for discontinuing breastfeeding in the first few weeks include: insufficient milk, painful breasts or nipples, feeding concerns (Chapman et al., 1985, Mogan, 1986) and maternal fatigue (Banoub et al., 1985; Graef et al., 1988). These concerns are all amenable to intervention with the appropriate level of support and encouragement. If mothers are advised during their stay in the hospital to expect such problems and how to overcome them using the various resources

that are available in the community and hospital, then breastfeeding mothers may be better able to continue despite difficulties encountered during the early weeks when breastfeeding is being established.

The literature suggests that much of the decrease in numbers of women breastfeeding occurs during the first few weeks after returning home from the hospital (Banoub et al., 1985; McIntosh, 1985; Sloper, Elsden & Baum, 1977; Rousseau, Lescop, Fontaine, Lambert, & Roy, 1982). Samuels, Margen and Schoen (1985) confirm that in their study, the "most rapid decline in breastfeeding occurred in the first two weeks postpartum..." (p. 506). Kelly (1983) reports that by the eleventh day postpartum, 13 (25%) of the 51 mothers who had initiated breastfeeding had stopped. Reiff and Essock-Vitale (1985) conclude that when interviewed between days 14-21 postpartum, only 23% of their sample (n = 77) were exclusively breastfeeding. A higher percentage of mothers (32%) were breastfeeding and giving supplemental formula feeding in the above study. Sixteen percent of mothers in the Reiff and Essock-Vitale study had switched from exclusive or partial breastfeeding to entirely formula feeding at two weeks postpartum. The Martin (1978) report on breastfeeding which covered a large sample of breastfeeding mothers (n = 789) in England and Wales, stated that 31% of mothers who started to breastfeed discontinued in the first two weeks.

In a study by Lawson (1976), participants mentioned the first two weeks as the most difficult time during breastfeeding. They attributed much of the stress to a lack of knowledge and encouragement. Lawson (1976) cautions nurses to be aware that often the new mother does not foresee potential problems and therefore, in the hospital, does not actively seek sufficient or appropriate information from the nurses. The researcher's clinical observations concur with the above finding.

The first fourteen days are cited by Humenick and Van Steenkiste (1983) and McIntosh (1985) as being the most relevant time for the establishment of breastfeeding. McIntosh (1985) feels that during this time the "establishment of breastfeeding is at its most fragile and... a large proportion of mothers give up" (p. 223). Humenick and Van Steenkiste (1983) conclude that early weaning is partially predictable from the mother's perspective of the course of events in the first two weeks. Weaning before eight weeks was associated with the mother's early expressions of low satisfaction with breastfeeding and/or the number of problems perceived by the mother in the first two weeks.

Research indicates that breastfeeding mothers encounter many difficulties related to breastfeeding and that they are particularly bothersome in the first few weeks postpartum. Many of those concerns result in prematurely discontinuing breastfeeding. How then, can hospital nurses prepare these

mothers to deal effectively with such problems in hospital and at home? Nurses need to be aware of the current types of support breastfeeding mothers are receiving in hospital, and of the various types of support, what is perceived as being most helpful to the mothers in their initiation and establishment of breastfeeding?

Different types of support are important for mothers initiating breastfeeding. Nursing interventions often focus on informational types of support for breastfeeding. This alone is certainly not adequate in preparing for a realistic breastfeeding experience. The psychological encouragement and caring attitude of the nurse may be of equal importance or more important to the mother than informational types of support. Nursing interventions which modify the hospital environment may be critical in eliminating traditional hospital practices that inhibit the breastfeeding experience. It is also likely that different mothers would benefit from different kinds of support (Cronenwett & Reinhardt, 1987).

The researcher's focus on nurses within the hospital setting does not underestimate in any way the community support groups and public health nurses' contribution and vital roles in home support for the breastfeeding mother. At the present time in Newfoundland, a public health referral is made at the time of the mother's and infant's discharge from hospital. A subsequent follow-up visit is then made by the public health nurse. However, the public health nurse may not

visit the new mother until the fifth day after discharge. If there are breastfeeding difficulties many mothers have already given up or initiated supplementary feedings and are on the verge of giving up. This emphasizes the significance of adequate support and anticipatory guidance from nurses in the hospital. Therefore, it is important to investigate what types of support mothers perceive as adequate in the early postpartum.

Purpose

The primary purpose of this research study was to describe the nature of postpartal nursing support for breastfeeding in hospital. The secondary purpose of this research was to assess the mothers' perception of the quality of this support measured prior to discharge from hospital and at two to three weeks postpartum.

The specific research objectives were as follows:

(1) To describe the nature of postpartal nursing support for breastfeeding in hospital;

(2) To assess the maternal perception of the quality of nursing support for breastfeeding prior to discharge from hospital and at two to three weeks postpartum;

(3) To assess the helpfulness of each category of support: emotional, instrumental, informational and appraisal, as reported by the mother;

(4) To describe the relationship between maternal perception of the quality of nursing support and maternal satisfaction with the breastfeeding experience.

Conceptual Framework

Nurses have consistently agreed that providing support to clients is one of the most basic components of nursing practice. This position is evident from a review of nursing literature illustrating that the word "support" has been widely used. Despite the frequent use of this word there is no consistent, comprehensive definition of the concept (Anderson, 1976; Gardner, 1979; Gardner & Wheeler, 1987; Grossman-Schulz & Feeley, 1984; Kintz, 1987).

The conceptual framework for this research was based on the concept of social support as defined by House (1981). House examined several definitions of social support in the literature to assess the range of aspects, the commonalities and the contrasting features. House (1981) then developed a four component definition of social support that subsumed all subconcepts of other definitions in the literature:

1. Emotional support (esteem, affect, trust, concern, listening).
2. Appraisal support (affirmation, feedback, social comparison).

3. Informational support (advice, suggestion, directives, information).
4. Instrumental support (aid in kind, money, labour, time, modifying environment). (p. 23)

A supportive relationship usually implies a sense of mutual reciprocity rather than the giving of unidirectional aid (Tietjen, 1980). House (1981) agreed that giving or receiving social support usually involves expectations of reciprocity. Therefore, social support generally occurs in relatively stable social relationships. For this reason, family and friends are viewed as being the main providers of social support. The concept of social support advanced by House (1981) was applied to the informal and non-professional sources of support such as family, friends, co-workers and specifically supportive individuals encoutered in the workplace.

The present research, however, examined the nature of support offered by the professional nurse. This is a more formal source of support in comparison to the informal and non-professional sources of support offered by family, friends and co-workers. In some situations, more formal support such as that provided by the professional nurse, is better able to meet the client's needs. This is observed in western society where breastfeeding mothers may be lacking the informal types of support more typically observed in traditional societies, specifically, members of the extended family who have

breastfed. Also, in western society we have come to expect, value and even become dependant on support from health professionals.

House (1981) acknowledged that social support may be received from informal and formal sources. With respect to formal and informal sources of support, House argued that "some sources will be more important than others, depending on the nature of the person and problem needing support" (p. 22). Evidence exists which suggests that not all sources or types of social support are equally effective in reducing distress (Thoits, 1982). Schaefer, Coyne and Lazarus (1981) pointed to the importance of distinguishing among different types of support is the possibility that they may have independent effects on health and psychological functioning. Thus, it would be critical to distinguish the different types of support offered by the nurse to assess the helpfulness of each type. For example, a breastfeeding mother may receive advice from a nurse in the form of informational support regarding expression of milk, however the mother in fact needed a form of instrumental support; for example, the actual demonstration of manual expression and use of a breast milk pump. In another situation, the breastfeeding mother may receive emotional support from the nurse; for example, reassurance, when she really needed accurate information. A nurse who has had personal experience with breastfeeding might contribute appraisal support to the breastfeeding mother.

The four categories of social support outlined by House (1981) are consistent with potential support behaviours offered by the professional nurse.

To assess the maternal perception of the quality of nursing support for breastfeeding, it is important that support is explored to determine how much of each type of support the mother is receiving in hospital and to what extent the support is perceived by the mother as helpful. House (1981) reported that subjective or perceived support is significant because social support will be effective only to the extent it is perceived as effective by the individual. Schaefer et al. (1981) concluded that "perceived social support involves an evaluation or appraisal of whether and to what extent an interaction, pattern of interactions or relationship is helpful" (p. 384). No matter how much the nurse uses supportive interventions which she or he believes to be positive, there will be a stronger positive effect on the client if the client perceives the interventions as supportive. Gardner and Wheeler (1987) argued that "when nurses' and patients' perceptions are congruent, support can be more purposefully given and more likely received" (p. 130). Furthermore, the researcher in the present study assumed that breastfeeding mothers who reported that they were satisfied with the quality of nursing support would also report more satisfying breastfeeding experiences.

The conceptual framework was used as a guide for the review of pertinent literature for this research study. The four categories of support: emotional, instrumental, informational and appraisal, provided a framework for developing appropriate instruments to explore the nature of nursing support and in the discussion and analysis of the findings.

Definition of Terms

The term "support" refers to House's (1981) conceptualization of social support which described four types of support; emotional, appraisal, informational and instrumental. The social support definitions advanced by House (1981) and Cronenwett (1985) were adapted for use in this research.

Emotional support - The nurse communicates feelings of love, empathy, caring, trust, or concern for the breastfeeding mother.

Appraisal support - The nurse communicates information regarding how the breastfeeding mother is performing in the new role; the mother is able to evaluate herself in relationship to others' performance in a similar role situation.

Informational support - The nurse shares information with the breastfeeding mother that is useful in her management of the new role or problems associated with the new role.

Instrumental support - The nurse directly assists the breastfeeding mother by demonstrating techniques and modifying the environment.

Breastfeeding mother - Anyone who initiates breastfeeding in hospital and is still breastfeeding at the time of the initial interview in hospital.

Perception - The breastfeeding mother's personal assessment and interpretation of observations about the quality of nursing support.

Satisfaction with breastfeeding experience - The mother's reported feelings of satisfaction resulting from her breastfeeding experience.

CHAPTER II

LITERATURE REVIEW

The current breastfeeding literature was examined and analyzed to facilitate the categorization of specific nursing support behaviours. The following review will begin by addressing the nature of nursing support using the categories of emotional, instrumental, informational, and appraisal support. The literature review also contains a review of specific research studies which have examined the maternal perception of postpartal nursing support for breastfeeding in the hospital setting.

Emotional Support

Emotional support, or those activities where the nurse communicates feelings of love, empathy, caring, trust, or concern for the breastfeeding mother, was one of the most frequently discussed aspects of nursing support in the breastfeeding literature. Gardner (1979) in her discussion of emotional support for all nursing clients referred to the aim of emotional support as "maintaining or enhancing the patient's emotional state of well-being" (p. 13). The breastfeeding literature revealed several theoretical and practical discussions of emotional support for breastfeeding

mothers. A few research studies discussed emotional support for breastfeeding.

Nichols (1978) described aspects of emotional support in her review of the role of the maternity nurse in assisting and educating the breastfeeding mother. The author concluded that maternity nurses have a professional obligation to support a mother in her breastfeeding efforts. Positive encouragement, supportive help and reassurance were behaviours deemed essential for nurses in their interactions with breastfeeding mothers.

Auerbach (1979), in a discussion of the role of the nurse in support of breastfeeding, highlighted a number of nursing behaviours which were characteristic of emotional support. The concept of patient advocate was implied in Auerbach's comment on the importance of the nurse "to intervene on behalf of the mother" and "support her decision to breastfeed" (p. 271). The postpartal nurse assists the mother to "feel more secure", (p. 272) simply by advising the mother that the nurse is available to answer questions or assist her. The ability to show "compassion and understanding, the capacity to actively listen to the concerns of each new mother, and to provide appropriate counsel when sought" (p. 282) were all behaviours consistent with emotional support. Other emotionally supportive behaviours noted were positive comments or praise regarding infant's weight gain.

Raphael (1981) in a discussion of the midwife as a doula to the breastfeeding mother referred to the following essential factors: "presence of someone who cares" and "a very special support system which provides someone to mother the mother" (p. 13). Other emotionally supportive behaviours described by Raphael included: "showing concern", [being] "receptive", and the "feeling that someone is there and concerned" (p. 14).

Cohen (1987) emphasized emotional support by advising that increased nursing time is required for breastfeeding mothers. Staying with the mother during the feeding to carefully observe and assess the mother-infant breastfeeding relationship is a critical component of nursing care.

Ladas (1972) suggested that both encouragement and help be offered to mothers who breastfeed. The combination of information and support in her study influenced the mothers' perceptions of satisfaction and duration of breastfeeding.

Lawson (1976) interviewed breastfeeding mothers concerning their perceptions of degrees of support from various individuals including postpartal nurses. Help and support were defined as "any praise, encouragement, suggestions or information that moved the nursing woman toward a successful breastfeeding experience" (pp.67-68). The mothers with positive perceptions of the nurse described the nurse as helpful and encouraging. The nurse's role in offering support was discussed in the context of the nurse

becoming the patient's advocate. This emotionally supportive behaviour was important in communicating to the mother that the nurse cared and could be trusted. A positive attitude was cited as an important characteristic for the nurse who is supporting the breastfeeding mother. This finding was consistent with other research (Hall, 1978; Kurtz, 1981; Maclean, Byrne, Gray-Snelgrove, Ferrier & Katamay, 1985; Solberg, 1984). Lawson's (1976) survey indicated that many women were aware of a nurse's negative feelings toward a breastfeeding mother although these feelings were never put into words. The nurse's approach and smile had more positive value to the sensitive mother than mere words of comfort. However, words of encouragement or a helpful suggestion were often all that was necessary for the mother to continue breastfeeding.

Hall (1978) used a variety of definitions in developing her conceptualization of nursing support. Support was defined as giving guidance and strength, providing relief from mental anguish, making the mother less fearful, relating an attitude of understanding and reassurance, offering praise and encouragement and giving help. Hall acknowledged her role as a doula to the mothers in carrying out her research. She offered encouragement, complimented and reassured the mother, always expressed interest in her, and conveyed an attitude of caring. Hall also recommended spending time with the new mother during her initial breastfeeding experience. The

descriptions of support outlined by Hall were consistent with emotional support behaviours.

Albers (1981), in a content analysis of breastfeeding mothers' descriptions of emotional support by nurses designated the following terms for each of the descriptors the mothers cited: "positive attitude", "encouraged", "empathy", and "concerned" (pp. 122-123). These terms applied to the nurse's role during the postpartum.

Beske and Garvis (1982) referred to nursing interventions such as "encouragement, support and help" (p. 177) as potentially significant factors related to a mother's success with breastfeeding.

Hewat and Ellis (1984) reported in their study of woman's perceptions of their breastfeeding experiences the support by nurses considered most helpful was portrayed as follows: "'She listened to what I told her', 'I liked the nurses that spent time with me while I fed', 'I knew she really cared'" (p. 447). Hewat and Ellis concluded from these statements that a caring attitude and individualized care are important components of support by nurses for encouraging breastfeeding.

Maclean et al. (1985) also highlighted emotional support behaviours in their discussion of the role of the hospital nursing staff as potential support persons for the mother in the immediate postpartum. Research by Maclean et al. indicated that specific behaviours valued by mothers were "'positive attitudes', 'very encouraging', 'showed warmth and

kindness', 'nurses were always there to help whenever you needed them' and 'very attentive to personal needs'" (pp. 226-227).

Jones and West (1985) discussed the role of a lactation nurse in assisting mothers to establish and maintain successful breastfeeding in hospital and at home. The nurse provided "support, encouragement..." to the mothers in addition to other specific activities. Jones and West did not elaborate on either descriptor.

The breastfeeding literature discussed emotional support behaviours by nurses for breastfeeding mothers in a number of general discussions on support for the breastfeeding mother. The discussions were limited in detail. There was only one research study (Albers, 1981) that reviewed emotional support for breastfeeding mothers. However, this study examined the emotional support from various individuals including the postpartal nurse. Studies by Hewat and Ellis (1984) and Maclean et al. (1985) discussed support in general by hospital nursing staff. Comprehensive descriptions of emotional support behaviours by nurses were elicited in the mothers' comments.

Instrumental Support

A second component of nursing support for the breastfeeding mother involves instrumental support. This type of support includes the many physical types of activities the

nurse carries out to assist the mother with breastfeeding. This encompasses modifying the environment to enhance the breastfeeding experience and demonstrating practical techniques of breastfeeding management.

Breastfeeding is a learned act involving practical skills which can and should be taught to mothers (Maclean et al., 1985; Nichols, 1978; Schlegel, 1983). Lawson (1976) described a positive component of nursing support as "offering needed instruction" (p. 69). Mothers both new and experienced need to be taught how to breastfeed during the initial feeding and given guidance in subsequent feedings.

Auerbach (1979) argued that the best instruction for breastfeeding mothers is demonstration. The author suggested that the teaching nurse be at ease in performing exercises such as nipple rolling, breast massage, and hand expression by herself. A willing experienced breastfeeding mother may also be used for such demonstration. Similarly, Raphael (1981) identified the midwife's role as introducing the mother to the techniques of breastfeeding. Schlegel (1983) provided a comprehensive practical discussion on breastfeeding technique. The author attributes many of the complications of breastfeeding to inaccurate technique. Schlegel gave detailed recommendations for nurses assisting mothers in the initiation of breastfeeding.

There were several instrumental support behaviours highlighted in a practical discussion on supporting the

breastfeeding mother by Haun (1985). The author described nursing behaviours such as, assisting the mother to a comfortable position, assisting the mother to get the infant latched onto the breast, demonstrating breaking suction and breast care. Woolridge (1986), in a discussion of the etiology of sore nipples, emphasized practical aspects of the nurse's role in correctly positioning the infant at the breast. Fisher (1984) also argued that ensuring correct positioning of the infant at the breast is a crucial component of nursing support for breastfeeding. Research studies have confirmed these practical discussions regarding the importance of demonstration of techniques. The most significant supportive behaviour by nurses in the postpartum as described by mothers in Albers' (1981) study was "demonstrated techniques" (p. 123). Solberg (1981) reported that nurses helped mothers with "techniques to facilitate breastfeeding" (p. 67). Jones and West (1985) also referred to a component of the lactation nurse's role in their study as "assisting mothers to fix babies on the breast..." (p. 272).

Cohen (1987) developed a single structured teaching session on breastfeeding for mothers in the first twenty-four hours after birth. It is interesting to note that the content of the session included primarily instrumental types of support; for example, breast massage, alternate breast massage, manual expression, positioning, stimulating the

infant to suck, and breaking suction. Winikoff, Myers, Laukaran, and Stone (1987) described physical assistance for breastfeeding mothers which included bedside demonstration.

Breastfeeding mothers should be supervised during the first few feedings so that required assistance can be provided in: positioning, demonstrating rooting reflex, breaking suction, avoiding nose obstruction, changing to the alternate breast, demonstrating breast massage, hand expression and nipple care, showing the mother signs of functioning milk-ejection reflex (Hall, 1978; Nichols, 1978), applying warm moist packs, demonstrating how to stimulate infant to suck and burping an infant (Princeton, 1986). The nurse may also need to assist the mother in learning how to breastfeed discretely in public.

Nurses can be influential in facilitating or enhancing the breastfeeding experience by altering conditions within the hospital which are detrimental to a satisfying breastfeeding experience. This is a major component of the nurse's role in providing instrumental support. Hospital routines in the first few days postpartum can affect both the initiation and maintenance of lactation. Minchin (1985) commented that: "One does not have to be a genius to see many pathways to failure which are the direct outcome of poor hospital practice..." (p. 61). McIntosh (1985) advised that more hospitals need to ensure that their practices are consistent with their avowed commitment to breastfeeding (p. 223).

Martin and Monk (1982) argued that improvements in breastfeeding rates are mainly attributable to changes in hospital policies and practice.

With respect to behaviours that enhance the hospital environment, the literature suggests that the nurse should encourage mothers to have early and frequent interaction with their infants, ideally through a policy which promotes breastfeeding immediately following birth and rooming-in (Hall, 1978; Haun, 1985; Mandl, 1988). Privacy should be maintained and the environment should be comfortable and relaxed for the mother and infant (Haun, 1985; Nichols, 1978; Riordan & Countryman, 1987). A component of modifying the hospital environment is avoiding the rigid four-hourly schedules and encouraging demand feeding on a 24-hour basis (Haun, 1985; Hewat, 1985; Ferris et al., 1987; Mandl, 1988). Limitation of feeding duration should also be discouraged as there is no scientific basis for such restrictions (Fisher, 1985; Riordan & Countryman, 1987) The routine supplementation of breastfeeding infants with glucose and water or formula is a practice that can be detrimental to the breastfeeding experience (Haun, 1985; Hewat, 1985; Houston & Howie, 1981; Winikoff, 1988).

There are a number of research studies which have indicated the importance of early mother-infant contact and breastfeeding in the immediate period after birth as contributing to successful lactation (Bloom et al., 1982; de

Château, Holmberg, Jakobsson & Winberg, 1977; Ferris et al., 1987; Loughlin, Clapp-Channing, Gehlbach, Pollard & McCutchan, 1985; Salaryia, Easton & Cater, 1978; Thomson, Hartsock & Larson, 1977). Klaus and Kennell (1976) reported that skin to skin contact immediately following birth strengthened the mother-child bond, and increased the likelihood of prolonged breastfeeding. These findings were demonstrated in two very different population groups (Klaus & Kennel, 1976; Sosa, Kennell, Klaus, Urrutia, 1976). At variance to the above studies, Rousseau et al. (1982) demonstrated no influence of early mother-infant contact and successful breastfeeding.

Research in the area of environmental influences has also demonstrated that rooming-in, or keeping the infant within easy access of the mother 24 hours a day prolongs the duration of breastfeeding and therefore increases the likelihood of successful breastfeeding (Bloom et al., 1982; Cole, 1977; Illingworth, Stone, Jowett & Scott, 1952; Jackson, Wilkin, Auerbach, 1956; Samuels et al., 1985; Winikoff et al., 1986; Winikoff, et al., 1987). These studies were at variance with a study conducted by Bjerre and Ekelund (1970). The duration of breastfeeding in their study was not significantly longer among mothers in the rooming-in group.

Closely associated with the early initiation of breastfeeding and rooming-in is demand feeding, in which the infant is encouraged to breastfeed whenever he or she desires rather than adhering to a fixed, rigid schedule. McNeilly and

McNeilly (1978) argued that the rigid three or four hourly feeding schedules adhered to by many hospitals are "unphysiological and as such may pose a threat to the initial success of breastfeeding" (p. 467). Consistently, research has demonstrated that demand feeding is associated with more successful breastfeeding (Cruse, Yudkin & Baum, 1978; Ferris et al., 1987; Gurney, 1976; Illingworth et al., 1952; Salariya et al., 1978). Ferris et al. (1987) observed that the mother's perception that she feeds her infant on demand was an important factor in the maintenance of lactation. The investigators also concluded that "adherence to feeding schedule regardless of frequency adversely affects the duration of lactation" (p. 321).

The routine supplementation of breastfeeding infants with glucose and water or formula reduces the infant's sucking stimulus and therefore the production of milk. Samuels et al. (1985) concluded that receiving formula in the hospital had the most significant impact on duration of breastfeeding. Mothers whose infants did not receive formula in hospital were more likely to continue breastfeeding during the early postpartum. This result was similar to findings of other studies reported in the literature (de Château et al., 1977; Feinstein, Berkelhamer, Gruszka, Wong & Carey, 1986; Goodine & Fried, 1984; Hawkins, Nichols & Tanner 1987; Houston, 1984; Jones, 1987; Loughlin et al., 1985; Reiff & Essock-Vitale,

1985; Verronen, Visakorpi, Lammi, Saarikoski & Tamminen, 1980).

Gray-Donald, Kramer, Munday and Leduc (1985) evaluated the effect of formula supplementation in hospital on the duration of breastfeeding. Using a controlled clinical trial, in contrast with the observational studies cited above, restricting supplementation had no effect on subsequent breastfeeding duration. The investigators reported, however, that infants still breastfeeding at four or nine weeks were far more likely to have not received supplemental feedings. Therefore, it was concluded that supplementation appeared to be a marker rather than a cause of breastfeeding difficulty.

The extent to which these practices in the hospital environment are adhered to by nurses has been the subject of a few research studies. Harvey and Post (1986) undertook a questionnaire-based study of all Canadian hospitals and discovered that many of these firmly established breastfeeding practices were not consistently reported as routine. Field (1985) interviewed 44 mothers using a semi-structured questionnaire and found that mothers frequently reported that the postpartal environment was not always conducive to breastfeeding. The mothers felt they had no say as to whether or not the baby roomed in and demand feeding was not readily practiced. The mothers found that the environment was not conducive to rest and some mothers commented on a lack of privacy.

Houston and Field (1988) undertook a study which examined existing nursing care policies and practices in hospitals in Alberta to assess whether or not nursing care of breastfeeding mothers during the early postpartum reflected well researched practices known to be helpful in the establishment of breastfeeding. The investigators administered a questionnaire to all Alberta hospitals including directors of nursing and staff nurses. The survey found that many hospitals still adhered to inflexible hospital routines with respect to breastfeeding, such as routine supplements or complements with formula and other fluids and restricted feeding times. Some hospitals continued to adhere to fixed feeding schedules particularly for small infants.

Informational Support

Informational support for the breastfeeding mother is critical in that it gives the mother access to information that will be helpful in preparing her for the breastfeeding experience. Many of the reasons for unsuccessful breastfeeding are related to a lack of proper information on the art and science of breastfeeding (Yeung et al., 1981).

Ladas (1970) surveyed 756 La Leche League women who had wanted to breastfeed their first child and who were no longer breastfeeding that child. Ladas concluded that lack of information was significantly related to all of the reasons

why mothers discontinued breastfeeding before they desired. The investigator argued that informed mothers are also often highly motivated and understand techniques that facilitate breastfeeding and are able to integrate this knowledge in dealing with problems when they arise. Mothers who are well informed are also better able to make their own decisions regarding breastfeeding when they are faced with negative attitudes and inaccurate advice from family, health professionals and friends.

Ladas (1972) outlined the following characteristics for appropriate breastfeeding information: correctness and usefulness, congruence with woman's beliefs, commitment to the point of view being presented and trust in the source of information. The provision of informational support is accomplished on an individual basis, through group breastfeeding classes, literature, videos, films and slide tape presentations. The information which is given must be reliable, accurate and consistent (Dutton, 1979; Goldfarb & Tibbits, 1985; Hall, 1978; Jones & West, 1985; Minchin, 1985). Maclean et al. (1985) commented that conflicting advice, particularly during the early postpartum when the mother is undergoing so much uncertainty, undermines all the advice offered by nursing staff. The mother has no way of determining which advice is accurate and most appropriate. Standardized information through a breastfeeding protocol such as that outlined by Dutton (1979) is helpful in eliminating

contradictory advice or guidance. Breastfeeding protocols are also of assistance in nursing units with high staff turnover.

Nurses who are in positions where they are providing support to breastfeeding mothers should be professionally competent and knowledgeable about breastfeeding. The nurse must have a thorough understanding of the lactation process both theoretically and practically from experience through working with other mothers (Helsing, 1985). Several authors have indicated that nurses often lack requisite knowledge to support breastfeeding mothers adequately (Cole, 1977; Crowder, 1981; Ellis & Hewat, 1983; Estok, 1973; Schlegel, 1983; Whitley, 1978; Winikoff et al., 1986). Nurses need to keep up to date on current breastfeeding literature and research. Minchin (1985) recommended that each hospital appoint one person whose responsibility it is to keep current with breastfeeding research and who is considered an authority on the subject. It is also imperative that nurses are familiar with the information which is available to mothers through the lay literature and the lay community support groups (Nichols, 1978).

The nurse must assess the learning needs of each mother with regard to her breastfeeding knowledge (Hewat, 1985). This is accomplished through a careful evaluation of the amount of correct breastfeeding knowledge the mother has acquired in the antepartum. The hospital period provides an excellent opportunity for teaching mothers about breastfeeding

because the mother is usually highly motivated by an immediate need to learn all she can about breastfeeding (Lawson, 1976). Cohen (1980) found that a teaching session on breastfeeding in the first 24 hours postpartum for primiparous mothers significantly increased the duration of breastfeeding at six weeks. The session included informational and instrumental types of support. Lawson identified the first week or two as a stressful time for breastfeeding mothers. This was partially attributed to their lack of knowledge. Suggestions and information were included as components of Lawson's conceptualization of help and support. Albers (1981) identified 'sharing knowledge' as the second most important behaviour demonstrated by nurses in the postpartum. This finding indicated that mothers wanted information relating to breastfeeding.

Hall's (1978) study found that the majority of women, 88%, did not anticipate any problems with breastfeeding, but 63% of these mothers stated that they did, in fact, experience problems. Similar findings were documented in Hewat and Ellis's (1984) study of women's perceptions of their breastfeeding experiences. Most of the mothers did not anticipate the numerous problems that arose with breastfeeding. Many women commented in Hewat and Ellis's study that the breastfeeding information acquired prenatally was unrealistic. The mothers felt that they could have coped more satisfactorily had they been more aware of the frequency

of occurrences such as sore nipples, irregular schedules, frequency of feedings, leaking breasts, and tiredness and advised regarding appropriate coping strategies and references that would assist them. The participants in Hall's and Hewat and Ellis' studies required more realistic information to prepare them for the unanticipated problems that arose with breastfeeding. Therefore, nurses cannot assume that if mothers do not actively seek information that the mother has all the information she requires for a realistic breastfeeding experience. When a mother is given effective educational preparation for breastfeeding by nurses in the hospital setting prior to discharge, she will be better equipped to cope with difficulties associated with the establishment of breastfeeding. Chapman et al. (1986) emphasized the need for nurses to identify mothers' concerns associated with breastfeeding so that appropriate and meaningful information can be provided to alleviate their concerns.

With the trend towards earlier hospital discharge, mothers may also leave hospital before their breastfeeding is well established. Many breastfeeding problems do not arise until after discharge. A mother who has been discharged without the appropriate information to deal with these problems may be vulnerable to prematurely discontinuing breastfeeding if there are no other means of support available. One of the most common concerns and reasons cited by women throughout the world for discontinuing breastfeeding

is an insufficient milk supply (Cole, 1977; Ellis & Hewat, 1984a; Gussler & Briesemeister, 1980; Hawkins et al., 1987; Houston & Howie, 1981; Mogan, 1986; Tully & Dewey, 1985; Winikoff et al., 1986; Yeung et al., 1981). Salariya, Easton and Cater (1980) argued that insufficient milk was given as the reason for discontinuing breastfeeding by women who lack information. This occurs usually through the mother's misinterpretation of the nature of normal breastfeeding, for example; shorter sleep periods between feedings, the thin bluish appearance of breastmilk, slower weight gain and frequent feedings. The mother who has an insufficient milk supply is often a mother who has been given inappropriate advice about breastfeeding. A common example is advice for introduction of supplemental feedings which produces a decrease in the sucking stimulation and ultimately decreases milk secretion. The lack of information or inaccurate advice conveyed to the breastfeeding mother contributes to the mother's inability to breastfeed for a longer duration.

The breastfeeding literature contains information regarding the type of informational support needed to adequately support breastfeeding mothers. The following information was recommended to be included in the informational support component. This information includes: basic knowledge of anatomy and physiology of breast, milk-ejection reflex, effects of maternal distress on reflex, reducing distress, clean hand technique, breast massage,

positioning, length and timing of feedings, criteria for determining a satisfied baby (Haun, 1985; Princeton, 1986), demand schedule, problems and management, infant growth patterns, maternal nutrition, hospital and community resources, breast pumps (Nicholas, 1978), colostrum, breast changes, sexual responses, rooming-in, sucking mechanism, supplements, collection and storage of milk, jaundice (Auerbach, 1979). Other topics which are important are maternal fatigue, adequate maternal rest (Haun, 1985), and non-nutritive sucking.

Informational support behaviours were discussed in detail in the breastfeeding literature. Most discussions of support for breastfeeding mothers consisted of a large component relating to types of information that should be presented. The research studies that examined support tended to include information in their definition of support. The problem of conflicting advice for breastfeeding mothers was a consistent feature of the research and discussion. The major deficit with respect to informational support was discussion regarding the appropriate timing of this information in the postpartum.

Appraisal Support

The literature review did not reveal any research studies which examined appraisal support by the nurse for the breastfeeding mother. However, several mothers in Lawson's

(1976) study commented on the support they received from a nurse who had breastfed. A few mothers in the study by Maclean et al. (1985) made comments which suggested that they had received appraisal type support behaviours from nurses in the hospital. Yeung et al. (1981) emphasized that encouragement by the hospital staff promotes breastfeeding especially if the staff themselves have had personal breastfeeding experiences. Sharing information with the breastfeeding mother regarding the nurse's personal experiences with breastfeeding and clinical experience working with other breastfeeding mothers are two types of appraisal support behaviours. The nurse provides information from case histories, research, and the literature, which allows the mother to compare her own experience with the other examples. The mother decides for herself how she is performing in the role based upon information provided by the nurse. Hewat (1985) discussed the importance of giving mothers opportunities to make their own decisions about the course of their breastfeeding. Hewat stated that: "alternate breastfeeding practices can be suggested and mothers assisted in making informed choices that are most suitable for them" (p.40). The nurse needs to ensure that the mother is not misinformed regarding a specific component of breastfeeding education.

The breastfeeding literature contained several research studies and discussion regarding the importance of appraisal

support behaviours from informal sources. These findings suggest that lay persons, particularly those who have breastfed their own infants can be influential in supporting the breastfeeding mother and increasing the duration of breastfeeding. Myres (1988) discussed the formation of the La Leche League of Canada as one of the most significant events in the trend back towards breastfeeding. The La Leche League is a mutual aid group of mothers who decided that they must support each other with practical advice and emotional encouragement (Myres, 1988). The benefit of the La Leche League in supporting breastfeeding mothers was confirmed by Ladas (1970). Ladas found that women who have both information such as that provided by La Leche League and support were more successful in their breastfeeding experience than women who had only information or only support. Support was defined in a vague manner in the above study. Ladas indicated that the support was both individual and group in nature. Individual support was based on the breastfeeding attitudes of individuals such as mother, husband, sister, friend or physician.

Lawson (1976) reported that of the 34 women who breastfed and viewed their experiences as successful, many turned to informal sources for support. The extended family was used most frequently (34.5%) followed by friends (13.8%), sisters (10.3%) and La Leche League (10.3%). Lawson advised that

breastfeeding mothers could be a source of support for each other.

Hall (1978) found that mothers who reported receiving emotional support for breastfeeding at home by husbands, mothers, other relatives and friends were more successful at breastfeeding than those who did not cite these individuals as supportive ($p = .03$). She also noted the importance of appraisal support. Hall concluded that mothers should contact other breastfeeding mothers for added support.

Albers (1981) cited the ongoing relationships of husband, mothers' parents and friends as providing the greatest amount of support. The emotional support behaviour of 'sharing knowledge' was especially significant after the birth of their infant. Albers did not indicate whether or not these friends and siblings had breastfed, however it is likely based on the fact that they shared knowledge of breastfeeding with these mothers. Houston (1981) also recommended that an experienced breastfeeding mother be given the task of helping a new mother.

The role of informal sources of support was evident in the Banoub et al. (1985) study in Newfoundland. After the public health nurse, support from a relative or neighbor was the most frequent source of support for breastfeeding. A substantial proportion of women living in the St. John's area mentioned the Breastfeeding Clinic (40%) and the La Leche League (17%) as support groups. Although the Breastfeeding

Clinic includes professional support from the nurses in hospital, generally it is an opportunity for breastfeeding mothers to share their breastfeeding experiences with one another.

Maclean et al. (1985) confirmed the significance of lay breastfeeding support groups and informal sources of support. The LaLeche League was mentioned by almost one-third of the women interviewed in that study. These investigators concluded from the mothers descriptions that:

> Those who had children and particularly women who had breastfed their children were women with whom the nursing mother could share experience and from whom advice and reassurance were obtained. (p. 268)

The accounts of experiences of breastfeeding mothers were stories which were meaningful to the participants in the study by Maclean et al. Appraisal support for breastfeeding mothers by nurses with personal breastfeeding experience is supported by the discussion above.

Maternal Perception of Nursing Support

Lawson (1976) interviewed 40 primiparous mothers to determine their perception of degrees of support for the breastfeeding mother. Specifically, Lawson was interested in assessing if mothers need help or support during the breastfeeding period and if so, from whom they receive it. In examining the perception of nursing support, the women in

this study felt that greater than 52% of the postpartal nurses were neutral or negative in terms of support toward the breastfeeding mother. This is a very disturbing finding when one considers the importance of the first three to four postpartum days in facilitating a positive initial breastfeeding experience. One of the major areas of concern voiced by the women surveyed was the nurse's inadequacies in the role of teacher (Lawson, 1976).

Cole (1977) conducted a survey of 151 breastfeeding mothers. One of the major goals was to explore how breastfeeding outcome might be related to personal-social factors in the postpartal hospital and home environments. The mothers were mailed a questionnaire at three months postpartum. In Cole's sample, only one-third of new mothers felt that hospital nurses provided useful information about breastfeeding; however, among those women who felt that the information they had received was useful, 79% were still breastfeeding at three months postpartum. This proportion was more than twice the average for the whole sample. Cole suggested that the primary difference between those who were successful at breastfeeding and those who were not seemed to be the availability of support and information or resources to deal with problems when they arose.

As part of a larger study, Kurtz (1981) surveyed 144 primparas a week after the birth and a month later to explore mothers' experience of help with breastfeeding. During the

hospital period, the mothers received very little advice on infant feeding, although what they received came almost exclusively from the nursing staff. Sixty-eight percent said they would have liked more information and 51% of those who breastfed and 35% of those who bottle fed would have liked to learn more about breastfeeding in particular. Conflicting advice was reported by 22% of the breastfeeding mothers. Kurtz (1981) suggested that minimal instruction and advice on breastfeeding was received by mothers at any time during their pregnancy or in hospital after the birth of their baby. The investigator remarked that the mother's expected sources of help and information for breastfeeding were the health professionals.

Albers (1981) interviewed 27 breastfeeding mothers at one month postpartum to detect behaviours and persons that were perceived as being emotionally supportive prior to and following the birth of their babies. Health professionals were identified by the subjects as the least supportive. Several mothers commented on the absence of support in the health care setting, where they expected it the most. Mothers felt that support was lacking in such areas as encouragement, information and assistance with breastfeeding techniques. The psychological support factors were deemed more important to the mother than physical factors. The physical support factors demonstrated a slight increase however during the early postpartum. These findings, taking into consideration

the small sample size, emphasized the significance of the nurse in fostering a satisfactory breastfeeding experience through effective emotional support for the mother.

Beske and Garvis (1982) followed 94 primparas in hospital and at one and six months postpartum to identify factors influencing the breastfeeding experience. The goal of the study was to ascertain the potential role of the hospital nurse in influencing and supporting the mother's breastfeeding experience. The prospective, descriptive study identified factors influencing the length and success of the breastfeeding experience. Sources of breastfeeding information and encouragement and discouragement were elicited in the questionnaire. Beske and Garvis (1982) state that "breastfeeding women frequently express disappointment in the hospital nurses, they feel that the nurses could offer more help especially during the first breastfeeding sessions" (p. 174). Results of their study suggested that nursing intervention may be a significant factor related to the mother's success with breastfeeding. However, more than 93% of the study participants were found to have achieved breastfeeding success (the mothers perceived they were successful and would breastfeed again if they had another child), in spite of the nursing care they received. The participants were able to identify three areas where they felt they required more assistance: "encouragement and support, practical information and help from the hospital nurse" (p.

177). These findings provide motivation for hospital nurses to continually re-evaluate their current nursing interventions with the breastfeeding mother.

Hewat and Ellis (1984) conducted a retrospective, study of women's perceptions of their breastfeeding experiences, to identify factors influencing breastfeeding, determine new parameters for nursing assessment, and clarify the nurse's role. Hewat and Ellis (1984) drew a matched sample of 40 primiparae and multiparae who initially decided to breastfeed: 20 who had breastfed for two days to eight weeks and 20 who had breastfed from six to 14 months. Type of support received was one of the major variables identified that influenced the initiation, maintenance and resolution of breastfeeding. The mothers stated that support provided by health professionals either encouraged or discouraged breastfeeding. The mothers described helpful nurses with comments that suggested they received emotional support behaviours from the nurses. Nurses' responses considered discouraging by the mothers included: "'They insisted I feed according to the hospital schedule', 'She weighed the baby before and after feeding and this made me feel I didn't have enough milk', 'She told me my baby wasn't gaining, I dissolved', 'Some of them were too busy to talk', 'She grabbed my breast and shoved it in my baby's mouth, I felt insulted'" (p. 447). Conflicting advice from professionals was the women's most frequent complaint. This finding was prevalent in the literature (Ellis & Hewat, 1984;

Hayes, 1981; Jeffs, 1977; Maclean et al., 1985; McIntosh, 1985).

Maclean et al. (1985) conducted a study of the psychosocial factors influencing breastfeeding. One of the objectives was to describe and analyze breastfeeding mothers' perceptions of community and family support systems. Maclean et al. concluded that hospital staff had a significant role as potential support persons for the mother in the time immediately following the birth of the baby. Almost all of the 50 women interviewed in the study group remarked on the degree of support that they did or did not receive from hospital staff. Approximately one-quarter to one-third of the women expressed negative feelings about their stay in hospital.

The positive comments indicated that mothers appreciated it when nurses offered suggestions but were also able to respect the mother's independent decision-making ability. Feeling that their wishes were being respected was important to the women. The importance of a positive attitude by the nurse was expressed by the mothers. Warmth and kindness were characteristics also described as significant to the mothers. Maclean et al. (1985) referred to the new mother needing mothering herself. This is similar to Raphael's (1981) view of the role of a doula.

In the above study by Maclean et al. (1985), an analysis of the more detailed negative comments indicated that

generally the mothers felt a lack of effective communication between nurses and mothers. Five categories of difficulties cited included: "confusion about hospital policy, 'But how do I breastfeed?', mixed messages, and miscommunication among nurses" (pp. 228-233). A number of women also experienced criticism regarding their breastfeeding efforts which served to undermine their ability to successfully breastfeed their infants.

The Maclean et al. (1985) study provided rich, qualitative data which gave significant insight into the mothers' experiences with breastfeeding. On the basis of their findings the investigators recommended the development of specific policies designed to reflect and meet mother's needs with regard to hospital support for breastfeeding. The study assists nurses in determining areas for improvement in their support to breastfeeding mothers.

The feeding practices of 80 primiparae were examined as a component of a larger prospective study of motherhood and infant care (McIntosh, 1985). The investigator attributed the comparatively low incidence of breastfeeding 29 of 69 (42%) mothers who remained in the study following the birth and their early discontinuation to a result of practice constraints and inadequate support. A large number (18) of the mothers verbalized concerns regarding the inflexibility of hospital ward routines and the adherence to fixed feeding schedules. Approximately half of the mothers who had

breastfeeding difficulties in hospital and requested assistance were almost encouraged to give up rather than helped to overcome the difficulty. A number of the mothers (8) also commented on the conflicting advice regarding breastfeeding from different health professionals. The investigator questioned the impact of hospital staff attitudes as a possible contributing factor to the relative lack of support and encouragement experienced by the mothers. Similarly, Kurtz (1981) reported in her study that less than half of the nurses questioned had a positive attitude to breastfeeding. McIntosh (1985) concluded that the quality of support available to the breastfeeding mothers in the study was far from ideal. The many physical problems which were the main reasons cited for mothers giving up breastfeeding could have been overcome with the appropriate support and encouragement by health professionals. The small breastfeeding sample (n = 29) made these findings limited.

Winikoff et al. (1986) used a multidimensional approach for data collection to provide a more accurate view of constraints to breastfeeding in a large urban hospital. This was a component of a larger project developed to design and implement interventions to increase the rate of breastfeeding at the specific hospital. Following interviews with 60 women in hospital, the investigators reported that support in the hospital for breastfeeding mothers was generally inadequate. The staff were not able to assist mothers with their questions

and concerns regarding breastfeeding. The nurses were not providing adequate emotional support to assure mothers that they would be able to breastfeed despite the minor difficulties which may arise.

Jeffs (1977), in a study to examine the underlying reasons why women decide to breastfeed or bottlefeed, concluded that generally mothers expressed satisfaction with the help they received with breastfeeding in the hospital. The hospital midwife was reported to be the most popular source of information in the health professional group. However, conflicting advice was the main complaint and it proved to be a major source of frustration and misunderstanding for the mothers.

Rousseau et al. (1982) examined as a component of a larger study the in-hospital experiences of 89 primiparas and multiparas who were breastfeeding. The support given by hospital nurses was perceived by the mothers as good.

Reiff and Essock-Vitale (1985) assessed the impact of nurses' attitudes, hospital factors, and mothers' perceptions of their hospital experiences on early infant feeding choices. Mothers of 77 infants responded to a structured interview administered at two weeks postpartum. Mothers reported that most infant feeding counselling came from the hospital nursing staff and the majority interpreted these discussions as advocating breastfeeding.

There have been a few quasi-experimental studies which have examined the effect of nursing support interventions with breastfeeding mothers (Ellis & Hewat, 1984b; Hall, 1978; Jones & West, 1985; Saunders & Carroll, 1988). There was minimal discussion by these authors on how the subjects perceived the quality of support they received from the staff nurses.

Hall (1978) studied the relative effects of three nursing interventions on breastfeeding success in 40 first-time breastfeeding women. Group I (n = 12) received routine hospital care, Group II (n = 13) received the routine care plus a slide-tape presentation on breastfeeding and a pamphlet to take home, and Group III (n = 15) received the slide-tape and pamphlet teaching plus individualized nursing support by the investigator. Support was defined as giving guidance and strength, providing relief from mental anguish, making the mother less fearful, relating an attitude of understanding and reassurance, and offering praise and encouragement. The support was given by being with the mother at least once while the mother was breastfeeding in the hospital, a visit or call each day in the hospital, and calls to the home at one to two days and one week postpartum. Eighty percent of Group III mothers were breastfeeding at six weeks postpartum compared to 50% of Groups I and II. At approximately six weeks postpartum each of the mothers in the study were interviewed to determine what factors were a help or a hindrance to her breastfeeding success. The women responded very favourably

to the care received by the investigator. All of Group III cited the investigator as the most helpful person in the hospital. In Group II half of the respondents also listed the investigator. In all groups, 70% of the women expressed some disappointment in the hospital nurses. They felt that the nurses could have offered more help particularly during the first breastfeeding session. This was a small sample and the investigator provided the individualized support. Therefore, she may not accurately represent the average nurse as she was highly committed to giving outstanding care to the breastfeeding mothers.

Jones and West (1985) conducted a randomized controlled trial of a lactation nurse assisting primiparae and multiparae during the early postpartum both in hospital and at home, to establish the duration of breastfeeding, attitudes and practices of infant feeding and problems they encountered. The investigators reported that the lactation nurse initiated breastfeeding earlier, increased frequency of feedings, discouraged supplementary feeding but more significantly, she encouraged mothers and supported those with problems. The intervention group mothers expressed appreciation for the support and assistance given by the nurse. Their positive comments were profuse both in hospital and at the second interview 12 months postpartum. There were only a few mothers who reported receiving insufficient help and many mothers reported enjoyable and satisfying breastfeeding experiences.

The results of the above study were similar in some respects to Hall's (1978) intervention study in citing the help of a specific, committed nurse in providing breastfeeding support and increasing duration of breastfeeding. Jones and West (1985) demonstrated with a large sample that the lactation nurse significantly extended the duration of breastfeeding in the intervention group particularly during the first four weeks. Saunders and Carroll (1988) examined the provision of hospital and community counselling and support on breastfeeding duration in a low income population (n=155) using a quasi-experimental design. The experimental group (n = 80) of multiparous and primiparous mothers received one or all of the following interventions: (a) a hospital visit at one to three days postpartum in which a feeding was observed, appropriate breastfeeding technique was discussed, and follow-up support was offered, (b) a phone call or letter at four to five days postpartum to answer questions and provide support, (c) a structured group support class at 2 weeks postpartum which included a slide/tape show and a discussion of common breastfeeding problems. A subgroup of the experimental groups who received all of the three support interventions (n = 36) was considered the complete intervention group. The results indicated that the experimental groups as a whole breastfed consistently longer than the control group at four to sixteen weeks. However, this finding was not statistically significant. The complete

intervention subgroup consistently breastfed for a longer duration than the control group with 95% still breastfeeding at four weeks and 67% at 16 weeks. This finding was statistically significant ($p = .001$ to $.03$).

Ellis and Hewat (1984b) assigned 194 women to groups that either did or did not have access to a hospital class on breastfeeding and extra informational, instrumental and emotional support from an expert nurse clinician. There was no positive relationship found between breastfeeding duration and support from nursing staff. Approximately 90% of the mothers breastfed at discharge, but at one month, three months, and six months postpartum, women in the comparison group had higher breastfeeding percentages than those who had received the extra hospital-based nursing support. These findings were not consistent with Hall's (1978) study. With respect to maternal perception of the hospital nursing support, of the total ($n = 104$) interviewed at one month postpartum, two stated they had received incorrect information and 15 said the nurses gave conflicting information. It was interesting to note that at six months postpartum the formula feeding mothers stated they received significantly more teaching about breastfeeding during hospitalization than did the breastfeeding mothers. The authors conclude that this finding indicates that information alone may be insufficient to significantly affect breastfeeding duration. Ellis and Hewat (1984b) concluded that the women who were more committed

to breastfeeding perhaps expected a greater quantity of and consistency in hospital teaching in comparison to the less committed breastfeeders.

Summary

The literature indicated that the nurse has a significant role to play in supporting breastfeeding mothers in the early postpartum. The breastfeeding literature described the nature of nursing support particularly with respect to emotional, informational and instrumental types of support.

There were several research studies in the non-nursing literature which examined in detail the hospital environment and its relationship to breastfeeding outcome. These studies were particularly significant in that the majority of the studies confirmed the negative influence of traditional hospital practices on successful breastfeeding. These hospital practices can be altered by the hospital nursing staff. The instrumental support category that included modifying the hospital environment for breastfeeding mothers would subsume practices such as encouraging demand feeding, rooming-in, early mother-infant contact and no routine supplementation.

The studies reviewed suggested that the support received from nurses by breastfeeding mothers was often inadequate. There were two studies (Hewat & Ellis, 1984; Maclean et al., 1985) which examined in detail mothers' perceptions of their

in-hospital breastfeeding experiences. Lawson's (1976) study which examined specifically hospital nursing support had several limitations, the small sample size and the vague conceptualization of support. In Alber's (1981) study which investigated emotional support by many sources including hospital nurses, many of the descriptors referred to as emotional support would be more suited to a category of instrumental or informational support, for example, "demonstrated techniques", "gave articles" and "shared knowledge" (pp. 122-123).

Several research studies examined the maternal perception of support given by nurses and other health professionals as a small component of larger breastfeeding studies. These studies often defined support in a vague and inconsistent manner. The literature review did not reveal studies which examined the four categories of support in detail. More often the studies explored informational and emotional types of support. Yet it is likely that some mothers would benefit more from instrumental or appraisal support. Nursing interventions may create a stronger impact on breastfeeding mothers if all four types of support were assessed in greater depth. There were no nursing studies found which exclusively assessed the postpartal nursing support for breastfeeding during hospitalization.

The effectiveness of various types of hospital nursing support interventions for breastfeeding were not conclusive.

The studies are few and they have not been replicated, and in some cases sample sizes were inadequate. These intervention studies examined the type of nursing support and success with or duration of the breastfeeding experience. There were no studies which described the relationship between maternal perception of the quality of nursing support and satisfaction with the breastfeeding experience, although several studies suggested a relationship (Jones & West, 1985; Maclean, et al., 1985).

CHAPTER III

METHODOLOGY

Design

This research study was a descriptive, exploratory study designed to survey a non-random sample of primiparous breastfeeding mothers regarding their perception of, and satisfaction with, the quality of nursing support for breastfeeding offered during the postpartal hospital period. Two standardized interview schedules were developed to yield the desired information for this study. The first interview schedule (Appendix A) assessed the types of postpartal nursing support received by the mothers in hospital; the helpfulness of each category of support; the maternal perception of the quality of nursing support and the maternal satisfaction with the breastfeeding experience. The second interview schedule (Appendix B), administered at two to three weeks postpartum, was a follow-up to assess the helpfulness of the nursing support received in hospital; the maternal perception of the quality of nursing support and the maternal satisfaction with the breastfeeding experience. The breastfeeding literature, the researcher's clinical experience in counselling breastfeeding mothers and the researcher's personal experience as a breastfeeding mother were used to develop the instruments.

A pilot study using a sample of eight primiparous breastfeeding mothers was undertaken to check the questions for clarity and to test the procedure. The two interview schedules were used and modified following the pilot study.

Sample

Forty-seven healthy primiparous women who delivered a healthy, full term infant at the selected hospital between the dates of June 2nd, 1988 to August 13th, 1988 and who were breastfeeding, were approached to participate in the study. Seven mothers who were approached were not included because three mothers preferred not to participate and four were discharged from hospital before an interview time was arranged. The remaining forty comprised the sample.

Primiparous mothers were used in the study to control for the possible effects of parity on breastfeeding experience. There were no restrictions for age, marital status, educational or socioeconomic background. The mothers were all able to understand, speak and read English. The sample included only full-term infants, 38 to 42 weeks gestation who were appropriate weight for gestational age. There was no prolonged separation of infant from mother which resulted in a delay in the initiation of breastfeeding. All mothers initiated breastfeeding within 24 hours of birth. The

study sample included mother-infant pairs with no intrapartal or postpartal complications that interfered with the breastfeeding experience.

Instrumentation

A review of the literature in this area did not reveal an appropriate instrument for measuring nursing support for breastfeeding mothers in hospital. The breastfeeding and nursing literature was however of assistance in developing the desired instruments. Gardner and Wheeler's (1987) interview guide used to measure medical, surgical and psychiatric hospitalized patients' perceptions of nursing support was used as a guide in developing the first interview schedule. Three of the open ended questions regarding nursing support were adapted for use in the interview schedule. Kintz's (1987) Nursing Support in Labour Questionnaire was also used in developing the instrument. The items which described various supportive nursing behaviours were adapted for use in Interview Schedule I (Appendix A).

Interview Schedule I (Appendix A) was composed of three sections. Part I was designed to assess the nursing support received by the mothers during their postpartal hospital period. This section consisted of three open-ended questions pertaining to nursing support. The mothers were asked to describe incidents when they felt they had received help from

a nurse for breastfeeding and when they had not received help. If they had not received help, they were then asked to describe what may have prevented the nurses from giving help for breastfeeding. The mothers were then asked to rate their satisfaction with the quality of nursing support for breastfeeding on a Likert scale of "very satisfied", "satisfied", "neutral", "dissatisfied" and "very dissatisfied". Part I also included forty items that described various types of supportive nursing behaviours for breastfeeding. For each item, mothers were asked to respond "yes" if they had experienced the behaviour and "no" if they had not. Mothers who responded "yes" were then shown a rating scale and asked to rate the helpfulness of the behaviour on a five-point Likert scale from "not at all helpful" (1) to "very helpful" (5). Six items measured emotional support, twelve items measured instrumental support, nineteen items measured informational support and three items measured appraisal support. When all forty items were completed, the mothers were given cards with each behaviour that they responded "yes" to in each of the four categories. They were then asked to rank the four categories overall in order of helpfulness to their breastfeeding experience in hospital.

Part II of Interview Schedule I asked questions relating to the mother's present satisfaction with the breastfeeding experience. There was an open ended question pertaining to questions and problems with breastfeeding. There was one

close-ended question regarding planned duration of breastfeeding with the following responses, "less than one month", "more than one month but less than three months", "more than three months" and "I don't know". A Likert scale was used to elicit information regarding the mother's satisfaction with the breastfeeding experience. The responses were "very satisfying", "satisfying", "neutral", "dissatisfying", "very dissatisfying".

Part III of Interview Schedule I consisted of a combination of nineteen open ended and close-ended questions. These questions provided demographic data and background data regarding labour and birth experience, prenatal breastfeeding education and preparation for breastfeeding and initial experience with breastfeeding.

The follow-up Interview Schedule II (Appendix B) consisted of eight open ended and close ended questions. There were questions relating to current breastfeeding status, problems with breastfeeding and the helpfulness of nursing support received in hospital for the breastfeeding experience during the first few weeks postpartum. There were two Likert scales used to measure the mother's satisfaction with the quality of nursing support received in hospital and, if they were still breastfeeding, their satisfaction with the breastfeeding experience. The responses for both scales were identical to similar questions in Interview Schedule I. The mothers were also asked if they would breastfeed their next

baby. The responses were "yes", "no" or "undecided". Finally, there was a question pertaining to the public health nurse's visit and advice for breastfeeding given by this nurse.

Face validity of the instruments was established by having three knowledgeable and experienced maternal-child nurses with considerable experience and research in breastfeeding to review the instruments.

Interview Schedule I took approximately forty-five minutes to complete and the follow-up interview took approximately five to ten minutes.

Ethical Considerations

The proposal for this research study was submitted to and approved by the Human Subject Review Committee of the School of Nursing, Memorial University of Newfoundland and the Director of Nursing at the selected hospital. Staff physicians whose patients would potentially be involved in the research were informed in writing (see Appendix C).

The mothers who fit the criteria for inclusion in the research study were determined by the teaching nurse (or in her absence a designated other) of the postpartal unit on a daily basis. The nurse approached the mother with a letter explaining the nature of the study (see Appendix D). The

nurse asked the mother for permission for the researcher to visit and to explain the study and to obtain consent.

The researcher contacted the unit on a daily basis to obtain the names of the mothers who had agreed to be interviewed. The researcher approached the mothers to explain the nature of the study, to answer any questions and to seek their consent. Each mother was therefore informed in writing and again verbally about the nature of the study and requested to sign the consent if she voluntarily agreed to participate in the study. Once the consent had been signed, the researcher and mother determined a mutually convenient time to administer the interview schedule. The mothers were reminded of the follow-up interview at the conclusion of the first interview.

The mothers were informed that they had a right to refuse to participate or to withdraw from the study at any time without affecting their nursing care.

The mothers were assured of complete confidentiality of information collected by the researcher. A code number was used rather than the mother's name. The identity of the mothers remained known only to the researcher. To ensure privacy for the mothers, an assigned room was used for interviews in hospital if the mother's own room was not appropriate.

Setting

The sample for the present research study was selected from the one postpartal unit at the selected hospital. Therefore, all the mothers in this study followed similar postpartum and breastfeeding practices specific to the selected hospital. The postpartal unit had a written breastfeeding protocol for nursing staff (see Appendix E). All of the mothers in this study had an opportunity to chose a rooming-in arrangement if they desired. Mothers in private accommodations could room-in on a 24 hour basis, whereas semi-private and ward rooms generally allowed for modified rooming-in from 0900 hours to 1900 hours. The postpartal unit consisted of a separate central nursery with specific nursery nurses and nursing assistants assigned to the care of the infants. Mothers were allowed free access to the central nursery. The nurses on the postpartal unit were generally assigned with a nursing assistant to a unit of postpartal mothers usually with a ratio of one nurse to seven to ten mothers. These nurses were responsible for the general postpartal care of the mothers. The postpartal unit had one teaching nurse who was responsible for tri-weekly classes on breastfeeding, family planning, infant bath and care and formula preparation. This nurse was also responsible for the breastfeeding mothers and a weekly Breastfeeding Clinic for mothers in the community. A further component of her work included all postpartal referrals for all mothers on the unit

and all in-patient prenatal education for high risk mothers. The teaching nurse was usually assigned to this position on a rotating basis with most of the postpartal nurses assuming this position for six week periods. However, during the data collection period from June until August, one specific teaching nurse assumed this position for the entire time. This same nurse was highly motivated and enthusiastic about breastfeeding. Support for breastfeeding was provided by the teaching nurse, and nursery and postpartal nursing staff. The intrapartal nurses were involved only if breastfeeding was initiated in the delivery or recovery area, in the period immediately following birth.

The hospital breastfeeding protocol indicates that the infant should be put to the breast as early as the mother desires after birth to promote early infant-mother contact. The general policy is that all infants spend an initial period of time in observation in the neonatal intensive care unit before transfer to the regular nursery. This period is usually six to eight hours. The protocol recommends that the infant start breastfeeding not later than eight hours of age. If the mother and infant are healthy, the infant can be transferred at three to four hours after birth for the first feeding. There is no statement in the protocol regarding breastfeeding in the delivery or recovery area immediately after birth. However, if the mother chooses to breastfeed at

this time there is no problem if both mother and infant are healthy.

The protocol states that "a glucose water feeding may be given at three to four hours of age only if the infant appears hungry and after each breastfeeding only until a mother has a good milk supply (if the mother agrees with the above)" (see Appendix E). However, the supervisor of the nursery has indicated to the researcher that all infants receive glucose-water as the first feeding unless requested not to do so by the mother. Supplementary bottles of glucose and water are given to the mothers for each breastfeeding session and they are encouraged to offer the glucose and water to the infant in the first few days postpartum until the mother has a good milk supply. A formula feeding is not to be administered to a breastfed infant unless ordered by the physician or if the mother requests formula. The nurse is not to suggest a formula feeding for the infant at any time.

Test weighing, weighing an infant before and after a breastfeeding, was not a routine practice at the hospital. The protocol states that "infants at the breast showing undue weight loss or signs of undue hunger should have one or two test weights performed" (see Appendix E). With regard to feeding patterns for breastfeeding infants the protocol recommends that the feeding frequency is usually three to four hours, however, the infant may need to be fed more often if he or she appears hungry. A breastfeeding mother could

request that her infant be demand fed although the nursery adhered to a fixed feeding schedule. The nurses should always encourage the mother to have the infant out for the 0200 hour feeding rather than give a formula in the nursery. The mothers are advised to feed initially for three to five minutes on each breast and for five to ten minutes on each breast by the second day. The protocol recommends that a nurse always stay with the mother for the first feeding and subsequent feedings if necessary.

The group breastfeeding classes were held tri-weekly and all mothers were informed of the schedule. Participation in all of the postpartal classes was voluntary.

Data Collection Procedures

Interview Schedule I was administered to the mothers in the mother's room or an assigned room in the postpartal unit of the selected hospital. The mothers were all interviewed as close to discharge as possible, usually the day before or morning of discharge. The interview took place between days three to five postpartum for the majority of the participants. However, a few of the mothers with longer postpartal stays were interviewed later than five days postpartum. Interview Schedule II was administered by telephone to the mothers in their home at approximately two to three weeks postpartum.

The interview schedule format was explained to the mothers at the time of the interview. The researcher asked each question and recorded each response. When Interview Schedule I was completed, each mother was reminded of the follow-up phone call and interview when their infant was between two to three weeks of age.

Interview Schedule II was administered to the mothers between two to three weeks postpartum. The researcher asked the mother if it was a convenient time to administer the interview schedule. If it was not appropriate, a mutually convenient time was agreed upon. The researcher asked each question and recorded each response.

Data Analysis

The results of both interview schedules were analyzed using descriptive and inferential statistics with such tests as mean, frequency, t-test, chi-square test of independence and Fisher exact probability test. The descriptive and inferential analyses were completed on a computer using the SPSS^X Statistical Package for the Social Sciences.

The responses to questions relating to descriptions of incidents where the mother received or did not receive help for breastfeeding were identified and systematically organized into the four selected categories of support. Frequencies and percentages were then calculated using SPSS^X. Further discussion regarding the analysis will be presented in the results section.

CHAPTER IV

RESULTS AND DISCUSSION

This chapter includes the results and discussion of the research based on the completed interview schedules of 40 primiparous breastfeeding mothers. The presentation of the results is divided into (a) characteristics of the sample, (b) nature of nursing support, (c) satisfaction with breastfeeding experience, (d) follow-up of subjects, (e) satisfaction with quality of nursing support and (f) relationship between maternal perception of the satisfaction with quality of nursing support and maternal satisfaction with the breastfeeding experience.

Characteristics of the Sample

The sample (n) consisted of 40 primiparous breastfeeding mothers. The average maternal age was 27.25 years with the range of maternal age 20 to 36 years. Thirty-four of 40 (85%) of the mothers were married. Three were living common-law and three were unmarried. The mothers varied a great deal in their educational preparation. The large majority, 34 of 40 (85%) had achieved some post-secondary education whereas six (15%) had completed high school. The majority of mothers, 35 out of 40 (87.5%) worked outside the home prior to the birth

of their infant. There was considerable variation in employment among the mothers. Of the 35 mothers employed outside the home, the largest number, 12 (34.3%) worked in clerical occupations. Eight mothers (22.9%) were employed in scientific or technical occupations. All mothers were born in Canada, 35 within Newfoundland and five outside Newfoundland.

The majority of mothers (57.5%) had a vaginal birth (23 out of 40). Of these 23 mothers, three had a forceps assisted birth. There was a substantial proportion, 17 out of 40 (42.5%) of mothers who had cesarean birth: two were anticipated and 15 were unanticipated. The mothers reported that their lengths of labour had ranged from one hour to 27 hours, with an average length of labour of 10.78 hours. Most of the mothers in their general comments indicated that their labour was "long" and "hard". A high percentage of mothers (48.7%) were administered an epidural anaesthetic mostly for cesarean birth. A slightly lower percentage (41%) received a local anaesthetic and three mothers (7.5%) had a general anaesthetic. The remaining two mothers (5%) received no anaesthetic for labour or birth.

Thirty-eight of 40 mothers (95%) attended prenatal classes during their pregnancy. The majority of these mothers attended the classes offered at the selected hospital while the remaining few attended classes held through the public

health department. Fourteen of the 40 mothers (35%) attended the prenatal breastfeeding class which was offered at the selected hospital during their pregnancy. The majority (65%) did not attend this class. The mothers who attended the class all reported that the class had been helpful to them. Eleven of the 14 mothers who attended this class found it "very helpful", two found it "helpful" and "somewhat helpful". The infant care class offered in the prenatal series of classes at the selected hospital was attended by 10 of the 40 mothers (26.3%). A large majority, 28 out of 40 (73.7%) did not attend this class. Two mothers reported that they did not attend because it was not offered in their prenatal series of classes. Of the 10 mothers who attended the infant care class one mother rated the breastfeeding component as "very helpful" and one mother rated it as "helpful". The majority (8) of the mothers rated it as "somewhat helpful" to "not at all helpful". Thirty-seven of 40 mothers (92.5%) attended the postpartal breastfeeding class. Of these 37 mothers, the majority (89.2%) found the class "helpful" or "very helpful".

A high percentage of mothers (95%) received additional information regarding breastfeeding during their pregnancy. The most frequently mentioned sources of additional information were pamphlets and books. Several mothers stated that they had viewed a film about breastfeeding during their pregnancy. Nine mothers (23.6%) mentioned receiving

additional information about breastfeeding in discussion with family and friends who had breastfed their infants. One mother (2.6%) reported that she had discussed breastfeeding with a La Leche League leader. Only 14 out of 40 mothers (35%) reported that their physicians encouraged them to breastfeed. The majority of mothers commented that their physicians asked them only if they intended to breast or bottle feed their infant. This latter finding was consistent with Lawrence (1982) who noted that although a high percentage of physicians claimed they advocated breastfeeding, approximately 34% never initiated the topic with the mother.

Physical preparation of breasts and nipples for breastfeeding was practiced by 32 of the 40 mothers (80%). The largest percentage of those mothers (68.7%) used two or more methods of physical preparation and the remainder (31.3%) used only one method. Nipple rolling to improve nipple protractility was the most frequently used preparation followed by using a rough towel or face cloth to toughen the nipples.

The majority of mothers (55%) did not initiate breastfeeding until more than eight hours after birth. Twelve mothers (30%) breastfed their infants in the recovery room. Six mothers (15%) breastfed their infants in their rooms on the postpartal units less than eight hours after birth. All mothers were asked to describe their experiences getting

started at breastfeeding. Fifteen mothers (37.5%) said getting started at breastfeeding was "easy" or "very easy". A higher percentage of mothers (62.5%) reported that getting started at breastfeeding was "about average" or "difficult".

A summary of the characteristics of the population is presented in Table 1.

Nature of Nursing Support

One of the specific objectives for the present study was to describe the nature of nursing support for breastfeeding. The researcher wanted mothers to describe incidents where they felt they had received help from a nurse for breastfeeding, and when they had not received help. If they had not received help for breastfeeding, they were then asked to describe what may have prevented the nurses from giving them help for breastfeeding.

Descriptions of Nursing Support

All of the mothers were able to describe at least one incident where they had received help from a nurse for breastfeeding. The mothers' descriptions were categorized according to the four different types of support in the

Table 1

Characteristics of the Sample n = 40

Characteristic	Absolute Frequency (n)	Relative Frequency (%)	Cumulative Frequency (%)
Age			
20-27 years	23	57.5	57.5
28-36	17	42.5	100.0
Sex of infant			
male	23	57.5	57.5
female	17	42.5	100.0
Education			
some high school	1	2.5	2.5
high school completed	6	15.0	17.5
some college	6	15.0	32.5
college-trades completed	11	27.5	60.0
some university	10	25.0	85.0
university degree	6	15.0	100.0
Marital status			
married	34	85.0	85.0
common-law	3	7.5	92.5
unmarried	3	7.5	100.0
Employment status during pregnancy			
Yes	35	87.5	87.5
No	5	12.5	100.0

Table 1 (continued)

Table 1 (Continued)

Characteristic	Absolute Frequency (n)	Relative Frequency (%)	Cumulative Frequency (%)
Type of employment			
clerical	12	34.3	34.3
sales	6	17.1	51.4
service	2	5.7	57.1
teaching	4	11.4	68.5
scientific	8	22.9	91.4
other	3	8.6	100.0
Place of birth			
Newfoundland	35	87.5	87.5
Other Canadian provinces	5	12.5	100.0
Type of birth			
vaginal	4	10.0	10.0
vaginal & episiotomy	16	40.0	50.0
vaginal, episiotomy & forceps	3	7.5	57.5
cesarean	17	42.5	100.0
Type of anaesthetic			
epidural	19	47.5	47.5
local	16	40.0	87.5
general	3	7.5	95.0
none	2	5.0	100.0
Attendance at prenatal classes			
yes	38	95.0	95.0
no	2	5.0	100.0
Attendance at prenatal breastfeeding classes			
yes	14	35.0	35.0
no	26	65.0	100.0

Table 1 (continued)

Table 1 (Continued)

Characteristic	Absolute Frequency (n)	Relative Frequency (%)	Cumulative Frequency (%)
Helpfulness of class			
very helpful	11	78.6	78.6
helpful	2	14.3	92.9
somewhat helpful	1	7.1	100.0
Attendance at infant care			
yes	10	26.3	26.3
no	28	73.7	100.0
Helpfulness of breastfeeding component of infant care class			
very helpful	1	10.0	10.0
helpful	1	10.0	20.0
somewhat helpful	5	50.0	70.0
not helpful	1	10.0	80.0
not at all helpful	2	20.0	100.0
Attendance at postpartal breastfeeding class			
yes	37	92.5	92.5
no	3	7.5	100.0
Helpfulness of postpartal breastfeeding class			
very helpful	26	70.3	70.3
helpful	7	18.9	89.2
somewhat helpful	3	8.1	97.3
not at all helpful	1	2.7	100.0

Table 1 (continued)

Table 1 (Continued)

Characteristic	Absolute Frequency (n)	Relative Frequency (%)	Cumulative Frequency (%)
Additional information received			
yes	38	95.0	95.0
no	2	5.0	100.0
Physical preparation of breast and/or nipple			
yes	32	80.0	80.0
no	8	20.0	100.0
Time of first breastfeeding experience			
more than eight hours after birth	22	55.0	55.0
less than eight hours after birth	18	45.0	100.0
Getting started at breastfeeding			
very easy	6	15.0	15.0
easy	9	22.5	37.5
about average	14	35.0	72.5
difficult	7	17.5	90.0
very difficult	4	10.0	100.0

conceptual framework. Thirty-six instrumental support behaviours (54.5%) were described by the mothers. This was followed by 19 emotional support behaviours (28.8%) and 11 informational support behaviours (16.7%). There were no descriptions of appraisal support behaviours. Table 2 provides a summary of these findings.

Table 2

Nursing Support for Breastfeeding Received by Subjects n=40

Type of Support	Frequency	Percentage (%)
instrumental	36	54.5
emotional	19	28.8
informational	11	16.7
appraisal	0	-
Total	66	100.0

The most frequently mentioned instrumental support behaviour was "helped to get infant latched on". A large number of mothers also indicated that "helped position self and infant for breastfeeding" was another main instrumental type of support. These two behaviours are physical types of activities that the nurse does to assist the mother with breastfeeding. These physical activities were described in the literature as helpful to a mother's breastfeeding experience (Albers, 1981; Hall, 1978; Jones & West, 1985; Winikoff et al. 1987). Maclean et al. (1985) and Solberg (1981) found that mothers wanted assistance with the technical aspects of breastfeeding such as positioning and the techniques of breastfeeding. Goodine and Fried (1984)

reported that participants in their study had difficulty with nursing technique that could have been overcome with correct demonstration. Auerbach (1979), Nichols (1978) and Raphael (1981) all referred to the nursing behaviour of demonstrating techniques in their discussion of support for the breastfeeding mother.

The nurse "stayed during a feeding" was the most frequently reported emotional support behaviour. This finding was supported in the literature (Hewat & Ellis, 1984; Maclean et al. 1985). A few mothers mentioned the following emotional support behaviours: nurse "checked on me during feeding" and the nurse's "positive attitude" towards breastfeeding. Even if a nurse was unable to stay with a mother during the feeding, the mother found it helpful for the nurse to check on her during the feeding. This supportive behaviour ensured that the mother was not left completely by herself without any guidance. Nurses often remark that they have insufficient time to spend with breastfeeding mothers. Occasionally checking on a mother during a feeding and offering a few words of encouragement or helpful hints can have a positive influence on a mother's breastfeeding experience. The importance of the nurse's positive attitude towards breastfeeding was consistently noted in the literature (Albers, 1981; Kurtz, 1981; Lawson, 1976; Maclean et al., 1985; Solberg, 1984). Several mothers in the present study

remarked specifically on the individual attention they received from the teaching nurse.

The most frequently cited informational support behaviour was the provision of information regarding engorgement and sore nipples. Engorgement and sore nipples, are two common problems experienced by breastfeeding mothers in the early postpartum. Beske and Garvis (1982), Chapman et al. (1985), and Mogan (1986) all reported problems relating to sore nipples and breasts. Information on how to deal with such problems can be particularly helpful to mothers in the early postpartum.

Twenty of the 40 mothers were able to describe at least one incident where they felt that they had not received help from a nurse for breastfeeding. There were 12 descriptions of incidents where the mothers were lacking in informational types of support, 11 incidents lacking in emotional support and five lacking in instrumental support.

The informational support was for the most part related to conflicting advice. One mother commented:

> The first night in the nursery I got three different answers to one question from three different nurses. How long to feed her? How much water to give her? I was addled. I didn't know what to do.

Another mother was also confused regarding the length and timing of feedings. A mother's description of the conflicting advice is described well in the following comments;

> Some nurses said to give formula because for the first 2 - 3 days there is not enough [milk] with the colostrum. Some nurses say to give formula at 2 a.m. feed, others say to give glucose and water. Some nurses say to rest and avoid night feeding, others say to feed. Some nurses say to increase fluid intake, others to decrease it.

One mother received conflicting advice regarding the use of an artificial nipple placed over her flat nipples. She recounted:

> One nurse said to use the plastic nipple because the baby wouldn't latch on but the nurse teaching the class said to throw it away and don't use it.

The reports of some mothers indicated that they received inaccurate or limited information regarding the importance of demand feeding. Two mothers illustrate this in their descriptions:

> The milk came in and no one told me to feed. I missed a feed and I didn't realize how important it was.

> I was really sore at 2 a.m. and the nurse told me to get sleep and she fed baby formula in the nursery. The baby couldn't suck from my breasts for the next two feeds.

One mother reported receiving different opinions regarding jaundice and breastfeeding. Another felt that information was poor in the area of a healthy diet for a breastfeeding mother. One mother mentioned worrying about how she would know that her infant was getting enough milk. Another stated that she was concerned about managing a sleepy infant who was reluctant to feed. One mother expressed confusion regarding supplementation with glucose and water or

formula. The data presented above indicated that conflicting advice was particularly frustrating and not helpful to mothers' early breastfeeding experiences. The mothers in the present study received conflicting advice primarily regarding the duration and frequency of feedings and the use of formula and glucose and water as supplements. Information regarding frequency of feedings in the early postpartum is one of the areas cited in the literature where mothers receive the most conflicting advice (L'Esperance, 1980). The one mother who described being worried about how much milk her infant was getting was not alone in experiencing this as a lack of informational support. Many mothers reported having questions relating to whether or not the infant was getting enough milk. There was only one mother who mentioned that information was poor with regard to a healthy diet for a breastfeeding mother. However, a few of the mothers who eventually discontinued breastfeeding cited "poor appetite" and "not eating well" as maternal problems leading to their decision to discontinue breastfeeding.

With regard to the emotional support behaviours which were lacking, mothers described needing more reassurance, having the nurse present in the room during a feeding or checking on them during a feeding, and feeling helpless and very concerned. Five of the mothers described incidents where they would have appreciated the nurse staying with them or

checking on them during the feeding. This was consistent with findings in the literature noting the importance of these behaviours (Hewat & Ellis, 1984; Maclean et al., 1985). This finding also supports previous discussions of mothers' descriptions of emotional support. One mother stated that the nurses did not encourage breastfeeding sufficiently:

> I needed more encouragement and push by nurses. I was really wanting to do it. If it wasn't for me I'd have given formula.

The following mother's comments describe an incident where she received inadequate emotional support:

> A nurse told me I didn't have my priorities right because I was cuddling him too much and not feeding him. She said he was down to be fed and not to be cuddled.

One mother whose infant was on a demand schedule and therefore had not adhered to the fixed feeding schedule of the hospital nursery made the following comments.

> Nurses had a fit she was down in my room so long ...I was told she had to be fed at 9 p.m.. I told the nurses I didn't wake her up. The nurse was furious. She told me if I didn't wake her up, she'd take the baby to the nursery and give her formula.

The five instrumental support behaviours in which the mothers felt they had not received help from a nurse were primarily related to getting the baby latched on to the breast properly and positioned correctly for breastfeeding. These findings were consistent with the mothers' descriptions of instrumental support previously discussed. The following

comments from a mother who had undergone a Cesarean birth described the lack of instrumental support:

> In the beginning, the first feed, I couldn't move [the] baby around. I felt like I was left on my own. I wasn't shown how to position [the] baby properly. Maybe I wouldn't be so sore now if they'd showed me.

Inadequate instrumental and emotional support was evident in the comments of this mother.

> It was usually at night, or the suppertime feedings. The second time I was feeding the baby I asked the nurse to stay long enough for me to get the baby latched on, just for a few minutes. She could not stay. I couldn't understand it. She wasn't friendly. She just left. She never asked me later if everything went okay.

The detailed negative comments described by half of the mothers may have been isolated incidents for each mother. However, they could have a serious influence on a mother's breastfeeding experience. The postpartal hospital stay is limited and inadequate nursing support may be detrimental to the whole breastfeeding experience. The first few days are critical in getting a mother off to a good start with breastfeeding.

The final open-ended question relating to nursing support asked those mothers who had described incidents where they had not received help from a nurse, what they think may have prevented the nurse from giving them help with breastfeeding. Six of the mothers felt that the nurses were either "too busy", "had alot to do", or were "in a rush". The mothers

reported that the conflicting advice was for the most part a result of the nurses having various backgrounds and opinions on breastfeeding. Three mothers felt that they didn't receive adequate help because the nurses "take for granted [you] know more than you do." Other comments included "nurse's territory", "some nurses haven't breastfed themselves", "not concerned", "wasn't interested in helping me", "frustrated", and "she thought she was doing the right thing". The final comment was attributed to a nurse who encouraged a mother to forego the two a.m. feeding. This is a prevalent comment by nurses who feel that mothers need their rest and should therefore avoid the night time feedings. Mullett (1982) suggested that nurses encourage night time breastfeeds and encourage daytime rest periods. Staff and visitors should be advised to avoid interrupting the mother during these critical rest periods. The family and friends will then appreciate the importance of rest when the mother returns home. The nurse in the above situation who encouraged the mother to forego the two a.m. breastfeeding perceived that she was giving adequate support to the mother. However, when the infant was unable to latch on at the subsequent feeding due to engorgement, the end result was a frustrated mother and infant. Riordan and Countryman (1987) emphasized that "engorgement which makes the breasts hard and the nipples inelastic, may make suckling impossible and set in motion the

beginning of cyclic pattern for lactation failure" (p. 21). The additional nursing intervention required to deal with the engorgement and getting baby latched on properly could have been eliminated with demand feeding on a 24-hour basis.

The nurses lack of support for breastfeeding mothers based on their belief that the mothers already know about breastfeeding was discussed frequently in the literature. Lawson (1976) found that mothers may not ask questions or actively seek information from the nurses in hospital regarding breastfeeding. The mothers in Lawson's study reported that the first two weeks postpartum were difficult partially due to a lack of knowledge. Hall (1978) and Hewat and Ellis (1984) also concluded that many of the participants in their studies did not anticipate the numerous problems they encountered with breastfeeding. Therefore, nurses cannot assume that a mother is knowledgeable without assessing her level of knowledge through questions and observation of breastfeeding technique. Mothers who do not seek assistance are not always well prepared for breastfeeding.

The nurse who assists a mother with breastfeeding, particularly during the initial feedings requires significant time for these activities. The mothers in this study often perceived the nurse's inability to assist them with breastfeeding as a result of the nurses already being too busy with other nursing activities. The emotional and instrumental

support behaviours described by the mothers as being helpful to their breastfeeding all require significant nursing time.

Several mothers commented on the teaching nurse who was able to spend time with them during their feedings. The comments were profuse in describing the benefit of her presence and her enthusiasm and her encouragement for breastfeeding. This individual nurse was present for a few of the mothers during most of their hospital stay. She was able to enact Raphael's (1981) "doula" role for these mothers, however, she worked an eight hour day shift and did not work on weekends. This teaching nurse had other components of her job description which prevented her from spending valuable time with breastfeeding mothers.

Nursing Support Behaviours

Specific questions relating to nursing support behaviours were asked in each of the four categories of emotional, instrumental, informational and appraisal support. This component of the research was important in eliciting information relating to specific types of nursing support that the mothers reported receiving from the nurses in hospital. It provided a more comprehensive assessment of the nature of the nursing support for primiparous breastfeeding mothers at the selected hospital. Table 3 presents a summary of the percentage of mothers who reported that they received specific

nursing support behaviours from the questions asked in Interview Schedule I.

Table 3

Percent of Mothers Reporting They Received Specific Nursing Support Behaviours n=40

Item	Percent
Emotional Support	
encourage trust	100.0
friendly and personal care	97.5
praise you	90.0
positive attitude	90.0
special attention	82.5
spend time with you	57.5
Instrumental Support	
assist in positioning	97.5
give sufficient time	95.0
maintain privacy	92.5
demonstrate how to get baby latched on	90.0
demonstrate how to get sleepy infant to suck	75.0
demonstrate breaking suction, burping	67.5
demonstrate how to care for breasts	65.0
avoid interrupting	60.0
assist in maintaining fluid intake	50.0
encourage breastfeed in delivery/recovery	33.3
encourage rooming-in	28.1
encourage demand feed	22.5

Table 3 (continued)

Table 3 (continued)

Item	Percent
Informational Support	
advice re. problems	95.0
good knowledge	92.5
expression and storage of milk	92.5
changes in breast milk over time	90.0
community and hospital resources	85.0
length and timing of feeds	82.5
pamphlets and information leaflets	80.0
structure of breast and how milk produced	77.5
positioning	70.0
healthy diet for breastfeeding	62.5
how to avoid getting pregnant	61.5
tiredness and its effect on breastfeeding	60.0
infant sucking needs and pacifiers	52.5
consistent and accurate advice	52.5
'let down' reflex	50.0
how you know if infant getting enough	40.0
infant growth patterns	32.5
avoiding formula supplements	22.5
patterns of weight gain	10.0
Appraisal Support	
give opportunities to make own decisions	72.5
share similar breastfeeding experiences of other mothers	60.0
share personal breastfeeding experience with you	50.0

Emotional Support

The mothers generally reported that they had received most of the emotional support behaviours presented to them in the interview schedule. However, only 23 mothers (57.5%)

reported that the nurses had spent time with them during their initial feedings. Seventeen mothers (42.5%) did not receive this nursing support behaviour. This was an interesting finding in that in the mothers' previous descriptions of support activities "staying with the mother" was the most frequently mentioned emotional support behaviour. If this was felt to be an important breastfeeding intervention by many mothers it was unfortunate that such a large proportion of mothers in this study reported not receiving it. The majority of the mothers felt that they had received "friendly and personal care", were "praised" and the nurses had a "positive attitude" towards breastfeeding. All of the mothers reported that the nurses "encouraged trust in their relationship".

Most of the studies reviewed in the literature did not indicate the degree of emotional support actually received by the participants. Therefore, it was difficult to assess whether or not breastfeeding mothers consistently receive emotional support from nurses in the hospital. It was difficult to compare the results of the present study with other research in the literature because there were no other studies that explored emotional support in a similar manner. However, the findings of the present study indicate that emotional support from nurses was perceived as adequate by the majority of mothers. The findings of other research studies were less favourable with respect to emotional

support. Lawson (1976) reported that 21 of 40 mothers described negative aspects of support received by nursing staff. Generally, the comments suggested that some of the nurses did not demonstrate adequate emotional support behaviours such as positive attitude and encouragement. The 19 mothers who described positive aspects of nursing support in Lawson's study, cited emotional support behaviours, such as, encouraging, patient's advocate, positive attitude and nurse's approach and smile.

Albers (1981) reported that the majority of mothers in her study cited supportive behaviours that were psychological in nature such as "positive attitude", "encouraged", "empathy" and "concerned" (p. 122). The emotional support was received from family, friends and health professionals. Albers concluded that emotional support was perceived as adequate by less than half (40%) of breastfeeding mothers. Only five percent of participants cited behaviours or adjectives such as "positive attitude", "empathy" or "concerned" in describing the emotional support of nurses after the birth of their infants. A slightly higher percentage (10%), of the mothers described that the nurses had "encouraged" their breastfeeding endeavors.

One study concluded that less than half the nurses had a positive attitude towards breastfeeding (Kurtz, 1981). The Kurtz study, however, involved interviews with staff nurses

regarding their attitudes towards breastfeeding, as contrasted with the present study which involved interviews with mothers regarding their perceptions of the nurses' attitudes. Reiff and Essock-Vitale (1985) reported that 68% of mothers (breast and bottlefeeding) interpreted counselling from hospital staff as encouraging breastfeeding. The descriptions of behaviours that mothers found helpful to breastfeeding in Hewat and Ellis's (1984) study were all emotional types of support. There was one example given of a mother receiving inadequate emotional support. Maclean et al. also highlighted emotional support behaviours in their discussion of the role of the hospital nursing staff as potential support persons for the mother in the immediate postpartum. The majority of mothers in the Maclean et al. (1985) study were positive about the support received by nurses in the hospital and the mothers described many emotional support behaviours. Several of the mothers in that study, however endured overt or covert criticism about their breastfeeding ability. This finding suggested that emotional support was not adequate for all mothers.

Instrumental Support

The large majority of mothers reported that the nurses "assisted with positioning the infant and self for breastfeeding" and "demonstrated getting infant latched on to

the breast". Thirty mothers (75%) received a demonstration on how to get a sleepy infant to suck. Ten mothers reported not receiving this behaviour. Mothers described methods shown to them by nurses such as stroking the infant's cheek with their fingers to get the infant to suck. This often resulted in the infant turning away from the nipple and therefore interfering with latching on to the breast.

Twenty-seven of 40 mothers (67.5%) reported that the nurses "demonstrated breaking suction, burping and changing to another breast". Thirteen mothers (32.5%) did not experience this behaviour. Twenty-six mothers (65%) were shown how to care for their breasts, whereas 14 (35%) did not report receiving such demonstration.

The literature varied considerably with respect to the degree of mothers receiving instrumental support behaviours such as demonstrating techniques of breastfeeding. It was difficult to make any conclusive statements regarding the adequacy of instrumental support because of the lack of detail in describing this support in the literature. Lawson (1976) described a positive component of nursing support as "offering 'needed instruction' (p.69)". The participants in Lawson's study reported that the first two weeks were difficult, partially as a result of an 'insecurity about how to go about it' (p.69). This finding suggested that for some of the mothers demonstrating the techniques of breastfeeding may not

have been adequate. Albers (1981) found support lacking in "assistance with breastfeeding techniques" (p. 45). Solberg (1981) reported that 32 of 40 mothers had a nurse present at the initial breastfeeding experience to assist with "techniques to facilitate breastfeeding" (p. 67). The majority of mothers in the above study apparently received some demonstration of techniques of breastfeeding. Goodine and Fried (1984) concluded that difficulty with nursing technique was a major problem for the mothers who switched from breastfeeding to formula feeding in hospital. This finding indicated that some mothers may not have received adequate instrumental support. Maclean et al. (1985) reported that the one-third to one-quarter of mothers who described negative aspects of support, needed more teaching and advice about how to breastfeed an infant. Several mothers described not having the skills to breastfeed, not receiving adequate direction on nipple care or breaking suction, and not receiving adequate direction on how to hold the infant during breastfeeding. A recent Canadian study however concluded that all breastfeeding mothers in the study were taught breastfeeding techniques (Houston & Field, 1988). That study interviewed directors of nursing and staff nurses, rather than breastfeeding mothers and must be qualified accordingly.

Only half of the mothers stated that they had been assisted to maintain adequate fluid intake. A few mothers

mentioned confusion regarding either decreasing or increasing their fluid intake particularly with regard to preventing initial engorgement. The practice of decreasing fluid intake to prevent engorgement had not been substantiated by research and therefore this behaviour should be discouraged by nurses. Maintaining an adequate fluid intake is important to a breastfeeding mother and particularly if the mother has undergone a cesarean birth or a long, dehydrating labour.

Rooming-in facilitates the breastfeeding experience by maintaining easy access for mother and infant and thus encourages demand feeding. Several research studies have demonstrated that rooming-in is related to successful breastfeeding (Bloom et al., 1982; Illingworth et al., 1952; Jackson et al., 1956, Samuel et al., 1985; Winikoff et al., 1987).

With respect to "encouraging rooming-in" only 11 out of 40 mothers (28.2%) reported that the nurses carried out this support behaviour. Twenty-eight mothers (72.8%) stated that they were not encouraged to room in with their infants. A few of the mothers commented that they were surprised it was not mentioned on the postpartal unit as it had been discussed and encouraged by their prenatal instructors.

Solberg (1981) noted that 40% of primiparous breastfeeding mothers in her study chose a rooming-in arrangement. Similarly, Rousseau et al. (1982) found that

37% of breastfeeding mothers elected to room-in with their infant. Winikoff et al. (1987) reported rooming-in rates of 43% in 1983 and 70% in 1985 following a major intervention program to overcome institutional constraints to breastfeeding. There was no indication in any of these studies as to the percentage of mothers actually encouraged to room-in by nurses. Houston and Field (1988) however, concluded that the majority of agencies and their staff encouraged rooming-in. Mothers were not interviewed in this study, therefore, it is not known how many mothers were actually encouraged to room-in. Houston and Field discovered that in many hospitals, rooming-in was not implemented until the infant was 24 - 48 hours old and frequently the infant was returned to the nursery at night.

The breastfeeding literature has suggested that demand feeding in hospital is closely associated with successful breastfeeding (Cruse et al., 1978; Ferris et al., 1987; Gurney, 1976; Illingworth et al., 1952; Salariya et al., 1978). Furthermore, when infants are placed in the home environment they do not adhere to a rigid three to four hourly schedule. Breastfeeding on demand has been found to decrease the incidence of initial engorgement (Fisher, 1984). The physiological importance of demand feeding in the early postpartum is that it initiates lactation. Frequent suckling of the infant stimulates the secretion of prolactin, the

hormone regulating milk production (Lawrence, 1985). An additional advantage of demand feeding was observed in the study by Salariya et al. (1978). Lactation was induced at least 24 hours earlier in the group of mothers who breastfed their infants at two hourly intervals in comparison to four hourly intervals.

On the question "did the nurses encourage you to demand feed your infant throughout the day and night", only nine out of 40 (22.5%) reported receiving this behaviour. More than 75% of the mothers were not encouraged to demand feed their infants. Several of the mothers stated that they were encouraged to keep their infants on a three or four hourly schedule of feedings. There was a definite perception by the majority of mothers that they had to adhere to the hospital nursery schedule. In fact, one mother asked the researcher on the day of her discharge, when she should start demand feeding.

Solberg (1981) reported that 32.5% of breastfeeding mothers studied, elected to demand feed their infants. Rousseau et al. (1982) concluded that the majority of mothers who had rooming-in (37%) also breastfed on demand. Winikoff et al. (1987) found that only 51% of mothers who were interviewed were aware that breastfed infants require more frequent feeding than formula-fed infants. This finding suggested that hospital routines may not have supported demand

feeding. Houston and Field (1988) reported that infants were generally demand fed as opposed to fixed schedule of feeding. None of the respondents stated that mothers were encouraged to breastfeed at night. Jones (1987) also discovered that demand feeding was not continued at night and most of the infants in her study were bottlefed formula at night. Jones (1987) noted that 69% of primiparous breastfeeding mothers reported feeding on demand. The most common interval between feedings reported by mothers while in hospital was four hours. Usually demand feeding indicates more frequent feedings than once every four hours.

Although the literature did not indicate whether or not nurses actually encouraged demand feeding, the findings regarding the extent of demand feeding practices gives insight into whether or not nurses in the hospital were encouraging this practice. The number of mothers who were encouraged to demand feed in the present study was considerably lower than other findings in the literature. The Houston and Field (1988) and Jones (1987) studies both indicated that mothers were not encouraged to demand feed at night while in hospital.

Several research studies have indicated that breastfeeding in the immediate period after birth contributes to successful breastfeeding (Bloom et al., 1982; de Château et al., 1977; Ferris et al., 1987; Salariya et al., 1978; Thomson et al., 1977). In addition to the physiological basis

for early initiation of breastfeeding, evidence suggests that close contact for the mother - infant pair in the early period after birth may be important in the formation of a strong attachment and may significantly increase the incidence and duration of breastfeeding (Sosa et al., 1976, p. 187). If the mother has not been excessively medicated during labour and birth, a newborn infant will normally be alert for at least an hour following birth. This is an ideal time for the first breastfeeding experience. A positive, satisfying first breastfeeding experience is important for the mother not only for the development of optimal suckling behaviours by the infant but also for the mother's own self-esteem (Riordan & Countryman, 1987). The nurse has a major role in facilitating a positive initial breastfeeding experience.

The large percentage of mothers (66.7%) in the present study were not encouraged by the nurses to breastfeed in the delivery room or recovery area even though they felt well enough to do so. A smaller proportion of the mothers (33.3%) reported that this behaviour was encouraged by the nurses. Four of the 40 mothers reported not being able to breastfeed in the early period following birth for reasons such as being under the effects of a general anaesthetic. One mother commented that it was her doctor who encouraged her to breastfeed immediately following birth.

This low percentage of mothers being encouraged to breastfeed immediately after birth was consistent with other findings in the literature. Houston and Field (1988) reported that only a small minority of mothers would be encouraged to breast immediately after delivery. It should be emphasized however that in the Houston and Field study, most of the infants were breastfed within two hours of birth. Solberg (1981) noted that only five of 40 mothers breastfed their infants within two hours of birth. The majority of mothers in Solberg's study did not initiate breastfeeding until more than eight hours after birth. In the present study 33.3% of mothers were encouraged to breastfeed in the delivery or recovery area, and the large majority of these mothers did in fact breastfeed their infants at this time. Similar to Solberg's study, the majority of mothers in the present study did not breastfeed until more than eight hours after birth.

Twenty-four mothers (60%) reported that the nurses had avoided interrupting them for unrelated events during breastfeeding. Sixteen mothers (40%) stated that they were interrupted during their feedings, usually for temperature and blood pressure readings. Solberg (1981) reported a higher percentage of mothers (77.5%) who felt the feeding periods were well organized to avoid interruptions.

It was apparent from the mothers' descriptions of the instrumental support behaviours that the nurse's role of

modifying the environment to facilitate a positive breastfeeding experience was not a component of nursing support consistently received by the mothers in this study. Encouraging rooming-in, demand feeding and early initiation of breastfeeding were nursing interventions that the majority of mothers did not receive. Although these instrumental support behaviours were all recommended in the breastfeeding protocol (Appendix E) of the selected hospital postpartal unit, it was evident that many of these behaviours were not encouraged by nurses. Mothers who wanted to initiate breastfeeding immediately following birth, room-in and demand feed their infants, were able to do so; however, these activities were probably initiated by a knowledgeable and enthusiastic mother rather than the nurse. The encouragement of rooming-in by the nurses in the present study would have been more readily facilitated in a unit that practised combined care nursing. Rooming-in and demand feeding are more problematic in a unit with a centralized nursery and separate postpartal unit.

The limited practice of encouraging demand feeding by the nurses is largely attributed to the higher number of formula fed infants who adhere to a rigid three or four hourly schedule. It was apparent that most breastfed infants were also kept to this feeding routine.

Unfortunately, a large percentage of mothers did not breastfeed in the delivery or recovery area in the present study. A possible explanation for this finding is that nurses working in the labour and delivery areas may not feel they have sufficient time to initiate breastfeeding. Also, nurses may inaccurately perceive that mothers and infants are not physically "ready" to initiate breastfeeding at this time. However, this research indicated that if mothers do not initiate breastfeeding in the period immediately following birth, they usually do not breastfeed until more than eight hours after birth.

Informational Support

The large majority of mothers in the present study reported that they had received informational support behaviours outlined in the Interview Schedule I. There were, however, several items in which only half or less than half of the mothers reported receiving these behaviours.

The large percentage of mothers (82.5%) received information regarding the duration and frequency of feedings. Dempson and Maret (1986) found that 96% of breastfeeding mothers (primiparous and multiparous) were told "how long or how often to nurse "by postpartal nurses in the hospital. Many of the mothers in the present study informed the researcher that they were advised to feed "three to five

minutes on each breast". Houston and Field (1988) reported similar findings in that the majority of participants in their study indicated that mothers were advised to restrict the sucking time of their infants at the breast. The length of time per breast per feed was restricted to two to five minutes initially. Many nurses focus on the length of time the infant has fed on each breast. Cohen (1987) commented on this problem:

> Simply asking the mother how long the infant nurses on each breast is not enough. A clock cannot tell you when the infant suckled or for how long, because infants do not continuously suckle. Mothers become clock watchers rather than baby watchers at the insistence of the nurse. (p. 191)

Nurses often advise mothers to limit the amount of suckling time in the first few days after birth to prevent sore nipples. Research has demonstrated however, that this practice delays soreness so that it occurs after the mother and infant return home instead of in the hospital setting (Whitley, 1978; Newton, 1952). deCarvalho, Robertson and Klaus (1984) examined the effects of the frequency and duration of breastfeedings on sore nipples and found no relationship between frequent feedings in early lactation and nipple discomfort. Sore nipples are frequently the result of improper positioning at the breast (Riordan & Countryman, 1987) rather than length of feeding time on the breast. Limitation of feeding time to three to five minutes on each breast may have negative effects on the 'let down' reflex.

The 'let down' reflex may not occur for as long as three minutes after breastfeeding begins in the early breastfeeding episodes after birth (Riordan & Countryman, 1987). Furthermore, early and frequent feedings have been suggested as a means of decreasing initial postpartal breast engorgement (Johnson, 1976; Riordan & Countryman, 1980).

As was previously stated the large majority of mothers did not demand feed their infants but rather adhered to a three or four hourly schedule. For the most part the mothers did not appear to have adequate information regarding demand feeding. The information that was received by the majority of mothers in this study was not consistent with recommendations in the literature.

With respect to the question on information regarding a healthy diet for breastfeeding, 25 out of 40 mothers (62.5%) stated that they had received this information. Several of the mothers commented that they had received Canada's Food Guide in the postpartal breastfeeding class and were advised to follow this guide. Fifteen mothers (37.5%) did not recall receiving this information. Several mothers mentioned receiving advice primarily regarding foods to avoid while breastfeeding. There appeared to be greater emphasis on foods to avoid while breastfeeding rather than a healthy diet for breastfeeding. Sixty percent of mothers received advice regarding tiredness and its effects on breastfeeding. Forty

percent reported not receiving this information. Maternal fatigue has also been suggested to adversely affect the milk supply (Lawrence, 1985).

Approximately half of the mothers reported receiving information about infant sucking needs and pacifiers. Half of the mothers received information about the 'let down' reflex. Several mothers commented that they had heard of it but could not recall any of the signs of 'let down' or the effect of stress on the 'let down' reflex.

Thirteen of 40 mothers (32.5%) reported receiving information about infant growth patterns, for example growth spurts and breastfeeding management at this time. Twenty-seven mothers (67.5%) stated that this information was not discussed. Mothers need to anticipate the occurrence of growth spurts and that, at such times, the frequency of demand for breastfeeding increases. Mothers who are unaware of growth spurts may incorrectly perceive that they are unable to satisfy their infant due to an inadequate milk supply.

It was interesting to note that only nine mothers received information about avoiding formula supplements for breastfeeding infants unless medically necessary. More than 75% of mothers reported not receiving this information. Two mothers stated that on the contrary, they were actually encouraged to give formula. Studies in the literature did not indicate the extent to which mothers were actually advised

to avoid formula supplements, however, there was considerable evidence pointing to the widespread use of formula and other supplements for breastfeeding infants. Cohen (1980) argued that "artificial feeding receives both tacit and open approval from many members of the health care profession" (p. 166). Tacit approval is given when free gift packs of formula are distributed to breastfeeding mothers and open approval occurs when supplements are used on postpartal units or suggested by nurses as complements to breastmilk. Solberg (1981) noted that 27.5% of mothers chose to supplement with formula. Samuels et al. (1985) reported that formula was routinely given during the first six hours after birth unless the mother stated otherwise. Gray-Donald et al. (1985) also stated that traditional supplementation in the hospital involved in their study consisted of a routine formula feeding for all babies at 2 a.m. unless the mother requested otherwise. Jones (1987) concluded that despite hospital policy, less than half of the mothers in her sample (n = 681) reported that their infants were never bottlefed in hospital. Houston and Field (1988) also found that the majority of breastfed infants at the hospitals participating in their study were routinely given non-breastmilk substitutes as supplements and/or complement to breastfeeding. Lawrence (1982) found disturbing results in a survey of practices and attitudes toward breastfeeding among health professionals. Most professionals did not feel

solids and formula supplements played a significant role in reducing duration of breastfeeding.

The use of supplementary feedings is felt to have an adverse effect on the initiation and establishment of breastfeeding. There are two different types of sucking mechanisms required for breastfeeding and sucking on an artificial nipple (Lawrence, 1985). The use of an artificial nipple in the early postpartum can therefore lead to nipple confusion. An additional reason for avoiding formula supplementation is that it will decrease the sucking stimulus of the breasts and therefore the milk supply. There is an added risk of introducing foreign substances to the infant through formula supplementation. There are specific properties of breast milk that appear to control infection (Lawrence, 1985). The encouragement of infant formula to breastfeeding mothers is also contrary to the World Health Organization's International Code of Marketing of Breast Milk Substitutes (World Health Organization, 1981).

Sixteen out of 40 mothers (40%) received information on how you know if your infant is getting enough milk. Sixty percent of mothers reported not receiving this information. One of the most common reasons for discontinuing breastfeeding prematurely is the mother's perception of an inadequate milk supply. Criteria for assessing whether or not the infant was

receiving adequate milk would be important to a primiparous breastfeeding mother.

Four out of 40 mothers received information regarding patterns of weight gain in a breastfeeding infant. Ninety percent of mothers reported not receiving this information. Patterns of weight gain in breastfed infants varies somewhat from that of the formula fed infant. Lawrence (1985) noted that formula fed infants gain more rapidly in weight than breastfed infants during the first months of life. This is most likely attributed to the higher content of protein, salts and minerals in formula (Riordan & Countryman, 1987). Breastfed infants are also less likely to be overfed since the infant controls the intake of breastmilk. Therefore, it is important that mothers understand the variations in weight gain and the problem of comparing formula fed and breastfed infants. Slower weight gain in the breastfed infant may be inaccurately perceived by the mother and health professionals as a failure to thrive.

Although 95% of mothers received advice about problems with breastfeeding and how to deal with them, the large majority did not receive any advice regarding management of an inadequate milk supply. This information would be important to a mother who is concerned that her milk supply was insufficient for her infant. Mothers are frequently encouraged by health professionals to supplement their

breastfeeding with formula without an adequate assessment of the breastfeeding experience. Most of the mothers reported receiving information regarding sore nipples and engorgement.

Twenty-four of 40 mothers (61.5%) received information on how to avoid getting pregnant while breastfeeding. This information was received in a separate family planning class in which methods of family planning were also discussed. There were no mothers who reported receiving information regarding the return of ovulation and menstruation.

The mothers in this research study overwhelmingly (92.5%) stated that they perceived the nurses as having a good knowledge of breastfeeding. Solberg (1981) also reported a high percentage (82.5%) of mothers who rated the postpartal nurses as knowledgeable about breastfeeding. These findings do not support other studies of nurses' knowledge of breastfeeding in the literature (Crowder, 1981; Ellis & Hewat, 1983; Estock, 1973; Hayes, 1981; Whitley, 1978). The above studies provide better insight because they all examined nurses' knowledge through interview or examination. Therefore, they reflect more accurately the nurse's knowledge of breastfeeding. There was also the limitation in the present study and in Solberg's (1981) study of interviewing the mothers in hospital. This may account for such high ratings of knowledge.

Despite this finding, only 21 mothers (52.5%) felt that they had received consistent and accurate advice about breastfeeding. A substantial proportion (47.5%) reported that they had not received consistent and accurate advice. The inconsistencies were for the most part related to the frequency and duration of feedings. L'Esperance (1980) also reported a similar finding. Kurtz (1981) stated that 22% of the mothers in her study received conflicting advice regarding breastfeeding. Solberg (1981) reported that 11 of 40 mothers (27.5%) had received inconsistent advice. Maclean et al. (1985) and McIntosh (1985) also noted that participants in their studies found conflicting advice a problem.

The studies reviewed in the literature did not indicate quantitatively the amount of informational support actually received by the participants. The researcher therefore could not conclude that breastfeeding mothers consistently received adequate informational support from nurses in the hospital. A few general observations were made based on the findings in the literature. Lawson (1976) concluded from her study that lack of information contributed to the difficulties experienced by breastfeeding mothers during the first two weeks. Hewat and Ellis (1984) found that the mothers in their study wanted more realistic information about breastfeeding, such as, potential problems and methods of dealing with these potential problems. These findings suggested that the

informational support provided to the mothers in that study may have been inadequate in meeting those mothers' needs, particularly those needs that arose after discharge from hospital. It is not until a mother encounters difficulties with breastfeeding that she discovers the shortcomings with information received and the need for more adequate information. Nurses in the hospital setting may not be preparing mothers for a realistic breastfeeding experience. Mothers are given information in hospital that may not seem particularly relevant to a new mother who is not experiencing any problems at that time and who may not foresee any problems arising in the future.

Appraisal Support

Over half of the mothers reported that they had received the items in the appraisal support category. However, the percentages were lower than other categories of support.

Twenty-nine of 40 mothers (72.5%) stated that the nurses gave them opportunities to make their own decisions about the course of their breastfeeding. Several of the mothers who reported not receiving this behaviour, remarked that the "nurses set the schedule". One mother commented that: "I had no choice but to feed on a schedule. I thought I could get him whenever I wanted". A few of the participants in the Maclean et al. (1985) study made statements that indicated

nursing support behaviours consistent with "giving you opportunities to make your own decision about the course of your breastfeeding". Maclean et al. concluded that : "mothers appreciated it when nurses offered suggestions but did so in a way which respected the mother's right to decide what to do" (p. 226). One mother in the above study commented: "'They really left me to do what I wanted. The hospital was really good about respecting my wishes'" (p. 226).

Twenty-four mothers (60%) reported that the nurses had shared similar breastfeeding experiences of other mothers with them. Sixteen mothers (40%) did not report receiving this support behaviour. Half of the mothers (20) reported that a nurse had shared her personal breastfeeding experience with them. In Lawson's (1976) study, mothers commented on the nurse that helped them who had breastfed her own baby.

The literature review did not reveal other research studies which discussed the appraisal support behaviours of the nurse in supporting a breastfeeding mother. The potential benefit of having a nurse share experiences of other mothers and of her own breastfeeding experience was confirmed by the comments of mothers in a study by Maclean et al. (1985). Women who had breastfed their own children were able to share experiences, offer advice and give reassurance to breastfeeding mothers. Although nurses do not need personal

breastfeeding experience to assist breastfeeding mothers, it can be an added benefit. By encouraging sharing among mothers, nurses can indirectly provide appraisal support.

Helpfulness of Support Categories: Emotional, Instrumental, Informational and Appraisal

One of the research objectives for this present study was to assess the perceived helpfulness of each category of support: emotional, instrumental, informational and appraisal. Mothers who responded positively to having experienced any of the 40 nursing support behaviours on Part I of Interview Schedule I were asked to rate the helpfulness of each of these behaviours using a five point Likert type scale from "not at all helpful" (1) to "very helpful" (5). Each nursing support was then given a helpfulness score out of five. Table 4 lists the nursing support behaviours, and their assigned helpfulness score ranked within each category of support.

Table 4

Helpfulness Scores for Each Nursing Support Behaviour n=40

Item	Score out of 5
Emotional Support	
praise you	4.833
spend time with you	4.783
special attention	4.667
positive attitude	4.639
friendly and personal care	4.564
encourage trust	4.450
mean helpfulness score for emotional support	4.612
Instrumental Support	
give sufficient time	4.895
demonstrate how to get baby latched on	4.778
avoid interrupting	4.760
demonstrate breaking suction, burping	4.704
maintain privacy	4.649
assist in positioning	4.641
encourage breastfeed in delivery/recovery	4.583
demonstrate how to care for breasts	4.462
encourage demand feed	4.444
demonstrate how to get sleepy infant to suck	4.300
assist in maintaining fluid intake	4.150
encourage rooming-in	3.909
mean helpfulness score for instrumental support	4.594
Informational Support	
positioning	4.786
expression and storage of milk	4.784
good knowledge	4.757
how you know if infant getting enough	4.688
consistent and accurate advice	4.667
how to avoid getting pregnant	4.625
pamphlets and information leaflets	4.563
healthy diet for breastfeeding	4.560

Table 4 (continued)

Table 4 (continued)

Item	Score out of 5
tiredness and its effect on breastfeeding	4.458
length and timing of feeds	4.455
changes in breast milk over time	4.389
avoiding formula supplements	4.333
advice re. problems	4.289
'let down' reflex	4.200
structure of breast and how milk is produced	4.161
infant growth patterns	4.154
community and hospital resources	4.088
infant sucking needs and pacifiers	4.000
patterns of weight gain	3.750
mean helpfulness score for informational support	4.383
Appraisal Support	
share similar breastfeeding experiences of other mothers	4.696
share personal breastfeeding experiences with you	4.650
give opportunities to make own decisions	4.207
mean helpfulness score for appraisal support	4.375

Emotional Support

The nursing support behaviour "praise you and tell you that you are doing a good job with breastfeeding" ranked the highest in the emotional support category with a score of4.833. Offering praise to the breastfeeding mother was a component of the definition of support used in Lawson's (1976) study regarding maternal perception of degrees of support for the breastfeeding mother. Although the mothers did not rank

the helpfulness of specific support behaviours, the participants in Lawson's (1976) survey remarked that "just a word of encouragement or a helpful suggestion was needed to keep them going" (p. 74).

Hall (1978) also referred to "offering praise" as a component of her conceptualization of nursing support. In Hall's role as a researcher, she "offered encouragement, complimented and reassured" the breastfeeding mothers in the study (p. 29). The participants in this study all responded favourably to the care given by Hall. Auerbach (1979) also referred to "offering praise" in her discussion of the role of the nurse in supporting the breastfeeding mother. Maclean et al. (1985) described several incidences where the mothers in her study were not praised or encouraged that they were doing well with breastfeeding by nurses in the hospital. The detailed negative descriptions of unhelpful breastfeeding support suggested that mothers need to be told that they are doing a good job with breastfeeding. Maclean et al. (1985) concluded that "because of the profoundly emotional nature of the time, mothers need moral support from staff" (p. 234).

The second highest ranking behaviour for the emotional support category was "spending time during initial feedings" (4.783). The high ranking of this supportive behaviour was consistent with the mothers' descriptions of support which were previously discussed. The "nurse staying with a mother

during a feeding" was the most frequently mentioned emotional support behaviour by the mothers in the present study. This finding was consistent with Hewat and Ellis (1984) in which mothers described helpful nurses as nurses that spent time with the mothers during feedings. Maclean et al. (1985) reported in mothers' descriptions of their first breastfeeding experience, that some mothers were left alone without any guidance and that they would have liked the nurses to have stayed with them. Hall (1978) and Cohen (1987) recommended that spending time during the initial breastfeeding experience is an important nursing role in providing support.

The nurse's positive attitude towards breastfeeding was frequently cited in the literature as a characteristic felt to be important to a mother's breastfeeding experience (Albers, 1981; Kurtz, 1981; Lawson, 1976; Maclean et al., 1985; Solberg, 1984). The nurses' "positive attitude" towards breastfeeding ranked fourth in order of helpfulness in the emotional support category with a score 4.639 in the present study.

Instrumental Support

The nursing support behaviour "give you sufficient time to breastfeed your infant" ranked highest by the mothers in the category of instrumental support (4.895). This behaviour is a component of the nurse's role in modifying the hospital

environment for breastfeeding. The large majority of the mothers in the present study reported that they were given sufficient time to breastfeed their infants, despite the fact that for the most part they were not encouraged to room-in with their infants or feed on demand. This behaviour would be enhanced with a rooming-in policy and demand feeding practices.

The literature review did not reveal research that discussed the mothers' perception of the helpfulness of this nursing support behaviour. A few of the mothers in McIntosh's (1985) study alluded to problems with adhering to fixed feeding schedules. They described feeling "tense" because they had to feed their babies when the nurses wanted them to. These time restrictions were implicated as causal factors in the mothers' reasons to discontinue breastfeeding.

This nursing support behaviour may be particularly helpful to first time breastfeeding mothers who require more time in getting the infant positioned and latched on correctly at the breast. A few mothers in the present study mentioned that their infants were "sleepy" and therefore took longer to feed. Giving a mother sufficient time to breastfeed her infant would be particularly helpful to a mother's early breastfeeding experience.

The second highest ranking (4.778) was given to the nursing support behaviour of "demonstrating how to get baby

latched on to breast". This was the most frequently mentioned instrumental support behaviour in the mothers' descriptions of support previously reported. This finding was consistent with other studies in the literature. In Albers' (1981) study, "demonstrated techniques" were reported as the most significant supportive behaviour by nurses in the postpartum (p. 123).

Solberg (1981) also found in her study of hospitalized mothers' early postpartum breastfeeding experiences that many of the questions and concerns about their first breastfeeding experience were related to the technical aspects of breastfeeding, for example; proper positioning and getting the infant latched on to the breast. The mothers in the Solberg study who reported having a nurse present during the first breastfeeding experience felt that the nurse was able to help with "techniques to facilitate breastfeeding" (p. 67).

Maclean et al. (1985) reported that there was a lack of effective communication between nurses and mothers in their study regarding the topic "But how do I breastfeed?" (p. 229). This finding suggested that mothers were not given adequate assistance by nurses in the actual techniques of breastfeeding, such as, demonstrating how to get the infant latched on to the breast. Jones and West (1985) referred to the major role of the lactation nurse in their study as "assisting mothers to fix babies on the breast" (p. 272).

Winikoff et al. (1987) concluded from their interviews regarding mothers' postpartal hospitalization that "in addition to encouragement, timely support and physical assistance is necessary to enable mothers to learn the subtleties of breastfeeding" (p. 433). The physical assistance would be considered to include instrumental types of support.

The nursing support behaviour "avoid interrupting you for unrelated events during breastfeeding" also ranked high with a score of 4.760. The high ranking of this behaviour in terms of helpfulness suggests that nurses need to facilitate this behaviour by adjusting hospital schedules to eliminate unnecessary interruptions for breastfeeding mothers. The postpartal unit is generally an area with well clients. Nurses who feel compelled to adhere rigidly to the designated hospital schedules should discuss their concerns with nursing and hospital administration. They could then present their arguments for allowing more flexible schedules for breastfeeding mothers. McIntosh (1985) pointed to the significance of this support behaviour in the following remarks:

> More hospitals need to ensure that their practices are consistent with their avowed commitment to breastfeeding. Although it may be potentially inconvenient to the hospital, changes in policy and practice in recent years have demonstrated that it is possible to make hospital routines compatible with the flexibility required for breastfeeding. (p. 223)

The nursing support behaviour "encourage you to demand feed" ranked ninth out of twelve in terms of helpfulness to the breastfeeding experience with a score of 4.444. This behaviour was not considered to be as helpful to the mothers' breastfeeding experiences in comparison to the other instrumental support behaviours. However, demand feeding has been shown to be related to successful breastfeeding (Ferris et al., 1987; Salariya et al., 1978). This finding suggested that the mothers in the present study were not given adequate information outlining the importance of demand feeding. The importance of demand feeding in hospital was evident later on in the follow-up interviews. Interestingly, a couple of mothers mentioned in the follow-up interview that the advice received about demand feeding in hospital had been particularly helpful to their breastfeeding experiences at home. It was likely that the mothers could only perceive the helpfulness of this behaviour later in their breastfeeding experiences. Several mothers mentioned in the follow-up interview that their baby fed frequently and was different from their hospital experiences. Perhaps these mothers would have had a more realistic expectation of infant feeding patterns if they had been encouraged to demand feed in hospital. Maclean et al. (1985) and McIntosh (1985) both found that mothers did not find it helpful to adhere to a fixed feeding schedule.

The instrumental support behaviour ranked lowest was "encourage you to room-in with your infant" with a score of 3.909. The large majority of the mothers in this study did not report receiving this behaviour and of the few who did, it was not ranked high in terms of helpfulness. The advantages of rooming-in in relation to breastfeeding may not be readily evident to a primiparous mother. Many mothers commented to the researcher that they would find "rooming in" too stressful. There is a perception that rooming-in implies that the mother is responsible for the complete care of her new born infant. Unfortunately, mothers and nurses are not always aware that nurses are still actively involved in infant care but the focus of their teaching and care occurs at the bedside. The new mother participates in the care of her infant with the guidance of the professional nurse. The advantages of rooming-in do not become apparent until the mother returns home. The literature review did not reveal any research studies that examined the mother's perception of the helpfulness of being "encouraged to demand feed or room-in".

Informational Support

The highest helpfulness score in the informational support category was given to information received regarding positioning for breastfeeding (4.786). This confirmed the mothers' apparent need for information regarding the

techniques of breastfeeding. The information pertaining to expression and storage of breast milk also ranked high in this category with a score of 4.784. The large majority of the mothers in this study worked outside the home prior to the birth of their infant, therefore, it was likely that many of the participants in this study would be returning to work after their maternity leave. Information regarding expression and storage of breast milk would be helpful to their later breastfeeding experiences in giving the mothers freedom to return to work or be separated from their infant for short periods of time.

The nurses' "good knowledge" of breastfeeding was perceived as helpful to the mothers' breastfeeding experience. This nursing support behaviour ranked third overall in the informational support category with a score of 4.757. The participants in Alber's (1981) study identified the support behaviour "sharing knowledge" as an important behaviour demonstrated by postpartal nurses. The high rating of this support behaviour was not surprising as nurses are the primary source of informational support for breastfeeding mothers in hospital. The importance of the nurses in hospital providing informational support to breastfeeding mothers was confirmed in Cole's (1977) study. Of the one-third of new mothers who indicated that nurses in hospital had supplied helpful information about breastfeeding, 79% were still breastfeeding

at three months postpartum. An extensive review of the literature did not point to studies which examined the helpfulness of the nurse's knowledge to the mother's breastfeeding experience in hospital. For some mothers, it was critical to their breastfeeding experience that nurses in the hospital setting are knowledgeable about breastfeeding. Mothers who were less prepared for breastfeeding depended on these nurses to provide them with accurate information. There were a few mothers who were already well prepared for breastfeeding and therefore relied less on the nurse's knowledge during the initiation period of breastfeeding.

The mothers in the present study who received information regarding "how you know if your infant is getting enough milk" ranked this information as helpful to their breastfeeding experience. The score 4.688 was fourth out of 19 informational support behaviours. In McIntosh's (1985) study, one mother reported giving up breastfeeding because she did not know how much milk her baby was getting. Another 15 out of 28 mothers in the above study gave up because of their perception of an insufficient milk supply. The mother's perception of having an insufficient milk supply was the most common reason cited in the literature for discontinuing breastfeeding or supplementing with formula (Ellis & Hewat, 1984a; Yeung et al., 1981). Therefore, criteria given to breastfeeding mothers that would assist them in assessing

whether or not their infant was getting enough milk would be extremely helpful to their breastfeeding experience.

The nursing support behaviour of receiving "consistent and accurate advice about breastfeeding" ranked high in this category (4.667) in relation to other support behaviours. It is reassuring to a breastfeeding mother when the information she receives from various nurses is consistent and perceived as accurate by that mother. Conflicting and inaccurate advice serves to frustrate and confuse the breastfeeding mother. This may be an even greater problem for primiparous mothers who do not have previous experience to rely on when interpreting nurses' advice. In the present study, only 52.5% of primiparous mothers felt they received consistent and accurate advice about breastfeeding. Mothers who received this support behaviour expressed that it was helpful to their breastfeeding experience. The descriptions of incidents where nurses did not provide adequate help with breastfeeding were most frequently related to inconsistent and inaccurate advice. By examining the negative descriptions of expected support, the researcher was able to gain an understanding of desired supportive behaviours. The mothers negative comments regarding inconsistent advice suggested that this was an area of importance to the breastfeeding mother. Maclean et al. (1985) also reported that receiving mixed messages from nursing staff about breastfeeding was not helpful to mothers.

The conflicting advice was problematic because a mother had no way of determining which advice was inappropriate. McIntosh (1985) also felt that "contradictory advice simply served to undermine their confidence and reduce their commitment to continuing" (p. 221).

The following information in the present study ranked lower in terms of helpfulness to the breastfeeding experience: 'let down' reflex (4.200), structure of breast and how milk is produced (4.161), growth patterns and spurts (4.154), community and hospital resources for breastfeeding (4.088), infant sucking needs and pacifiers (4.000) and patterns of weight gain (3.750). Perhaps information relating to some of the above such as growth patterns, infant sucking needs and patterns of weight gain, would be better presented to the mothers later in the postpartum; for example, during the public health nursing visit or at the Breastfeeding Clinic. The mothers at this point in time are likely more concerned about the basic "how to" of breastfeeding. Information regarding the anatomy and physiology of breastfeeding might be more relevant at a prenatal class on breastfeeding.

It was surprising that advice received about the 'let down' reflex ranked lower in terms of overall helpfulness to the mothers' breastfeeding experiences. This finding may be a result of the mothers receiving this information but not in any detail. Most mothers stated that they heard about the

'let down' reflex in the postpartal breastfeeding class, however, many mothers appeared unsure about this information particularly with respect to factors that might inhibit the let down reflex. Gullick (1982) emphasized the importance of including information on factors influencing the production and ejection of breastmilk. Gullick (1982) found that unsuccessful breastfeeders in her study reported "nervous, uncomfortable, embarrassed feelings" (p. 373) about breastfeeding. The let down reflex can be inhibited by the above psychological factors or other forms of emotional tension (Lawrence, 1985).

The information given regarding community and hospital resources for breastfeeding may not be seen as helpful until the mother encounters questions or concerns with breastfeeding at home and then uses such support groups as the Breastfeeding Clinic or the La Leche League. A few of the mothers in the present study reported that they did not find this information helpful because they did not live close enough to attend the hospital Breastfeeding Clinic. One mother stated that she did not require these resources as her sister was a nurse and she would give assistance with breastfeeding. A couple of mothers told the researcher that the La Leche League was "not for me".

Appraisal Support

The mothers who reported receiving the nursing support behaviours of "sharing similar breastfeeding experiences of other mothers" and "sharing personal breastfeeding experiences" felt that they were helpful to their breastfeeding experience, with scores of 4.696 and 4.650 respectively. Lawson (1976) also found that nurses who had breastfed were helpful to the mothers in her study. However, "giving mothers the opportunity to make their own decisions about the course of their breastfeeding" ranked lowest in the appraisal support category with a score of 4.207. This contrasts with the descriptions of support received from hospital staff in the Maclean et al. (1985) study which suggests that mothers found it helpful when nurses gave them opportunities to make their own decisions about the course of their breastfeeding.

Several of the mothers in the present study explained to the researcher why they found this nursing support behaviour less helpful to their breastfeeding experience. One mother made the following comment:

> You are thrown to the lions. I could have used more help and guidance [with breastfeeding].

Another mother stated:

> You are totally left on your own. I really didn't know what to do about giving glucose and water. I was concerned about nipple confusion but the nurse said it was totally up to me.

It was apparent that some of the mothers wanted more direction with regard to formula and glucose and water supplementation, particularly at the 2 a.m. feedings. Nurses need to have a clearer understanding of hospital policies and the physiology of breastfeeding, regarding the use of glucose and water, supplemental formula at night feedings and demand feeding. There were many comments and examples by mothers in the present study which suggested that the mothers were unsure about breastfeeding protocols and the degree to which such protocols were flexible. Maclean et al. (1985) reported similar findings in their study of psycho-social factors influencing breastfeeding.

The nurse in providing support to the breastfeeding mother, must be capable of assessing carefully a mother's ability to make informed decisions regarding breastfeeding and offer appropriate guidance to those who require it. The mothers who rated this nursing support behaviour as "very helpful" were likely more confident in their breastfeeding and perceived that they had adequate information to make informed decisions about the course of their breastfeeding experience.

Ranking of Nursing Support Categories in Terms of Helpfulness

At the completion of the 40 item section of nursing support behaviours and the helpfulness of each behaviour, the

mothers were given cards. Each card identified a nursing support behaviour to which the mother had previously responded positively. There were four categories of support: emotional, instrumental, informational and appraisal. The mothers were then asked to rank the four general categories of support in order of "most helpful" to "least helpful" in relation to their breastfeeding experience in hospital. This procedure was used to complement the findings of the helpfulness scores previously reported. Since mothers tended to rate all of the nursing support behaviours as helpful to their breastfeeding experience, this procedure gave the mothers an opportunity to note each support behaviour actually experienced and decide which of the four categories of support was most helpful and least helpful.

Fifteen of 40 mothers ranked instrumental support as being "most helpful". This was followed closely by emotional support in which 14 mothers ranked it as "most helpful". Eleven mothers ranked as "most helpful" informational support and one mother ranked appraisal support. In comparing these findings with the mean helpfulness scores for each category, the emotional support category had the highest mean helpfulness score with 4.612. The instrumental support category followed with a 4.594 score. Informational support was third with a score of 4.383 and appraisal support ranked fourth with a score of 4.375. In summary, the mothers in the

present study found the emotional and instrumental support categories as most helpful to their breastfeeding experiences in hospital. This was consistent with the findings in the literature previously discussed. Informational support was an important component of support for the breastfeeding mother, however, the mothers did not rate it as being most helpful to their early breastfeeding experiences in hospital. Informational support was more helpful to the mothers after they were at home. Appraisal support consistently ranked fourth in terms of overall helpfulness to mothers' early breastfeeding experiences. However, in comparison to the three other categories of support, the mothers did not receive as much appraisal support. Although many mothers commented on the helpfulness of appraisal support behaviours, the other three categories of support: emotional, instrumental and informational were seen as more helpful. Appraisal support as a component of the nurse's role was referred to in only one of the research studies reviewed in the literature. Appraisal support and its perceived helpfulness to the breastfeeding mother was discussed for the most part in relation to the support of family, friends and lay support groups.

Satisfaction with Breastfeeding Experience

To elicit information regarding maternal satisfaction with the breastfeeding experience, three questions were asked

in Interview Schedule I. The mothers were asked if they had any questions or problems at that time related to breastfeeding, how long they planned to continue to breastfeed and how satisfied they were with their breastfeeding experience. The researcher felt that it was important to include these questions because research has demonstrated that there is an increased chance that a mother will totally wean her infant before eight weeks when she has a low satisfaction with breastfeeding and/or when she perceives herself or her infant as having several problems in the first two weeks (Humenick & Van Steenkiste, 1981). The planned length of time a mother would breastfeed her infant was assumed by the researcher to be related to the mother's present satisfaction with the breastfeeding experience. Solberg (1981) found that length of time a new mother would breastfeed her infant was related to how satisfied the mother seemed to be with the experience of breastfeeding.

Eighteen of the 40 mothers (45%) stated that they had no questions or problems relating to breastfeeding at the time of the first interview in hospital. The remaining 22 mothers (55%) still reported questions or problems. Nine mothers had questions relating to length and timing of feedings. Nine stated that they did not know how to determine if their baby was getting enough milk. Six reported problems with engorgement. Four mothers had questions relating to formula

supplementation. Three mothers had problems with sore nipples. Two mothers felt that they had problems positioning self and infant for breastfeeding; two had questions about growth spurts; two mothers had questions regarding expression of milk with a breast pump; and two wanted more information on weaning. There were a number of other questions or problems which were mentioned only once. Table 5 summarizes the questions or problems that the mothers wanted help with relating to breastfeeding at the time of the initial interview in hospital which was just before discharge.

Several of the mothers (9) in this present study had questions relating to the length and timing of feedings. It was in this area of information that the mothers reported receiving the most inconsistent advice. The advice that was given to the mothers regarding frequency and duration of feedings was not always in line with recommendations in the breastfeeding literature. The mothers in the present study ranked the nursing support behaviour "information received about length and timing of feedings" as tenth with a score of 4.455 in the informational support category. This suggested that it was likely that the information received was confusing and insufficient in detail for the mothers to feel comfortable with this area of knowledge.

Nine mothers indicated that they had questions about "How do I know if my infant is getting enough milk?". Sixty

percent of mothers in the present study reported not receiving this nursing support behaviour. The mothers wanted more information about this topic. This has important implications for nurses educating breastfeeding mothers because research has indicated that a mother's perception of an insufficient milk supply was the most frequently cited reason for

Table 5

Questions/Problems with Breastfeeding in Hospital n=40

Question/Problem	Frequency
length and timing of feedings	9
how do I know if baby getting enough milk	9
engorgement	6
formula supplementation	4
sore nipples	3
positioning self and infant for breastfeeding	2
growth spurts	2
expression of milk using breast pump	2
weaning	2
teething	1
a lot of uncertainty about breastfeeding	1
information on breastfeeding in general	1
who's going to help me at home	1
weight gain in breastfeeding infants	1
how do I know if milk is in	1
jaundice and sleepiness and breastfeeding	1
burping	1
tiredness and effect on breastfeeding	1
number of normal bowel movements for breastfeeding infants	1
breastfeeding discretely	1
will my breasts get smaller	1
how long will I be able to breastfeed	1
is baby getting right nutrition	1
is it normal to prefer one breast	1
baby cries a bit - is she hungry	1
will I be comfortable breastfeeding	1
am I going to get frustrated especially at night	1

Note: Some subjects reported more than one question/problem

discontinuing breastfeeding prematurely (Chapman et al., 1985; Ellis & Hewat, 1984; Houston, Howie & McNeilly, 1983; Janke, 1988; McIntosh, 1985).

The questions and problems that the mothers experienced in the early postpartum were consistent with those in the literature. Beske and Garvis (1982) found that while in the hospital following delivery, some of the major maternal concerns with breastfeeding included tender breasts and nipples and difficulty in finding a comfortable breastfeeding position. Chapman et al. (1985) reported that breastfeeding mothers had concerns relating to frequency of breastfeeding, adequacy of milk supply, sore nipples, infants having a preferred breast, and expression of milk and storage of milk. There were similar infant concerns, for example; rate of weight gain, and fussiness. The participants in the study by Chapman et al. (1985) also reported concerns regarding maternal fatigue. Similarly, Mogan (1986) noted that mothers in her study had questions relating to breastfeeding while still in hospital. The mothers sought information about duration and frequency of feedings, getting baby latched on and discomfort with sore nipples and breasts.

The large majority of mothers, 29 (72.5%) stated that they planned to breastfeed for more than three months. Ten (25%) felt they would breastfeed for more than one month but less than three months. Only one mother stated that she did

not know how long she planned to breastfeed. This same mother also stated that her breastfeeding experience was "very dissatisfying". There was no significant relationship between planned length of time breastfeeding and satisfaction with the breastfeeding experience in hospital using Chi-Square analysis.

The large majority of mothers in the present study described their breastfeeding experiences as satisfying. Twenty-three (57.5%) mothers reported "very satisfying" breastfeeding experiences. Fourteen (45%) described their breastfeeding experience as "satisfying". Two mothers were "neutral" and one found it "very dissatisfying". The breastfeeding experience was satisfying for many reasons. Comments were made by the mothers such as, "special bond", "nutritionally best for baby", "closeness", "feeling of accomplishment", "only thing I can do alone for baby". One mother who stated that her breastfeeding experience was neutral made the following comments:

> I'm not really comfortable with it yet. I'm nervous. I can't see how much milk she's getting.

Another mother felt that she had to describe her experience as neutral because "the baby is not sucking well". The one mother who reported a very dissatisfying breastfeeding experience felt this way because there is "so much pain breastfeeding". There was no statistically significant difference between women who had a cesarean birth and women

who had a vaginal birth with respect to satisfaction with breastfeeding experience in hospital using Chi-Square analysis. Jenke (1988) and Solberg (1981) also reported similar findings.

Follow-up of Subjects

Participants were followed-up at two to three weeks postpartum by means of a telephone interview. The primary purpose of the follow-up interview was to determine whether or not the nursing support received for breastfeeding in hospital was helpful to the mothers' breastfeeding experiences at home. Research has demonstrated that it is often in the first few weeks postpartum that breastfeeding mothers experience problems relating to breastfeeding and a significant number of women choose to discontinue breastfeeding at this time. The maternal perception of the quality of nursing support for breastfeeding was measured again retrospectively to note any significant change in the mean score since the initial interview at three to five days postpartum. The researcher also examined the mother's breastfeeding status, problems and questions relating to breastfeeding, satisfaction with the breastfeeding experience and whether or not the mother would breastfeed a subsequent infant. The interview concluded with a series of questions pertaining to the public health nurse visit and help given for breastfeeding.

The follow-up interview schedule (Appendix B) was administered to 37 of the 40 mothers. Two mothers had relocated and were not available for interview by telephone. One mother discontinued breastfeeding in hospital. The data for the follow-up interview is presented in the following sequence: breastfeeding status at two to three weeks postpartum; problems experienced by mothers who discontinued breastfeeding; problems experienced by mothers still breastfeeding; helpfulness of nursing support to mothers still breastfeeding; helpfulness of nursing support to mothers who discontinued breastfeeding; satisfaction with breastfeeding experience and public health nursing visit.

Breastfeeding Status at Two to Three Weeks Postpartum

Twenty-six of 37 (70.2%) mothers were still breastfeeding at the follow-up interview. Eleven mothers (29.8%) had discontinued breastfeeding. Of the 26 who reported that they were still breastfeeding, 19 (73.1%) were totally breastfeeding (no supplements) and seven (26.9%) were partially breastfeeding (breastfeeding with supplements). Table 6 summarizes this data. The only variable found to be associated with breastfeeding status at two to three weeks postpartum was level of education ($p = .04$). Mothers who attended university were more likely to be still breastfeeding

at the follow-up interview than non-university educated mothers. This relationship between level of education and breastfeeding duration has been discussed in the literature (Feinstein et al., 1986; Florack, Obermann-de Boer, Van Kampen-Donker, Van Wingen & Kromhout, 1984; LeFevre et al., 1987; Wright & Walker, 1983, Yeung et al., 1981).

Table 6
Breastfeeding Status at Follow-up Interview n=37

Infant feeding	Frequency (n)	Valid %	Cum %
Breastfeeding	26	70.2	70.2
totally breastfed	(19)		
partially breastfed	(7)		
Discontinued breastfeeding	11	29.8	100.0

The substantial proportion (29.8%) of mothers who discontinued breastfeeding prematurely in the present study was comparable to other findings in the literature. Yeung et al. (1981) reported that 30% of breastfeeding mothers had discontinued by the first month. Jones, West & Newcombe (1986) reported that 26% of their sample had stopped breastfeeding by four weeks. McIntosh (1985) found that by one month postpartum, 66% of mothers in his study had discontinued breastfeeding. McIntosh's sample consisted of

working class primiparae, therefore, the higher rate of discontinuance. In Western societies, the higher socioeconomic classes are more likely to select breastfeeding as a feeding method and are more successful than the lower socioeconomic classes (Feinstein et al., 1986; Jones, et al., 1986; Martin & Monk, 1982; Peters & Worthingham-Roberts, 1982; Houston et al., 1981).

There were a number of studies that reported lower discontinuance rates. Goodine and Fried (1984) noted that at one month postpartum approximately 10% had discontinued breastfeeding. Feinstein et al. (1986) reported that 15% had discontinued by one month. Similarly, Ferris et al. (1987) found that approximately 14% discontinued by four weeks postpartum. Hawkins et al. (1987) also reported comparable results with almost 13% discontinued by four weeks. At variance to the above studies, Lai, Garson and Hankins (1982) reported in a Western Canadian study that no significant change in breastfeeding was observed in the first month, but a marked drop occurred after the first month. Two Newfoundland studies reported rates of discontinuance of breastfeeding at six weeks postpartum. Banoub et al. (1985) found that approximately 12% of mothers had discontinued breasteeeding at six weeks. Dempson and Maret (1986) observed that 24% of breastfeeding mothers discontinued breastfeeding during the first six weeks postpartum.

In the present study, of the 11 who discontinued breastfeeding, five stopped by the end of the first week postpartum and another four discontinued by the end of the second week. Banoub et al. (1985), Samuels et al. (1985) and McIntosh (1985) all reported similar findings with a rapid decline in breastfeeding occurring in the first two weeks postpartum. Banoub et al. (1985) found that 20% of those mothers who had discontinued did so by one week postpartum. Fifty percent of all mothers who had discontinued breastfeeding did so between two to four weeks postpartum. McIntosh (1985) reported that 8 (28%) mothers discontinued in the first week and by the end of the second week more than half (52%) had stopped breastfeeding. Rousseau et al. (1982) also confirmed that most of the decrease in breastfeeding occurred during the first weeks after returning home.

Of the 26 mothers still breastfeeding at the time of the second interview, seven were only partially breastfeeding. Five of these mothers were routinely giving supplemental formula feedings. These findings are important in the light of findings in the literature which suggest that supplemental feedings are related to a shorter duration of breastfeeding. Wright and Walker (1983) concluded in a large sample of primiparous breastfeeding mothers that the use of additional formula feedings at home was associated with a reduced prevalence of breastfeeding at 18 weeks. Feinstein et al.

(1987) found that partial breastfeeding (supplementing more than one bottle of formula per day, measured at one month postpartum) was associated with a shorter breastfeeding duration (p. <.001). Ferris et al. (1987) also concluded that the more calories from non-breast milk sources fed to the infant at two weeks, the greater the likelihood that the infant would not be breastfeeding at 10 weeks (p <.05).

Problems Experienced by Mothers Who Discontinued Breastfeeding

The mothers who had discontinued breastfeeding were asked "what sorts of problems did you have?" This information was important in describing the situation which eventually led to their decision to stop breastfeeding. Nurses are better able to prepare mothers for their breastfeeding experiences at home, if they are aware of the problems mothers experience before discontinuing breastfeeding. Table 7 presents a summary of these problems.

Most of the mothers identified more than one problem which led to their decision to discontinue breastfeeding. Five mothers mentioned problems related to "difficulty getting baby latched on". One mother attributed this problem to engorgement and another to flat nipples. Five mothers perceived that they had an insufficient milk supply. Four mothers mentioned maternal fatigue as a problem. Five mothers

Table 7

Summary of Problems Which Led To Discontinuing Breastfeeding

n=11

Problem	Frequency
Infant fussiness	5
Difficulty latching on	5
Insufficient milk	5
Maternal fatigue	5
Engorgement	2
Sore nipples	2
Poor maternal appetite	2
No routine	1
Infant losing weight	1
Low maternal hemoglobin	1
Infant used to bottle	1
Blues	1

Note: Some subjects reported more than one problem

described problems related to an unsettled, fussy baby. Four mothers had maternal breast problems such as engorgement or sore nipples. These findings were consistent with previous studies into problems with breastfeeding during the first three weeks postpartum (Chapman et al., 1985; Graef et al., 1988; Mogan, 1986). Chapman et al. (1985) and Graef et al. (1988) found that infant behaviours such as crying or fussiness were common in the first three weeks postpartum. Houston et al. (1983) also reported that the "baby crying" or "unsettled" (p.vi) were two of the most common complaints in the second week postpartum. Banoub et al. (1985) and Dempson

and Maret (1986) found that "infant cried frequently" (p. 29) was one of the main reasons given in both studies for discontinuing breastfeeding. Maternal-physical problems which included "difficulty with fixing baby" (p.ii) was the most frequently cited reason for mothers stopping breastfeeding before five weeks in the Houston et al. (1983) study.

The maternal perception of an insufficient milk supply was a frequent problem of mothers in the present study. This finding was consistent with other studies reviewed in the literature (Bloom, et al., 1982; Chapman et al., 1985; Houston et al., 1983; Mogan, 1986). It has also been cited as the most frequently mentioned reason for women discontinuing breastfeeding prematurely (Ellis & Hewat, 1984; Feinstein et al., 1987; Goodine & Fried, 1984; McIntosh, 1985; Yeung et al., 1981).

Maternal fatigue was the most frequently mentioned emotional difficulty in the Graef et al. (1988) study during the first week postpartum and this continued through the first four weeks. Mogan (1986) also indicated fatigue and lack of sufficient sleep as common concerns at one month postpartum. Banoub et al. (1985) cited maternal fatigue as the most common reason mentioned by mothers for stopping breastfeeding at six weeks postpartum. Similarly, Dempson and Maret (1986) indicated maternal fatigue as a major reason for discontinuing breastfeeding.

Maternal breast problems were frequently mentioned as concerns or reasons for discontinuing breastfeeding prematurely. Banoub et al. (1985), McIntosh (1985), Chapman et al. (1985), Dempson and Maret (1986), Mogan (1986), and Graef et al. (1988), all mentioned maternal breast problems, such as sore nipples, painful breasts and engorgement.

Problems Experienced by Mothers Still Breastfeeding at Follow-up

The following results pertain to the 26 mothers who were still breastfeeding (totally or partially) at the follow-up interview. Table 8 presents a summary of the follow-up results from these mothers.

Ten of 26 mothers (38.5%) reported having no questions or problems relating to breastfeeding at the time of the follow-up interview. The majority of the breastfeeding mothers (61.5%) reported one or more problems with breastfeeding. In the present study, the most frequently mentioned problem was the mother's perception of the infant not being satisfied. This finding indicated that mothers perceived their milk supply was inadequate. Chapman et al. (1985), Houston et al. (1983), and Mogan (1986) found that a perception of having insufficient milk was a frequent concern of mothers during the first months postpartum. Graef et al. (1988) did not report this as a concern in their study which identified postpartum concerns of breastfeeding mothers from

hospital discharge through the first month postpartum. Frequency of feeding was the most significant concern raised by the mothers in the Graef et al. (1988) study. It was mentioned as a concern by three mothers in the present study.

Eight mothers reported problems with sore nipples, plugged ducts, and engorgement. This finding was consistent with other studies in the literature. Chapman et al. (1985)

Table 8

Summary of Problems Experienced by Mothers Still Breastfeeding at Follow-up n=26

Problem	Frequency
infant not satisfied	6
sore nipples	5
frequency of feedings	3
plugged ducts	2
infant gas	2
infant falls asleep at breast	2
infant fussiness	2
leaking	1
engorgement	1
spitting up	1
infant not gaining weight	1
infant not latched on properly	1
infant not taking breast well	1
infant not sucking for long	1

Note: Some subjects reported more than one problem

described concerns relating to sore nipples and plugged ducts. Graef et al. (1988) noted that nipple problems were a major

concern for the first month postpartum. Mogan (1986) reported that breast or nipple discomfort was a major concern at two weeks postpartum and was a lesser concern at four weeks.

Maternal fatigue was not mentioned as a problem for the mothers who continued to breastfeed in the present study. Perhaps these mothers experienced fatigue, but they anticipated it and therefore it was not a problem to them. Graef et al. (1988) found that fatigue was the most frequent emotional difficulty for mothers during the first week and this concern continued through the first four weeks postpartum. Fatigue and lack of sleep were the common complaints of mothers at one month postpartum (Mogan, 1986). Chapman et al. (1985) reported that participants in their study were "tired" from birth through to four months. Maternal fatigue was, however cited as a major problem of mothers who chose to discontinue breastfeeding in the present study.

One mother mentioned that she was unsure whether or not the infant was well latched onto the breast. It is unfortunate that a mother who was breastfeeding for at least two weeks still expressed uncertainty about this aspect of breastfeeding. Ninety percent of mothers in the present study reported that they were shown how to get the infant latched onto the breast. This important instrumental support behaviour is a major component of nursing support for

breastfeeding mothers in hospital. A mother should not be discharged from the hospital unless she is confident that the infant is able to latch on and suck well at the breast.

Helpfulness of Nursing Support to Mothers Still Breastfeeding at Follow-up

The mothers were asked if the support given by nurses in the hospital was helpful in dealing with their questions or problems with breastfeeding during the period after discharge. The mothers who reported no questions or problems were asked if the support was helpful to their breastfeeding experience during the prior weeks. The mothers were then asked to describe the type of support that was most helpful.

Of the 26 mothers who were still breastfeeding at the follow-up interview, 19 (73%) mothers felt that the support given by nurses in the hospital was helpful. Six (23%) mothers reported that the support they received was not helpful. One mother responded both in the affirmative and negative to the question, as she felt that certain aspects of the support received were helpful, however, there were specific areas which were inadequate.

A few of the mothers cited more than one type of support as being most helpful. Instrumental support behaviours were mentioned by 13 mothers as being most helpful. Emotional support behaviours were cited by eight mothers. Informational

support behaviours were identified by eight mothers. Appraisal support behaviours were not mentioned as being helpful by any of the mothers who were still breastfeeding.

The instrumental behaviours cited included "assist with positioning", "encouraging demand feeding", "getting baby latched on", "showing me how to do it", and "demonstrated how to pump". The emotional behaviours cited included: "nurses really promoted it and said you'll do it", "emotional aspects- not to get upset and to take it slow", "good attitude towards breastfeeding", "encouraged", "knowing nurses are always there". The informational support behaviours most helpful were information regarding sore nipples, engorgement, demand feeding and the Breastfeeding Clinic.

The seven mothers who responded that the support given to them by the nurses in hospital was not helpful, were asked "what type of support would you like to have had?" This group included the one mother who responded both in the affirmative and negative to the previous question. All seven mothers reported needing more informational support. The comments made by the mothers included: "more information on gassy babies", "more information on what to expect with feeding times", "more on how much baby is getting", "advice about what to do if he's not getting enough", "sore nipples", "no one told me about the Breastfeeding Clinic" and "more definite answers in hospital, I don't know what to do". These comments

support much of the previous discussion on areas of informational support which were generally felt to be inadequate in the present study. The mothers still had questions regarding the duration and frequency of feedings. This was one area where the information received was frequently inaccurate and inconsistent. They often received varied responses to one question. The mothers commented that they were confused about the length and timing of feedings. In addition, the mothers were for the most part not encouraged to demand feed in hospital. The infants were generally kept on a fixed feeding schedule. This appeared to present an unrealistic picture of future feeding patterns to some mothers in this present study.

One mother wanted more information about how much milk the baby was getting. Another wanted to know what she could do if the infant was not getting enough milk. This finding was consistent with the results in the initial interview in hospital where the mothers had many concerns regarding whether or not the infant was getting enough milk. The mother's perception of having an insufficient milk supply was also the most frequently mentioned problem of mothers still breastfeeding in the follow-up interview.

One mother made the following comment regarding informational support:

> All information came much too soon; when you have no problems you don't listen to advice. By the fifth day I had problems. The nurses are fine if

> you don't have problems. There are so many different views. The nurses also don't recognize that the mother has read and is knowledgeable.

The above statement suggests that the timing of informational support may be problematic for some mothers. The new mother usually attends the postpartal breastfeeding class on the second day postpartum. At that time, most mothers are not experiencing any difficulties with breastfeeding. They are more concerned about the "how to" of breastfeeding. The information and advice given at that time may seem irrelevant to the mother who does not foresee potential difficulties. Lawson (1976) argued that because of the newness of the experience and the mother's inability to foresee the problems, she also may not actively seek sufficient or appropriate knowledge from the nurses. The responsibility for disseminating the information for breastfeeding mothers at the selected hospital rests with the teaching nurse who conducts the postpartal breastfeeding class. The postpartal and nursery nurses may not perceive the informational support as a component of their role. These nurses should, however, be reinforcing the information that was given in the class and evaluating the mothers breastfeeding knowledge. In this way, gaps in information can be noted and dealt with before the mother is discharged, or during a follow-up at home visit. This information could be presented more effectively during the postpartal visit at home by the public health nurse or

during the prenatal classes. This could alleviate the problem experienced by a mother who told the researcher that: "I forgot a lot of the information [that was given in hospital]".

Breastfeeding mothers also need to acquire information that is realistic to their breastfeeding experience. Hewat and Ellis (1984) remarked that mothers want to know about "sore nipples, leaking breasts, irregular schedules, frequent feedings and tiredness" (p. 446). Unfortunately these problems may not be manifested until the mother has been discharged from hospital. She may not have been informed of the frequency of these occurrences or how to cope with them.

Two mothers disclosed that they would have liked more instrumental types of support. One mother made the following statement: "No one showed me how to get the baby latched on or how to do it". Another commented: "I didn't have the baby positioned properly". These findings reinforce the importance of instrumental support in the early postpartum to ensure that mothers are knowledgeable about the techniques of breastfeeding. Interestingly, some mothers returned home from the hospital without being confident about the basic techniques of breastfeeding. Improper positioning of the infant at the breast may also lead to other problems such as sore nipples.

Finally, one mother mentioned that "no one stayed with me [during the feedings in hospital]". This suggests that

the mother did not receive adequate emotional support. This was the most frequently mentioned emotional support behaviour in the descriptions of support discussed previously. Also, this one emotional support behaviour is necessary for all other types of support. The significance of staying with the mother during the initial feedings was emphasized in previous discussion.

Helpfulness of Nursing Support to Mothers Who Discontinued Breastfeeding

The 11 mothers who had discontinued breastfeeding were asked if the support given to them by hospital nurses was helpful in dealing with their questions and problems. Five of the 11 mothers (45.5%) felt that the support given to them was helpful in dealing with their questions and problems relating to breastfeeding. Three (27.3%) mothers said that the support was not helpful and three mothers were ambivalent, indicating that certain aspects of support were helpful and other aspects inadequate.

One mother found emotional support as being particularly helpful to her breastfeeding experience. Six mothers favoured instrumental behaviours. Three mothers referred to informational support behaviours. One mother stated that an appraisal support behaviour had been most helpful.

The instrumental support behaviours were all related to the physical techniques of breastfeeding. They included the following: "showing me how to breastfeed", "showing me things", "helping to get baby positioned", "getting baby latched on", and "how to hold nipple". The informational support behaviours cited as being most helpful included: "information regarding breastfeeding in general", "how long to feed at each side", "foods to avoid", and "information regarding sore nipples". The appraisal support behaviour mentioned by one mother as being particularly helpful was: "a nurse who had breastfed herself had more understanding".

There were several mothers who described the support as not helpful. They wanted more informational, instrumental and emotional support. Two mothers wanted more instrumental support, one mother would have liked more emotional support and the majority of mothers (5) would have liked more informational support.

One mother stated that she would have liked to have been encouraged to room in with her infant:

> It was totally different once I got home. Rooming-in should have been encouraged or even mandatory. I would have gotten more used to her between feedings. Rooming-in and the importance of spending more time with the baby wasn't explained in hospital.

It was interesting to note that at the initial interview this mother had commented to the researcher that she had "no problems and didn't need much help". Her baby fed on a four

hourly schedule in hospital and was returned to the nursery following each feeding. Rooming-in with her infant would have given this mother a more realistic understanding of normal newborn behaviour and normal breastfeeding. When she arrived home the infant "cried all night" and "didn't seem to be getting enough [milk]". The mother was exhausted and upset and gave the baby formula which settled the infant. This mother's comment in the follow-up interview regarding the importance of rooming-in reinforces the nurse's role in making mothers aware of the advantages of rooming-in.

Another mother who felt that she needed more instrumental support stated that she wanted the nurse to "show me how [to breastfeed]". This mother experienced problems getting the baby latched on due to engorgement which eventually led to her stopping breastfeeding. This mother gave up breastfeeding the day after being discharged home from the hospital. The mother's physical reasons for discontinuing breastfeeding could have been overcome with the appropriate guidance in hospital.

The one mother who expressed that she would have preferred more emotional support stated that she wanted the nurse to "stay with me for first few feedings". The importance of this emotional support behaviour has been discussed in detail above.

Five of the mothers who had discontinued breastfeeding would have liked more informational support. One mother wanted more "advice regarding engorgement". Two mothers wanted more consistent advice. One mother made the following statement:

> I would have preferred one on one. There were so many coming at me, some supported and some didn't. So much different advice.

Another mother stated that she received "mixed answers from all of them and that fooled me up". This mother received conflicting advice about whether or not to feed her infant at the 2 a.m. feed. She was told by one nurse not to feed her baby at night but to give formula and it would not "fool up my milk supply". Another nurse told the same mother that it would "decrease my milk supply if I didn't feed". These statements confirm that conflicting advice from nurses can be a problem to breastfeeding mothers. The mothers are left confused and frustrated, particularly if they have no other support persons to turn to for advice. Mothers who are knowledgeable about breastfeeding may be able to sort through the information and determine correct and incorrect information.

One mother wanted more informa..on on demand feeding and satisfying her baby. Another would have liked more information on "how do I know if they are getting enough". These comments reinforce previous discussion regarding the

relevance of providing mothers with criteria that would enable them to assess whether or not their infant is receiving adequate milk.

The follow-up interview of 37 primiparous mothers at two to three weeks postpartum indicated that the majority, 24 (64.9%) found the nursing support received for breastfeeding in hospital helpful to their breastfeeding experience. Nine mothers (24.3%) responded that the support was not helpful and four (10.8%) mothers gave both affirmative and negative responses. Table 9 presents a summary of this data.

Table 9

Support Received in Hospital and its Helpfulness to the Breastfeeding Experience at Home n=37

	Frequency n	Valid %	Cum %
helpful	24	64.9	64.9
not helpful	9	24.3	89.2
both	4	10.8	100.0

The most frequently mentioned type of support that the mothers considered "most helpful" to their breastfeeding experience was instrumental support (47.5%). The physical activities which included "demonstrating techniques" was

generally felt by most mothers to be particularly helpful. This finding indicates that instrumental support was critical to the mothers both in their early breastfeeding experiences in hospital and during the first two to three weeks postpartum. The majority of behaviours described by mothers in their descriptions of nursing support were also instrumental behaviours primarily relating to "demonstrating techniques".

A substantial proportion (27.5%) of the behaviours cited as being most helpful were informational in nature. When mothers described support they would have liked, informational types of support were most frequently mentioned (73.3%). These findings suggest that informational support was more important to the mothers after they were discharged home from the hospital. This supports earlier discussion regarding the importance of accurate and realistic information. It was evident that the mothers needed information once they were at home, however, the appropriate timing of that information was problematic as some mothers felt they received a lot of information too early in hospital. It should also be emphasized that there were significant problems with conflicting and inaccurate advice for the mothers in the present study which resulted in the mothers requesting more informational support.

Emotional support behaviours were mentioned as being "most helpful" in 22.5% of the descriptions in the follow-up interview. This suggests that while the emotional support continued to be helpful to mothers after they were home, this category of nursing support was more helpful to their early breastfeeding experiences in hospital. There were only two mothers who stated at the follow-up interview that they would have liked more emotional support and both of these mothers referred to "staying with me during feedings".

Table 10 presents a summary of the support considered to be most helpful to the breastfeeding experience for all mothers in the follow-up, regardless of breastfeeding status.

Table 10

Support Considered to be Most Helpful to the Breastfeeding Experience n=37

	Still Breastfeeding (Frequency of Support Behaviour)	Discontinued Breastfeeding (Frequency of Support Behaviour)	Total Support Behaviours	Valid %
Instrumental	13	6	19	47.5
Informational	8	3	11	27.5
Emotional	8	1	9	22.5
Appraisal	-	1	1	2.5
Total			40	100.0

Note: Some subjects reported more than one type of support

Appraisal support followed a similar pattern. In the initial interview appraisal support did not factor as an important component of nursing support. One mother in the follow-up interview did cite an appraisal support behaviour as being most helpful. A substantial proportion of the mothers did not receive appraisal support behaviours from the nurses in hospital. Table 11 presents a summary of the support that was most helpful to the mothers at home and support they would like to have received.

Table 11

Frequencies and Percentages of Support Behaviours Mothers Would Like to Have Had in the Early Postpartum n=13

	Still Breastfeeding (Frequency of Support Behaviour)	Discontinued Breastfeeding (Frequency of Support Behaviour)	Total Support Behaviours	Valid %
Instrumental	6	5	11	73.4
Informational	-	2	2	13.3
Emotional	1	1	2	13.3
Appraisal	-	-	-	
Total			15	100.0

Note: Some subjects reported more than one type of support

Satisfaction with Breastfeeding Experience at Follow-Up

The mothers who were still breastfeeding their infants at the follow-up interview were asked to rate their satisfaction with their breastfeeding experience on the identical Likert scale used in the initial interview. Fourteen of 26 mothers (53.8%) still breastfeeding described their breastfeeding experience as "very satisfying", eight (30.8%) found it "satisfying" and three reported "neutral" breastfeeding experiences. One mother stated that her breastfeeding experience was "dissatisfying".

One mother who described her experience as "neutral" made the following comment: "I'm tired, I don't want to stop breastfeeding but I want to supplement". Another who expressed being "neutral", wondered if breastfeeding was best for her infant as the infant did not appear to be satisfied. The third mother who described a "neutral" breastfeeding experience, felt that she had so many additional stressful factors that it was perhaps best to discontinue breastfeeding. There was an illness in her extended family. The one mother who described her breastfeeding experience as "dissatisfying" did not feel that her infant was getting enough milk. She also stated that "it still really hurts and it's not as nice as I thought it would be". This same mother stated that she would not breastfeed a subsequent infant.

It was particularly discouraging to note that one mother who stated that her breastfeeding experience was "satisfying", would definitely not breastfeed her next infant. She emphatically stated that her next infant would "be on the bottle from the start". This mother felt that it was important for her infant to get the nutrition from breastmilk. She expressed ambivalent feelings about breastfeeding because it continued to "hurt when he sucks". The mother's comment that she would not breastfeed a subsequent infant gives the researcher better insight into the mother's actual satisfaction with her breastfeeding experience. Solberg (1981) found that, based on the present breastfeeding experience, "if the woman would breastfeed her next infant" (P. 73), was an item that was positively related to how satisfied the mother seemed to be with the experience of breastfeeding. Lumley (1985) in a discussion of problems with assessing satisfaction with child birth indicated that one indirect measure of satisfaction was the choice made for a subsequent birth. This is comparable to the choice made for method of feeding in a subsequent infant.

Twenty-seven of the 37 mothers (73.0%) stated that they would breastfeed their next infant. Six (16.2%) said they would not and four were undecided. Of the 26 mothers who were still breastfeeding their infants, two were "undecided" about breastfeeding a subsequent infant, and two stated "that they

would not". Remarkably, five of the mothers who had discontinued breastfeeding, stated that they would breastfeed their next infant. A few of these mothers told the researcher they would make changes next time to achieve a more satisfying breastfeeding experience. The changes suggested were: rooming-in and avoiding supplemental bottles of formula and glucose and water.

Public Health Nursing Visits

The final question in the follow-up interview pertained to the public health nursing visit and help given with breastfeeding. The researcher felt that it was important to differentiate between support received by nurses in hospital and additional support received by public health nurses.

Thirty-three of 37 mothers (89.2%) received a home visit from the public health nurse and four mothers did not receive a home visit. One of the mothers who did not receive a visit had two phone calls. The public health nurses in her area were on vacation. One mother reported that she was to receive a public health nursing visit the following week. One mother stated that she had not been contacted by the public health nurse. One mother who did not receive a visit from the public health nurse had a home nurse visiting on a daily basis for dressing changes. The mean contact time following discharge from hospital was five and one half days with a range of 2 to

14 days. The modal length of time after discharge before visiting was seven days. The majority of the mothers received one visit. The public health nurse spent an average of 45 minutes with each mother with a range of 15 to 120 minutes.

These findings indicate that the length of time between discharge from hospital and initial visit from the public health nurse was particularly long for the mothers in the present study. The majority of mothers who discontinued breastfeeding in the first two weeks postpartum indicate that there is a need for earlier contact, ideally within the first 48 hours postpartum. Most of the mothers who had discontinued breastfeeding did so prior to the public health nurse's visit. Dempson and Maret (1986) found that 69% of mothers in their study had public health nursing visits and 74% of these occurred in the first few weeks. Eighty-six percent (86%) of the mothers however stated that they would prefer a visit during the first week at home and 12% preferred a visit within 48 hours after discharge. Houston & Field (1988) reported that only 3 of 46 staff nurses in their study thought that the public health nurse would visit within 72 hours of discharge. The majority of staff nurses felt that the public health nurse would visit between one and two weeks after discharge.

Several reasons could account for the length of time between discharge and initial public health nursing visit. Although postpartal mothers and infants are referred by the

selected hospital to the public health nurse immediately upon discharge, it may take several days for initial contact due to slow mail delivery particularly in more remote, rural areas, mothers being discharged on a weekend, and the public health nurse's work schedule. There may have been an additional problem that public health nurses were not routinely telephoned immediately by staff nurses in hospital, to advise regarding early follow-up of mothers who were still experiencing difficulties with breastfeeding on discharge.

Nineteen of the 33 mothers (57.5%) who received a public health nurse's visit indicated that they had received help from the nurse for breastfeeding. Fourteen mothers (42.4%) stated that they had received no help with breastfeeding from the public health nurse. Five of these mothers had already discontinued breastfeeding. A few of the mothers who reported receiving no help indicated to the researcher that they would have liked some help with breastfeeding. The mothers cited emotional, instrumental, informational and appraisal types of support. The majority of mothers mentioned emotional support behaviours. Comments were made such as "she was very supportive", "very concerned", "encouraged me to continue breastfeeding", and "told me I was doing great". Several mothers referred to informational support behaviours such as "literature received on breastfeeding", "advice for sore nipples", "advice about fluoride and Vitamin D supplements",

"fussy periods are normal", "introduce artificial nipple after three weeks" [to get used to bottle], "advice about giving pacifier or water to satisfy her", "express milk after a feed", and "hints regarding timing and frequency of feeds". A few mothers mentioned instrumental types of support; for example, "gave help expressing milk", "encouraged to feed frequently" and "checked to see if baby was latched on okay". One mother described an appraisal support behaviour, "nurse described her personal experience with leaking". Two mothers described examples of what they perceived as help with their breastfeeding. One mother stated that the public health nurse had encouraged her to supplement with a commercial infant formula after each feeding if the baby did not seem settled. Another mother reported that the public health nurse "told me to give up if I'm not comfortable, and don't feel guilty, at least you've given it a try".

The help received from public health nurses for breastfeeding mothers in the present study generally consisted of emotional and informational support behaviours. The emotional support was comprised of comments by the public health nurses that encouraged mothers to continue with their breastfeeding efforts. The informational support experienced by several mothers answered specific concerns of the mothers. The information reinforced advice previously given by nurses in the hospital setting; for example, management of sore

nipples. The informational support given by public health nurses also dealt with concerns that often arise after the mother had some experience with breastfeeding; such as, introducing an artificial nipple, pacifiers, expressing milk, fluoride and Vitamin D supplements and infant fussy periods. These concerns may not have been covered in detail by nurses in the hospital. The comments of the mothers in the follow-up interview suggest to the researcher, that the support received for breastfeeding by the public health nurses did not have a significant influence on the mother's breastfeeding experiences at home. A substantial proportion of mothers in the present study did not receive help from the public health nurse for breastfeeding. A few of these mothers definitely needed and expected help with breastfeeding.

Satisfaction With Quality of Nursing Support

One of the major research objectives of this study was to assess the maternal perception of the quality of nursing support for breastfeeding during the postpartal hospital period, prior to discharge and at two to three weeks postpartum.

The mothers were asked to rate their satisfaction with the quality of nursing support for breastfeeding, on a Likert scale of "very satisfied", "satisfied", "neutral", "dissatisfied" and "very dissatisfied". This question was

asked in the initial interview in hospital and again at the follow-up interview. It was important to assess this variable in hospital and later in the mothers' breastfeeding experience, in order to assess any changes in perception that occurred over the two to three week interval. The mothers should be better able to evaluate the nursing support received after they have breastfed for a couple of weeks. They would be able to evaluate whether or not the nursing support received for breastfeeding in hospital prepared them for their subsequent breastfeeding experiences. There are of course several limitations in assessing client satisfaction with care and these will be addressed later.

The mothers were for the most part satisfied with the quality of nursing support received for breastfeeding in hospital at the time of the initial interview. A large proportion of the mothers, 28 out of 40 (70%) were "very satisfied", 10 (25%) were "satisfied", one was "neutral" and another was "dissatisfied". At the follow-up interview 18 mothers (48.6%) stated that they were "very satisfied", 14 (37.8%) were "satisfied", two were "neutral" and three were "dissatisfied". This finding indicated that there was a significant difference in the responses in the hospital and at two to three weeks postpartum. Using a t-test, there was a statistically significant difference between the mean

satisfaction scores at the initial interview and the follow-up interview. (t = -3.38, df = 36, p = 0.002)

The mothers' reported satisfaction with the quality of support for breastfeeding was consistent with a number of studies reviewed in the literature. Jeffs (1977) concluded that mothers were satisfied with the help for breastfeeding in the hospital. One study reported that more than eighty-percent of primiparous breastfeeding mothers interviewed in hospital felt that nurses were supportive towards breastfeeding (Solberg, 1981). Other studies reported similar positive ratings of nursing support in hospital (Maclean et al., 1985; Rousseau et al., 1982).

The findings of the present study were at variance with a number of other research studies. Lawson (1976) concluded that more than 52% of postpartal nurses were neutral or negative in terms of support for breastfeeding mothers. Cole (1977) also found that only one-third of breastfeeding mothers felt hospital nurses gave useful information about breastfeeding. Hall (1978) found that 70% of breastfeeding mothers expressed some disappointment in hospital nurses. Albers (1981) found health professionals least supportive for breastfeeding, particularly in the health care setting. Kurtz (1981) noted that the majority of mothers in her study did not feel they received adequate information about breastfeeding from nurses in the hospital. McIntosh (1985) concluded from

the comments of mothers in his study that support from nurses in the hospital setting was inadequate. These discrepancies in the research with respect to perception of the quality of nursing support for breastfeeding can be attributed to several possible factors. There were differences in the timing of and setting of the interviews. The definitions used to measure the quality of nursing support varied. The research studies were all undertaken at various postpartal units with different protocols for breastfeeding and therefore the quality of nursing support would vary accordingly.

It was likely that after the mothers were discharged from hospital in the present study they encountered problems or questions relating to breastfeeding and that they did not feel adequately prepared to cope with those problems. This is a possible explanation for the significant difference between satisfaction with support scores in hospital and at two to three weeks postpartum. As was previously discussed, primiparous breastfeeding mothers may not anticipate problems, especially if breastfeeding is progressing well in hospital. The nurses are always there for assistance in hospital, however at home many of the mothers had to face difficulties without adequate support. One mother commented: "It was my first time around and I didn't know what questions to ask [the nurses]". Lawson (1976) emphasized that "lack of questions

does not necessarily mean the new mother has all the information she needs" (p. 71).

Of the five mothers who were either "neutral" or "dissatisfied" with the nursing support at the follow-up interview, three had discontinued breastfeeding. When these three mothers encountered problems which led to their stopping breastfeeding, they realized the deficiencies with nursing support and hence a probable explanation for the change in rating of satisfaction. One of the mothers who stated that she was "very satisfied" with the quality of nursing support in hospital and then changed to "neutral" in the follow-up interview, concluded that she had received more help with breastfeeding from her family and sisters. When this mother encountered problems with sore nipples and concern that her infant was not getting enough milk she sought assistance from family and sisters who had breastfed. This same mother reported that she had received no help at all from the public health nurse. She recognized the need for support and sought out individuals who were supportive when she was unsuccessful in securing adequate professional support. This finding was consistent with Lawson's (1976) survey in that women who breastfed successfully, recognized the need for support and sought support from immediate or extended family and friends.

Albers (1981) found that persons identified as most supportive for breastfeeding mothers included husbands,

mothers, parents and friends. Harrison, Morse and Prowse (1985) indicated that environmental factors such as support of family and friends were most important for breastfeeding success. Houston et al. (1983) noted that for many mothers successful breastfeeding was influenced mainly by encouragement from family and friends.

Mothers may have been reluctant while still in hospital to evaluate negatively the quality of the nursing support that they were receiving. An attempt was made to minimize this limitation by asking mothers about their satisfaction with the quality of nursing support while still in hospital and again during the follow-up interview. The mothers may also have felt threatened by the interviewer who was a nurse asking questions about the nursing support received in hospital. This may explain the reason for one mother who rated that she was "satisfied" with the quality of nursing support in hospital but changed to "dissatisfied" at the follow-up interview. The mother described many incidences where she had not received adequate emotional, instrumental and informational support. This same mother also commented that the nurses had "encouraged formula supplements" and that she had received a lot of inconsistent advice about breastfeeding. She was still breastfeeding at the follow-up interview. The rating of "satisfied" at the initial interview

appeared high in comparison to the actual support received as described by the mother.

A mother who described that she was "satisfied" with the quality of nursing support at the initial interview and at the follow-up interview that she was "dissatisfied", illustrates someone who received inadequate nursing support yet still had a high satisfaction rating at the initial interview. This mother reported receiving significant conflicting advice about breastfeeding. She had several questions and problems relating to breastfeeding just prior to discharge, such as: engorgement, "is the baby satisfied?" and "is the baby getting the right nutrition?" The mother stated that she found getting started at breastfeeding "very difficult". She also stated during the hospital interview that her satisfaction with the breastfeeding experience was "neutral" because she felt nervous about breastfeeding and couldn't see how much milk the infant was getting. This mother would certainly be an "at risk" client for breastfeeding failure. She required significant guidance and support from the nurses in hospital and unfortunately did not receive it. The mother had several problems with breastfeeding in the early postpartum and this more than likely resulted in a lower rating of satisfaction. These two factors have been associated with a shorter duration of breastfeeding (Humenick & Van Steenkiste, 1983). Janke (1988) reported a relationship between satisfaction with

breastfeeding experience and success with breastfeeding. The variable, feeling satisfied with breastfeeding in hospital, was found to be associated with breastfeeding success exclusively among women who had experienced a vaginal birth in Janke's (1988) study.

Another "at risk" mother for breastfeeding described being "dissatisfied" with the quality of nursing support both at the initial interview in hospital and at the follow-up interview two to three weeks postpartum. This mother found getting started at breastfeeding "very difficult". She described several incidents where she did not receive adequate support from the nurses in hospital including: conflicting advice and lack of emotional support. At the time of the initial interview in hospital, she reported having several questions and problems with breastfeeding related to frequency and duration of feedings, and how you know if infant is getting enough milk. This mother stated at the first interview that she needed more information in general on breastfeeding. Although she rated her breastfeeding experience as satisfying at the time of the initial interview, she reported that it was dissatisfying up until the day of that first interview. This mother had an emergency cesarean birth under general anaesthetic for fetal distress. At the follow-up interview, the mother reported that she felt the baby had become too used to the bottle in hospital and then

refused the breast. She would definitely breastfeed her next infant, however, she would not give the infant a bottle in hospital.

That mother's experience illustrates well how the early breastfeeding experiences in hospital can influence the mother's later breastfeeding experiences. It also points to the importance of careful assessment by nurses in the initial breastfeedings so that "at risk" clients can be identified and given appropriate support. The support which was given to both of these "at risk" mothers was inadequate and the mothers reported being dissatisfied with the support.

Another mother who reported that she was "satisfied" with the nursing support in hospital changed to "neutral" at the follow up interview. This mother described incidents where she lacked support; for example, formula was given at the night time feedings and she received inconsistent and inaccurate advice. Prior to discharge she had eight questions and problems with regard to breastfeeding, including: duration and frequency of feedings, correct positioning, getting baby latched on properly, and determining whether the baby was getting enough milk. This mother also found getting started at breastfeeding "about average" following a cesarean birth under epidural anaesthetic. The mother finally gave up breastfeeding because there was "no routine" and she was "ready to go in the Waterford [psychiatric hospital]".

Overall responses in the present study suggest that satisfaction with quality of nursing support was high, even though many mothers received inadequate support for breastfeeding. The ratings were significantly higher in hospital at the initial interview when compared with follow-up interview results. This change could be partially attributed to the mothers encountering unanticipated problems or difficulties with breastfeeding at home and not feeling adequately prepared to deal with such problems. In hospital, the mothers were not aware of potential problems and therefore did not ask questions. They perceived having received adequate support from the nurses. Some of the mothers may not have had sufficient knowledge to understand what level of support they should be receiving from nurses in hospital. This is a limitation of studies measuring client satisfaction. Individuals will rate that they are satisfied because they do not know what type of support or care they should be receiving.

Shearer (1983) highlighted the following limitations in defining and measuring satisfaction with prenatal care:

> It changes according to unrelated variables such as parents' overall mood when asked to rate satisfaction, who is asking parents for their rating of satisfaction, how the question is posed, and how much time has elapsed to sort out events and come to terms with them... (p. 77)

These limitations are applicable to the present study. The mothers may have rated how satisfied they were with the

quality of nursing support based on how well breastfeeding was going for them. Three of five mothers in the present study who rated the nursing support as neutral or dissatisfied in the follow-up interview had discontinued breastfeeding. There may be difficulties with rating satisfaction in the early postpartum in hospital. This is a highly emotional and vulnerable time for the new mother who may also be recovering from a difficult labour and birth. These extraneous variables are important to consider when measuring client satisfaction with nursing care. Shearer (1983) made the following comments regarding measuring satisfaction with perinatal care:

> Even under the most disastrous circumstances parents usually do express satisfaction (especially if their care giver or his or her agent is the one asking) if they can be persuaded that everything possible was done, or that what was done was necessary... (p. 77)

Although the researcher explained to the mothers that the researcher had no association with the postpartal unit of the selected hospital, some of the mothers may have felt threatened by the researcher, that she may be representing the nursing staff and the hospital. Interviewing mothers in hospital has limitations in that the mother is a "patient and a captive" (Lumley, 1985, p. 141). Interestingly, eight of 11 mothers who had discontinued breastfeeding rated that they were "satisfied" or "very satisfied" with the quality of nursing support. Even mothers who gave physical reasons for discontinuing breastfeeding, which may have been surmounted

by adequate support in hospital, still rated the quality of nursing support very high. This finding was consistent with Shearer's (1983) comments above.

Cassileth, Walsh, Blake and Greenspan (1987) also concluded that "a problem commonly associated with patient satisfaction studies is that respondents give uniformly high ratings" (p. 53). These authors suggest that once hospitalized, patients lose their objectivity and tend to express great satisfaction with almost everything in hospital. Cassileth et al. (1987) indicated that people may focus on "attentiveness of staff and friendliness of environment" (p. 54) as opposed to objective evaluations of the quality of care received.

A recent Canadian Medical Association study on obstetrical care found that 95.7% of respondents were very or somewhat satisfied with prenatal care, 91.5% were very or somewhat satisfied with their labour and delivery and 89.3% were very or somewhat satisfied with postnatal care (Sullivan, 1987). These high ratings of satisfaction do not indicate that obstetrical care is satisfactory in Canada. The Canadian Institute of Child Health has critically examined the results of the Canadian Medical Association survey. The problem with global satisfaction questions was addressed in the Institute's June 1987 newsletter:

> If women do not know the risks and benefits of procedures, the qualities and drawbacks of other

> safe choices and alternatives, how can they critically examine the care they receive?

Cleary and McNeil (1988) addressed the problem of patient satisfaction as an indicator of quality care in the following remarks.

> Patients are certainly aware of whether the way in which care was delivered met their expectations and whether there was an acceptable outcome, but it is difficult for them to know whether they had reasonable expectations or whether any undesired outcomes were the result of poor care or unusual circumstances. (p. 29)

These comments might apply to mothers who discontinued breastfeeding early as a consequence of difficulties that could have been overcome with adequate support.

An additional limitation noted by Lumley (1985) is that "there is evidence that fixed scale questionnaire methods elicit fewer negative responses than do open-ended interviews" (p. 143). The open-ended questions provide the researcher with more interesting and complex data (Lumley, 1985). This was apparent in the present research study, where mothers would frequently describe detailed incidents when they had not received help from a nurse for breastfeeding, yet still they rated that they were "very satisfied" or "satisfied" with the quality of nursing support on the fixed scale component of the questionnaire.

There are obvious difficulties in measuring satisfaction with quality of nursing support. However, it is important that the findings are examined in a total context and not as

objective evaluations of the nursing support received. The mothers' descriptions of the support they received or did not receive provided the researcher with additional insight into the total nursing support received. The follow-up interview was valuable in giving mothers an opportunity to reflect on and reassess the support received and its helpfulness to their breastfeeding experience, both in hospital and at home.

Relationship Between Maternal Perception of the Satisfaction With Quality of Nursing Support and Maternal Satisfaction With the Breastfeeding Experience

There was a statistically significant relationship found between the maternal perception of the satisfaction with quality of nursing support and maternal satisfaction with the breastfeeding experience at the initial interview in hospital ($p = .04$). Mothers who reported that they were "very satisfied" with the quality of nursing support generally reported "very satisfying" breastfeeding experiences. This significant relationship was achieved by collapsing catergories and using a Fisher's exact probability test. There were only a small number of mothers who reported that they were dissatisfied with the quality of nursing support and who had dissatisfying breastfeeding experiences in hospital. Therefore, the data was analyzed by collapsing the "satisfied", "neutral", "dissatisfied" and "very dissatisfied" categories together and comparing these with the "very

satisfied" group of mothers for the variable satisfaction with quality of nursing support. In a similar manner, for the variable satisfaction with breastfeeding experience, "very satisfying" was compared with the four other categories of "satisfying", "neutral", "dissatisfying" and "very dissatisfying". The large majority of mothers in the present study, 36 of 40 (90%) reported that they were satisfied with the quality of nursing support and had satisfying breastfeeding experiences. There were only two mothers who reported that they were neutral or dissatisfied with the quality of nursing support at the initial interview. The mother who was neutral about the nursing support stated that her breastfeeding experience was "very dissatisfying". However, the one mother who reported that she was dissatisfied with the quality of nursing support described her breastfeeding experience as "satisfying".

Some mothers who were critical of the nursing support received were still able to achieve satisfying breastfeeding experiences. This may be a result of their own motivation and commitment to breastfeeding. These mothers may also have had other informal sources of support. Beske and Garvis (1982) found that 93% of the mothers in their study achieved breastfeeding success in spite of the nursing care. A similar pattern was observed in the pilot study where two mothers who were "dissatisfied" and "very dissatisfied" with the nursing

support still reported "very satisfying" breastfeeding experiences. Both mothers achieved satisfying breastfeeding experiences because of their own knowledge and preparation and other sources of support.

At the follow-up interview it was found that there was no relationship between these two variables for the 26 mothers who were still breastfeeding.

Chapter V

LIMITATIONS AND CONCLUSIONS

This chapter presents the limitations of this research study and the conclusions drawn from the results. Implications for nursing practice, education and research are discussed.

Limitations

The use of a non-random sample to select participants for this study, indicates that the results can not be generalized to any other group of primiparous breastfeeding mothers. The research study was exploratory and descriptive in nature and therefore the results are only representative of this specific group of breastfeeding mothers.

A second major limitation of this study is the small sample size. This may account for the lack of statistically significant results found in the Chi-square test for independence among specific variables. The use of a larger sample size would be required to achieve statistically significant results.

A third possible limitation of this research study was the reliability and validity of the research instruments. An attempt to establish content validity was made by having three knowledgeable and experienced maternal-child nurses review the

instruments. The pilot study of eight mothers enabled the researcher to check the questions for clarity and reliability. However, the reliability and validity of the findings elicited will not be well established until these instruments have been subjected to repeated use in a variety of settings.

Another limitation of this study was discussed earlier as a problem with measuring client satisfaction with care. The mothers may have rated their experiences with nursing support more positively as a result of the first interview occurring in the hospital. The extent to which mothers were compelled to answer positively to questions concerning nursing support will be unknown. The findings are also based on mothers' retrospective reports of the nursing support received rather than on the researcher's observations or interviews with nurses. The validity of the findings will be influenced by the accuracy of the mothers' recollections.

A final limitation of the study was the nature of the research design. It would have been useful to have had an additional follow-up of the mothers to examine breastfeeding duration in a more comprehensive manner. Several of the mothers who were still breastfeeding at two to three weeks postpartum were routinely giving formula supplements. A few mothers indicated that they were less than satisfied with their breastfeeding experiences. It would be interesting to observe the pattern of breastfeeding for these mothers.

If this study was repeated again, it would be useful to obtain information on mother's plan to return to work following the birth of their infant to determine if the mother's planned length of time breastfeeding was related to resuming employment. It would also be beneficial to obtain information relating to support received for breastfeeding by sources other than the public health nurse when at home, for example; La Leche League, Breastfeeding Clinic, and family and friends. Some of this information was documented because it was volunteered by several of the mothers. In addition, it would be useful to know if mothers actually roomed-in with their infants and demand fed their infants. The mothers were asked if they had been encouraged to do so by the nurses in hospital but complete data was not systematically collected for all mothers on these topics. This information would provide the researcher with a more accurate picture of the breastfeeding experience in hospital. Relationships between these variables and subsequent duration of breastfeeding could be examined.

Conclusions

The purpose of this research was to describe the nature of postpartal nursing support for breastfeeding in hospital and to assess the mother's perception of the quality of this support prior to discharge and at two to three weeks

postpartum. An attempt was also made to assess the helpfulness of the four different categories of support: emotional, instrumental, informational and appraisal. Finally, the relationship between quality of nursing support and satisfaction with the breastfeeding experience was examined. Despite the limitations of the present study, the following conclusions are drawn from the results.

The data indicated that primiparous breastfeeding mothers in the present study generally felt they received adequate emotional support for breastfeeding. However, the results demonstrated that a substantial proportion of the mothers reported that the nurses did not spend time with them during their initial feedings. This emotional support behaviour was most often described by mothers as being helpful to their breastfeeding. Therefore, nursing support interventions should be directed at having a nurse present during the first couple of breastfeeding sessions. Although this requires significant nursing time initially, it will mean less nursing time in dealing with difficulties which have arisen because of lack of guidance in the first feedings. The majority of the mothers received adequate instrumental support in the area of physical activities such as demonstration of techniques. The data indicated that the instrumental support component of modifying the hospital environment to facilitate a positive breastfeeding experience was for the most part inadequate.

The large majority of mothers in the present study were not encouraged to room-in, demand feed, or breastfeed in the delivery or recovery area. These findings suggest that nurses may not be aware of the significance of such practices on mothers' subsequent breastfeeding experiences. Therefore they may not be able to educate mothers properly with respect to these practices. A substantial proportion of mothers in the present study did not initiate breastfeeding until more than eight hours after birth. Although the results were not statistically significant, many of these mothers reported that they had difficulty getting started at breastfeeding.

The data suggests that most of the mothers received information regarding various topics of breastfeeding in hospital. However, many mothers did not report receiving information on avoiding formula supplements and criteria for assessing whether or not the infant is getting enough milk. A few mothers felt that they were encouraged by nurses to give formula to their infants. The most frequent question reported by mothers at the initial interview in hospital was "How do I know if my infant is getting enough milk?". This problem was manifested in the mothers' later breastfeeding experiences as a perception of having an insufficient milk supply. Informational support interventions should include criteria to assess whether or not an infant is receiving adequate milk and methods of increasing an inadquate milk supply.

The predominant source of complaint by mothers in this study with regard to the informational support received was inconsistent advice about breastfeeding. Problems with inconsistent and inaccurate advice could be eliminated to some extent if postpartal nurses followed the written breastfeeding protocol on the postpartal unit. Despite this frequent complaint, the large majority of mothers perceived the nurses as having a good knowledge of breastfeeding. The mothers reported receiving less appraisal support behaviours such as sharing personal breastfeeding experiences and sharing similar breastfeeding experiences of other mothers. The majority of mothers felt that they were given opportunities to make their own decisions about the course of their breastfeeding.

This study indicated that primiparous breastfeeding mothers found emotional and instrumental support behaviours most helpful to their breastfeeding experiences in hospital. The mothers' descriptions of help received by nurses for breastfeeding included for the most part instrumental and emotional support behaviours. The mothers cited such behaviours as "demonstrating how to get infant latched on to the breast", "praise you and tell you that you are doing a good job with breastfeeding", "give you sufficient time to breastfeed" and "spend time with you during initial feedings" as being particularly helpful. Therefore nursing support interventions in the early postpartum should focus on

emotional and instrumental support behaviours. Informational support tended to be more helpful to the mothers after discharge from the hospital. The mothers cited informational support most frequently as the type of support they would like to have had but did not receive by nurses in the hospital. Therefore, informational support interventions need to be reevaluated in terms of content and appropriate timing of information. Instrumental support was found to be most helpful to the mothers in hospital and also throughout the first two to three weeks postpartum. The emotional support category ranked highest in hospital, however, at the follow-up interview, it ranked after instrumental and informational support in terms of most helpful to the mothers' later breastfeeding experiences. The data suggests that appraisal support was perceived as being less helpful to the mothers' breastfeeding experiences in hospital and at the follow-up interview. The study indicated that although many mothers felt it was important to be able to make their own decisions about the course of their breastfeeding, for several mothers this behaviour was not helpful because they felt that they were left on their own without sufficient guidance from nurses.

The data indicated that the majority of the mothers expressed satisfaction with the quality of nursing support received for breastfeeding in hospital. However, many mothers

still had questions and problems with breastfeeding at the time of the initial interview in hospital. Many of these problems were unresolved and led to premature discontinuation of breastfeeding for a substantial proportion (29.7%) of mothers. The findings demonstrated however, that their satisfaction with the quality of nursing support was significantly lower when measured at two to three weeks postpartum. The data suggested a relationship between satisfaction with quality of nursing support and satisfaction with the breastfeeding experience at the initial interview in hospital. The majority of mothers who reported that they were satisfied with the nursing support also reported satisfying breastfeeding experiences.

Implications

This study has implications for nursing practice, education and research.

Nursing Practice

The results of the present study provide useful information to nurses in the hospital and community settings. In Newfoundland with such low initial rates of breastfeeding in comparison to other Canadian and North American rates, those mothers who do initiate breastfeeding must be given adequate professional support for their efforts. It is

critical that nurses in hospital assist mothers with their early breastfeeding experiences because so many give up within a few weeks or even days of discharge from hospital.

Based on the results of this study nurses will have a clearer understanding of the nature of nursing support experienced by mothers in hospital and the helpfulness of that support both in hospital and to the mothers' breastfeeding experiences at home. The results suggest that primiparous breastfeeding mothers want nurses to spend time with them during their feedings and show them the techniques of breastfeeding. These supportive interventions require significant time and a knowledgeable nurse. The nurse must have a strong theoretical background in breastfeeding and competence in the practical aspects of breastfeeding which involve her demonstration. There are also many factors in the hospital environment that may enhance or inhibit a mother's breastfeeding experience. The postpartal nurse can be influential in altering these factors to make the environment more conducive to breastfeeding. The nurse can encourage the mother to room-in with her infant by pointing out the advantages of this practice and by fully supporting the mother who chooses to room-in. Early initiation of breastfeeding in the delivery or recovery area and demand feeding should also be encouraged by the nurse. The nurse can maintain privacy for the breastfeeding mother and encourage a change in

hospital practices that needlessly interrupt a mother during breastfeeding.

Nurses in the hospital and community settings need to collaborate with each other and evaluate the current methods of providing informational support to breastfeeding mothers. Currently, breastfeeding mothers receive most of the informational support through a postpartal breastfeeding class which the mother usually attends on the first or second day postpartum. The information is relevant and essential. However, it may be overwhelming to a new mother. Perhaps this information could be covered by prenatal nurses, postpartal nurses in hospital and public health nurses in the community. The prenatal nurse could focus her discussion on benefits of breastfeeding, preparation of breasts for breastfeeding and anatomy and physiology of milk production. The postpartal nurse in hospital could focus on information relating to positioning, common problems with breastfeeding, 'let down' reflex, criteria for assessing adequacy of milk supply, and the importance of avoiding formula supplementation. The public health nurse might focus on aspects of growth, weight gain, expression and storage of milk, weaning, returning to work and breastfeeding and maternal fatigue. This would ensure that the information was covered adequately without overwhelming the new mother in the early postpartum. Furthermore, postpartal, nursery and intrapartal nurses should

be reinforcing the information given in the classes in their interactions with mothers during breastfeeding sessions.

The information that is presented to breastfeeding mothers should be realistic and include a discussion of the frequency of occurrence of common problems and resources to cope with such problems when they arise. Although the positive aspects need to be reinforced, more emphasis should be placed on informing mothers that breastfeeding is demanding, particularly in the first six weeks, and therefore requires motivation and commitment by the mother. Examination of the types of questions and problems that mothers in the present study reported experiencing in hospital and at two to three weeks postpartum gives insight to nurses in developing relevant informational support interventions. The information could reflect the concerns of mothers such as the adequacy of their milk supply and frequency and duration of feedings. As well, mothers reported many physical problems with breastfeeding such as, sore nipples, engorgement, plugged ducts and often these problems led to their decision to discontinue breastfeeding. This finding suggests that nurses need to make more astute assessments of breastfeeding mothers. It is not satisfactory for a nurse to ask a mother only "Did your baby feed well?" following a feeding. How does an inexperienced mother evaluate whether or not the baby has fed well? Nurses need to examine breasts, nipples and techniques

of breastfeeding to avoid or decrease the physical problems that place a mother at risk for failure. The widespread use of glucose and water and formula as supplements or complements to breastfeeding infants should be discouraged by nurses.

Although appraisal support behaviours are more typically experienced by breastfeeding mothers through informal networks such as family and friends, the postpartal nurse can develop these support behaviours. Nurses who have breastfed their own infants can be valuable "doulas" for the primiparous breastfeeding mother. They can share their personal breastfeeding experiences and similar breastfeeding experiences of other mothers to assist new mothers in evaluating their own breastfeeding. Mothers should be encouraged by nurses to bring their infants to the postpartal breastfeeding class. This would be a valuable way for mothers to share breastfeeding concerns with each other and for the nurse to identify problems with breastfeeding techniques.

Hospitals and community agencies should have written breastfeeding protocols that are frequently revised in keeping with current research. Since consistency and accuracy of information provided to breastfeeding mothers is a major problem, these protocols, when adhered to by all health professionals, would minimize this concern.

There is a need to ensure on-going nursing care for breastfeeding mothers from the hospital to the community

because of the significant number of women who discontinue breastfeeding in the early days after discharge. Many mothers give up breastfeeding before they have had any contact with the public health nurse. An indepth assessment of a mother's breastfeeding experience in hospital and anticipated problems should be completed so that "at risk" mothers can be seen by the public health nurse within 48 hours of discharge. Furthermore, breastfeeding mothers should all be aware of resources within the community such as lay support groups and breastfeeding clinics.

Finally, the researcher recommends that on every postpartal nursing unit there be one experienced breastfeeding nurse with the responsibility for the breastfeeding mothers and education for nursing staff. This does not underestimate the need for knowledgeable staff nurses or reduce in any way their vital role in assisting breastfeeding mothers. The breastfeeding nurse could have additional time to spend with "at risk" mothers and would ensure comprehensive discharge planning and follow-up for all breastfeeding mothers.

Nursing Education

The results of this study suggest that nurses in hospital and community settings must be knowledgeable about the various types of support offered to and perceived as helpful by breastfeeding mothers. It was evident from this study that

informational support alone was inadequate. Nurses need to be also competent in the practical aspects of breastfeeding techniques. They need to be aware of current research which discusses the impact of the hospital environment on a mother's breastfeeding experience. They should be knowledgeable about the emotional types of support and their value to a mother's early breastfeeding experience.

The educational process must be initiated in basic nursing programs. Nursing students need to explore their individual attitudes and feelings towards breastfeeding and recognize how these factors may influence their nursing support to breastfeeding mothers. Nursing students should work closely with breastfeeding mothers in the clinical setting by observing and assisting with breastfeeding techniques. All educational programs in nursing should ensure that their breastfeeding educational content reflects current practices and recommendations of the World Health Organization. The education in this area can be expanded through continuing education programs. Hospital and community orientation programs for nurses anticipating work with pregnant women and breastfeeding mothers should provide a comprehensive learning program that focuses on all four categories of support: emotional, instrumental, informational and appraisal. Nurses currently working in these areas should be regularly examined on their breastfeeding knowledge from

both a theoretical and practical perspective. This would ensure that nursing interventions are accurately based on current research and recommendations in the breastfeeding literature. Team conferences are a potential mechanism for discussing and planning appropriate support interventions for mothers who are experiencing difficulties with breastfeeding. Furthermore, these conferences would be an effective means of ensuring that breastfeeding mothers are given consistent and accurate advice to deal with their concerns.

Nursing Research

The research instruments in the present study need to be used repeatedly in different settings to establish reliability and validity and to further develop and refine the instruments. It would be valuable to undertake a replication of the present study using a larger sample population. Future research might also expand the criteria for selection to include multiparous breastfeeding mothers. It would be beneficial to compare the perceived helpfulness of the four categories of support between primiparous and multiparous women. This study could also be repeated in a postpartal unit where combined care is practiced. It would be interesting to observe the differences in support offered and the perception of that support when there is one nurse assigned to the

mother-infant pair and is primarily responsible for breastfeeding support.

There are a number of recommendations for further research in the area of breastfeeding support. Future research should compare the helpfulness of specific breastfeeding support interventions for mothers in hospital with the routine nursing support provided on a specific unit. The impact of these supportive interventions on subsequent breastfeeding duration and satisfaction with breastfeeding experience could be investigated. Subsequent research is recommended in mothers' descriptions of their early breastfeeding experiences in hospital and perceived support. Research should also investigate in detail the descriptions of situations leading to a mother's decision to discontinue breastfeeding. What environmental, physical and emotional factors influenced this decision? This would assist nurses in designing more appropriate supportive interventions in hospital.

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APPENDIX A

Interview Schedule I

Identification number: _____.

Date of 1st Interview: _____

Length of 1st Interview: _____

Date of 2nd Interview: _____

Introduction

Thank you very much _____ for agreeing to participate in this research study. I appreciate the interest and time you are giving to me during such a busy and exciting occasion in your life. I would first like to ask you some questions about the help that you have received from the hospital nurses for your breastfeeding.

Part I NURSING SUPPORT

1. Describe something that has happened to you in hospital in which you felt that you received help from a nurse for breastfeeding.

2. Describe something that has happened to you in hospital in which you felt that you did not receive help from a nurse for breastfeeding.

3. If you did not receive help, describe what you think may have prevented the nurses from giving you help for breastfeeding.

4. In general how satisfied are you with the quality of nursing support you have received so far for breastfeeding in the hospital?

   (a) very satisfied _____

   (b) satisfied _____

   (c) neutral _____

   (d) dissatisfied _____

   (e) very dissatisfied _____

All of the following rating scale items 1-40 will be placed on a card and given to the mothers. The answers to the questions will be recorded in writing on the interview schedule by the researcher at the time of the mother's response.

Emotional Support

Did the nurses:

1. Provide friendly and personal care for you when you were breastfeeding? For example, made you feel comfortable/at ease.

   (a) yes

   (b) no

   (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

2. Praise you and tell you that you were doing a good job with breastfeeding?

   (a) yes

   (b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

3. Give you special attention when helping you with breastfeeding?

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

4. Have a positive attitude towards breastfeeding? For example, did they support and reinforce the benefits of breastfeeding?

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

5. Spend time with you during initial feedings until your infant was feeding well?

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

6. Encourage trust in your relationship? For example, did you feel that you could talk openly and honestly with them regarding your feelings or concerns about breastfeeding.

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

Instrumental Support

Did the nurses:

7. Assist you in positioning your infant and yourself comfortably for breastfeeding?

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

8. Demonstrate how to get baby latched on to nipple?

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

9. Demonstrate how to get a sleepy or uninterested infant to suck?

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

10. Demonstrate breaking suction, burping and changing to other breast?

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

11. Demonstrate how to care for your breasts? For example breast massage, hand expression and nipple care.

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

12. Assist you in maintaining adequate fluid intake? For example, encouraged you to drink fluids, brought fluids to your room if needed?

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

13. Maintain privacy for you and your infant during breastfeeding? For example, closed door, drew curtain or suggested breastfeeding classroom as an alternative room?

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

14. Encourage you to room-in with your infant to help you get a good start at breastfeeding?

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

15. Encourage you to demand feed your infant throughout the day and night?

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

16. Encourage you to breastfeed in the delivery room or the recovery area? (If you were able to breastfeed your infant)

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

17. Give you sufficient time to breastfeed your infant? For example, did not rush you or "watch the clock".

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

18. Avoid interrupting you for unrelated events during breastfeeding?

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

Informational Support

Did the nurses:

19. Give basic information on the structure of the breast and how milk is produced?

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

20. Tell you about the let down reflex? For example, signs of functioning let down reflex, maternal stress and its effect on let down reflex.

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

21. Tell you about positioning your infant and yourself for breastfeeding?

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

22. Tell you about the length and timing of feedings? For example, how long to feed at each breast, frequency of feeds and demand feeding.

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

23. Tell you about what you should eat for a healthy diet while you are breastfeeding?

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

24. Tell you about infant growth patterns? For example, infant growth spurts and breastfeeding management at this time.

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

25. Tell you about community and hospital resources for breastfeeding? For example, La Leche League, Breastfeeding Clinic.

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

26. Tell you about the changes in breast milk over time? For example, colostrum, mature milk.

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

27. Tell you about avoiding formula supplements for breastfeeding infants unless medically necessary?

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

28. Tell you about expression of milk and collection and storage of milk? For example, hand expression, breast pumps, freezing milk.

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

29. Tell you about tiredness and its effect on breastfeeding? For example, need for sleep or rest.

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

30. Tell you about how you know if your infant is getting enough milk?

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

31. Tell you about patterns of weight gain in breastfeeding infants?

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

32. Give advice about problems with breastfeeding and how to deal with them? For example, sore nipples, inadequate milk supply, hard, tender breasts, plugged ducts.

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

33. Give advice about infant sucking needs and the use of pacifiers?

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

34. Share information about how to avoid getting pregnant while breastfeeding? For example, breastfeeding is not a safe method of birth control, methods of birth control, return of ovulation and menstruation.

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

35. Have a good knowledge of breastfeeding?

(a) yes

(b) no

(c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

36. Provide consistent and accurate advice about breastfeeding? For example, did they all give you the same advice about breastfeeding?

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

37. Give you pamphlets and other information leaflets on breastfeeding?

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

Appraisal Support

Did the nurses:

38. Give you opportunities to make your own decisions about the course of your breastfeeding? For example, told you of alternatives and gave you a choice.

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

39. Share similar breastfeeding experiences of other mothers with you to help you in evaluating your own performance.

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

40. Share their personal breastfeeding experiences with you?

    (a) yes

    (b) no

    (c) if yes, rate the helpfulness of the behaviour listed above

1	2	3	4	5
(not at all helpful)		(somewhat helpful)		(very helpful)

Ranking

Emotional Support _____

Instrumental Support _____

Informational Support _____

Appraisal Support _____

PART II

SATISFACTION WITH BREASTFEEDING EXPERIENCE

The next few questions have to do with your feelings about breastfeeding so far for you.

1. Do you have any questions or problems that you would like help with at the present time related to breastfeeding? Specify.

2. How long do you think you will breastfeed your baby?

   (a) less than one month

   (b) more than one month but less than three months

   (c) more than three months

   (d) I don't know

3. At the present time, would you describe your breastfeeding experience for yourself as:

   (a) very satisfying

   (b) satisfying

   (c) neutral

   (d) dissatifying

   (e) very dissatisfying

   In what way?

PART III

Background Data

There are just a few questions left. These questions will help me to know what things may influence your breastfeeding experience.

1. Age: _____

2. Parity: _____

3. Infant's date of birth: Day: ____ Month: ____ Year: ____

4. Sex of infant: M _____ F _____

5. a) In your own words, can you tell me a little bit about your labour?

_____

_____

_____

_____

_____

b) How long was your labour? _____ hours.

6. Type of delivery:
   - vaginal _____
   - vaginal with episiotomy _____
   - forceps _____
   - cesarean _____

7. Type of anesthetic
   - general _____
   - epidural _____
   - local _____
   - none _____

8. How much schooling have you completed?

   (a) elementary

   (b) some high school

   (c) high school

   (d) some college/trades

   (e) college/trades

   (f) some university

   (g) university

9. Are you currently married?

   (a) married

   (b) common-law

   (c) separated

   (d) divorced

   (e) unmarried

10. Did you work outside your home prior to having your infant?

   (a) yes

   (b) no

   (c) If yes, what kind of work did you do?

      (i) clerical and related occupations (typist, telephone operator, receiptionist, filing clerk, book-keeper, etc.)

      (ii) sales occupations (sales clerk, agent, deliverer, etc.)

      (iii) service occupations (police, cook, floor cleaner, etc.)

      (iv) farming, fishing, forestry, logging, mining and quarrying occupations

(v) teaching and related occupations (school teacher, trade instructor, driving instructor, etc.)

(vi) scientific and technical occupations (medical doctor, nurse, civil engineer etc.)

(vii) other

11. Where were you born?

(a) Newfoundland

(b) Canada

(c) Other

12. Did you attend prenatal classes?

(a) yes

(b) no

13. If a breastfeeding class was offered in the prenatal series of classes, did you attend?

(a) yes

(b) no

(c) If yes, rate the helpfulness of the class.

Not at all helpful	1	2	3	4	5	Very helpful

14. If an infant care class was offered in the prenatal series of classes, did you attend?

(a) yes

(b) no

(c) If yes, rate the helpfulness of the breastfeeding component of the class.

Not at all helpful	1	2	3	4	5	Very helpful

15. Did you attend the postpartum breastfeeding class?

    (a) yes

    (b) no

    (c) If yes, rate the helpfulness of the class

Not at all helpful	1	2	3	4	5	Very helpful

16. Did you receive any additional information/education about breastfeeding in the prenatal period?

    (a) yes

    (b) no

    (c) If yes, what did you receive or do? eg. read books, pamphlets, physician's advice, La Leche Leaque meeting, videos, films. Specify

17. Did you do anything to prepare your breasts for breastfeeding?

    (a) yes

    (b) no

    (c) If yes, what did you do? eg. nipple rolling

18. When did you first breastfeed your infant?

    (a) delivery room

    (b) recovery area

    (c) postpartum unit more than 8 hours after delivery

    (d) postpartum unit less than 8 hours after delivery

19. In general, how did you find getting started at breastfeeding?

    (a) very easy

    (b) easy

    (c) about average

    (d) difficult

    (e) very difficult

I would like to phone you at home approximatley two weeks after your infant's birth. At that time I will again ask you a few questions about your breastfeeding experience and the help you received from nurses in the hospital.

Your participation in the research study is gratefully appreciated.

APPENDIX B

Interview Schedule II

Indentification Number: _____

Date of 1st Interview: _____

Date of Infant's Birth: _____

Date of 2nd Interview: _____

Follow-up telephone call at two weeks postpartum.

Introduction

Hello _____. I am Janet Murphy Goodridge, the registered nurse who is conducting a research study on the help that hospital nurses give to breastfeeding mothers. I talked to you for a while in the hospital just before you were discharged. I would like to ask you a few questions about your breastfeeding at the present time. I realize that having a new baby at home is a busy time, so if this is not a convenient time for you, we could arrange a better time for my phone call. The questions will take approximately ten minutes.

1. Are you still breastfeeding?

   (a) Yes

   (b) No

   (c) If yes, are you totally breastfeeding (no supplements) or partially breastfeeding (breastfeeding with supplements). Specify

   (d) If no, what sorts of problems did you have? Specify

(e) When did you stop breastfeeding? (Please answer questions 3, 5, 7, 8).

2. Do you have any questions or problems that you would like help with at the present time related to breastfeeding? Specify.

(a) Yes, specify

(b) No, go to question 4

3. Was the support given to you by hospital nurses helpful in dealing with your questions or problems the past two weeks?

(a) Yes

(b) No

(c) If yes, what in particular was most helpful? Specify. Probe: emotional support eg. positive attitude, informational support eg. sore nipples, instrumental support eg. demonstrated hand expression, appraisal support eg. shared personal experiences

(d) If no, what type of support would you like to have had? Specify

4. Was the support given to you by hospital nurses helpful to your breastfeeding experience the past two weeks?

(a) Yes

(b) No

(c) If yes, what in particular was most helpful? Specify. Probe: emotional support eg. positive attitude, informational support eg. sore nipples; instrumental support eg. demonstrated hand expression, appraisal support eg. shared personal experiences.

(d) If no, what type of support would you like to have had? Specify.

5. In general, how satisfied are you with the quality of nursing support you received for breastfeeding in the hospital?

(a) very satisfied

(b) satisfied

(c) neutral

(d) dissatisfied

(e) very dissatisfied

6. At the present time, would you describe your breastfeeding experience for yourself as:

(a) very satisfying _____

(b) satisfying _____

(c) neutral _____

(d) dissatisfying _____

(e) very dissatisfying _____

In what way?

7. Would you breastfeed your next infant?

(a) Yes _____

(b) No _____

(c) Undecided _____

8. Did you have a visit from the public health nurse?

   (a) Yes

   (b) No

   (c) If yes, when did the nurse first visit you?

   (d) How many visits were made?

   (e) How long were the visits?

   (f) What help with breastfeeding did she give you? Specify.

Thank you very much for participating in the study. The information which you have given me will be very helpful for nurses who are working with breastfeeding mothers in the hospital.

APPENDIX C

Letter to Staff Physicians

Dear Doctor

I am writing to inform you of a nursing research study, a component of which will be conducted at the Grace General Hospital and may involve some of your obstetrical patients.

This descriptive study is designed to explore the maternal perception of postpartal nurses' support for breastfeeding offered during hospitalization.

Research indicates that breastfeeding mothers require adequate support for their efforts prior to and following the birth of their infant. The postpartal nurse frequently has the greatest amount of contact with the mother and infant in hospital. Therefore, her role is critical in supporting the mother and in promoting an effective hospital environment conducive to breastfeeding.

Participation by the mother in this research study is voluntary. The initial phase of the study will take place in hospital three to five days postpartum and will require the mother to answer questions from a structured interview schedule. The second phase will be conducted by telephone at two weeks postpartum.

The study has been approved by the Human Subject Review Committee of the School of Nursing, Memorial University of Newfoundland.

If you have any questions or concerns regarding this study, I would be pleased to discuss them with you. My home telephone number is 753-2052.

Yours sincerely,

Janet Murphy Goodridge,
BNSc, RN
Graduate Student

APPENDIX D

Letter of Explanation and Consent Form

My name is Janet Murphy Goodridge. I am a Registered Nurse who has worked with mothers and infants both in the hospital and in the community. I am presently completing a post-graduate nursing degree at the school of Nursing, Memorial University of Newfoundland.

As a nurse, I am very interested in the help that hospital nurses give to breastfeeding mothers in the first few days following the birth of their infants. I am particularly interested in knowing what types of behaviours by nurses are seen as helpful or unhelpful by breastfeeding mothers. Only by knowing what you as a mother perceive to be helpful will nurses be able to improve the care that they give to you during this important time.

I am also interested in knowing after you have been at home with your infant if the help you received from the hospital nurses was of assistance to you in dealing with problems or questions related to breastfeeding that arose during this time.

If you are willing to participate in the study, I will meet with you in the hospital prior to discharge. At this time, you will be asked to answer a series of questions. This will take about 45 minutes of your time. When your infant is two weeks old, I will telephone you in your home and ask a short series of questions. This second interview will take about 10 minutes of your time.

For the research study you will only be identified by a number and all information obtained will be kept in strict confidence. There will be no way of identifying you in the report that is made of this study.

Your participation is voluntary, and your nursing care will not be affected in any way, whether you do or do not participate. There are no risks for you or your infant. Hopefully, participation in the study will be beneficial to you in that you will have an opportunity to discuss your breastfeeding experiences with an interested nurse. You are free to withdraw from the study at any time by notifying me.

I will be available to explain the study with you in more detail and to answer any questions you may have prior to making your decision to participate.

CONSENT FORM

I agree to participate in the above study, understand its procedures, understand that all information collected by Janet Murphy Goodridge will be held in strict confidence, and that I may withdraw from the study at any time.

DATE: _____

SUBJECT'S SIGNATURE: _____

RESEARCHER'S SIGNATURE: _____

WITNESS: _____

APPENDIX E

Breastfeeding Protocol for Selected Postpartal Unit

BREAST FEEDING REGIME

The Case Room Staff are responsible for routinely inquiring at delivery if the mother wishes to breast feed, and they are to make a specific note on the infant's chart for early notification of the Neonatal Staff.

To promote early infant-mother contact, the infant is put to the breast as early as the mother desires after birth. If the mother is well enough to have the baby for a feeding 3-4 hours after birth, provided the infant is healthy in all respects, the infant will be transferred to 2nd. Floor Nursery at 3-4 hours of age for early breast feeding. Otherwise, all healthy breast fed babies will be transferred to 2nd. Floor Nursery 6-8 hours of age, and the baby is to start breast feeding not later than 8 hours of age.

No breast fed infant is to receive a formula feeding unless it is ordered by the doctor or unless the mother requests formula for 0200 hr feeding. The nurse is not to suggest a formula feeding for the baby at any time. If the baby needs a formula feeding, the doctor must explain the need for formula to the mother.

A water feeding may be given at 3-4 hours of age only if the infant appears hungry, and after each breast feeding only until the mother has a good milk supply. (If the mother agrees with the above).

If there are significant problems with hydration, hunger, weight loss, or jaundice, the paediatrician must be notified and he will order the appropriate supplement after discussion with the mother. The nurse is not to suggest a formula supplement. The Nurse is not to suggest to the mother that the baby has an excessive weight loss however the nurse must report this to the Doctor.

Infants at the breast showing undue weight loss or signs of undue hunger should have one or two test weights performed as soon as the difficulties arise. Do not test weigh after each feeding. Test weighing is discouraged as much as possible.

Milk production may not begin for up to 48 hours after parturition, but will be preceded by colostrum containing nutrients and valuable maternal antibodies. It is important not to limit timing at breast for first few days but assist mother with breast feeding to prevent sore nipples.

Enquiry should be made regarding maternal medications and appropriate instruction received from the doctor in charge before breast feeding is commenced. N.B. If a mother is receiving Flagyl, check with the attending doctor and preferably have the medication changed before she commences breast feeding.

Breast Feeding Regime, Cont'd

At discharge, successfully breast feeding mothers should NOT be given commercial formula food packs, "Best Wishes" or "New Mothers" magazine.

Breast feeding pattern is usually q3-4 hours however the baby may need to be fed more often if appears hungry.

Demand feedings: Do not let a baby go any longer than 4-5 hours between feedings. Demand feedings usually means more frequent feedings.

Night Feeding:

The infant is brought to the mother for the 0200 hour feeding as a routine unless she makes a specific request to the contrary. In the latter case, the mother will be informed that a glucose water feeding will likely be necessary. Do not give a formula feeding at 0200 hours unless the mother requests same. If the baby will not settle after the glucose water feeding, the baby should be taken to the mother for breast feeding or given a formula in the Nursery if the mother requests same. Always encourage the mother to have the baby out for the 0200 feeding rather than give a formula in the Nursery.

Supplemental Feedings:

Supplemental formula feedings must be ordered by the doctor in specific circumstances, such as intrauterine growth retarded infants, premature infants, and infants of diabetic mothers. In all such instances, the mother must first be informed by the doctor. Otherwise, a glucose water feeding may be given after breast feeding if the infant is obviously hungry and the mother agrees with a glucose water supplement.

Jaundice:

If a breast feeding infant is noted to be jaundiced within the first four days of life, the nursing staff will, as a routine, obtain the mother's group and coombs and the infant's cord group and coombs. The infant will be flashed with the Bilirubin Meter and appropriate measures taken according to the unit guidelines for use of the Bilirubin Meter. The paediatrician on call will be notified in all cases of early jaundice or deep jaundice. If phototherapy is to be instituted, a mandatory consultation to the paediatrician on call is necessary. It should be noted that in all instances where the mother is Rhesus negative, the infant's cord blood group should be obtained from the Laboratory no later than 24 hours after birth. If a breast fed baby requires phototherapy, the infant is breast fed q3 hours and supplemented with glucose water only q3 hours p.r.n. Breast feeding is discontinued only upon the written order of the paediatrician and formula supplement must be ordered by the doctor in all cases.

Breast Feeding Regime, Cont'd

Breast Milk Expression:

Each breast feeding mother will be taught breast milk expression by breast pump or by manual expression. Breast milk expression will not be instituted as a routine, but will be done when necessary to collect milk if the baby is not sucking adequately, or if the breasts are engorged. If a premature baby is not ready to suck at the breast, expressed breast milk should be given to the baby via nasogastric tube whenever available.

All expressed breast milk should be collected in a sterile "plastic" container and labelled with name, date and time of collection. The E.B.M., which is up to 24 hours old, can be given to a baby if it is refrigerated, and frozen breast milk can be frozen for days then thawed and given to the baby when he is ready for feedings. Do not put expressed breast milk in the glass bottles because the leukocytes in the milk attach to the glass. Plastic containers are satisfactory.

Manual Expression:

Make sure the mother is in a comfortable position. Wash hands thoroughly. Cup the breast in your hand, placing your thumb above and the forefinger below the nipple on the edge of the dark area (Aerola). Press inward toward the chest wall, squeeze thumb and finger together gently, pull forward slightly. (Don't slide the finger and thumb out toward the nipple). Rotate your hand to reach all the milk ducts, which radiate out from the nipple at all points of the clock. Alternate sides every few minutes.

Engorgement:

Apply hot compresses alternately with massage and expression for approximately 10 to 20 minutes before each feeding. Massage by placing both hands with fingers overlapping on the upper part of the breast. By exerting gentle pressure with heel of hands bring down and out towards the nipple. Follow same procedure around breast.

Preparation of Nipples:

Instruct the mother to hold the nipple between the thumb and index finger and gently pull it out. If the nipple is flat or inverted, hold it between the thumb and index finger and gently massage it in a backward forward rotation. The mother may have to wear a Woolwich shield if she has an inverted nipple. We do not recommend nipple shields for any baby having problems with breast feeding.

Sore Nipples:

1. The mother should be encouraged to feed the baby in different positions, to take the pressure off the sore part of the nipple.

2. Apply vitamin E cream sparingly to nipples and continue to use Vitamin E cream as long as necessary after discharge.

3. Expose nipples to the air. (Never apply cream before exposing nipples).

4. If soreness persists, expose the nipples to sunlight or a lamp. Use a 40 watt clear bulb for five minutes three times a day.

5. If the nipple is cracked, breast feeding may need to be discontinued for 24-48 hours. Express milk by hand from the sore side and give

NURSES RESPONSIBILITY RE BREAST FEEDING

Procedure:

1. Give Lanolin and the breastfeeding leaflet to mother. Instruct mother to cleanse nipple and areolar area of breasts before and after nursing and apply lanolin after each breast feeding to nipples and areolar areas. Stress the importance of a daily shower with adequate nipple cleaning.

2. Prior to preparation of nipples, have mother wash her hands. Stress the importance of handwashing before commencing breast feeding.

3. Make sure the room is draft free. Help the mother to find a comfortable position and offer a johnny coat if the mother is not appropriately dressed. Advise the mother to wear a good supportive bra at all times.

4. Check the identification bands of both mother and baby to ensure they correlate.

5. Before putting the baby to breast advise the mother to express a small amount of colostrum. Guide the baby to the breast by supporting the head towards the nipple, making sure the baby has a good grasp of the nipple and part of the aerolar area. If the baby grasps and chews on the nipple only, the result may be cracked or fissured nipples.

6. If baby appears sleepy, stimulate the sucking reflex by stroking under the chin or try to stimulate baby to wake up. If baby is bundled and held tightly during breast feeding he may become sleepy.

7. The breast must not rest against the infant's nose because this will obstruct the breathing.

8. Feed at both breasts each feeding. It may be necessary to have the baby feed for 5-10 minutes on one breast then change to the second breast rather than have the baby feed for 20 minutes on one breast. Begin the next feeding with the breast the baby last fed from.

9. Recent literature indicates that "limiting feeding time may contribute to engorgement, interfere with letdown, reduce the infants needed fluid intake and delay the establishment of mother-infant bonding". Time limitation does not prevent sore nipples but merely delays the time this occurs. Helping the mother position the infant on the breast the first several times the infant feeds after birth is important in preventing nipple problems. Faulty suckling may lead to nipple problems. Position of the infant on the breast can vary thus distributing the pressure exerted by the infant around the areola rather than pressure being exerted over one area aline. Timing at the breast is not limited and maybe increased as tolerated.

10. Teach the mother how to break the infant's suction on the breast. Suction may be broken by placing the little finger in the corner of the baby's mouth and apply gentle pressure until the suction is broken and the baby releases the nipple.

11. Burp baby when changing from one breast to the other and more often if necessary. Most mothers use over the shoulder method of burping. Another method is to hold the infant in a sitting position with his chest supported with one hand while his back is gently rubbed or patted with the other hand.

12. After feeding, the baby should be positioned on his right side or abdomen for at least 30 minutes.

13. Always stay with mother for the first feeding, and subsequent feedings if necessary.

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