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MATERNAL ATTITUDES ABOUT PROVIDING BREAST MILK FOR THE INTENSIVE CARE INFANT

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MATERNAL ATTITUDES ABOUT PROVIDING BREAST MILK FOR THE INTENSIVE CARE INFANT

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ABSTRACT

The purpose of this study was to provide insights into maternal attitudes about providing breast milk for the premature or high-risk infant. Eleven mothers providing breast milk for their infant in the intensive care nursery were interviewed. Grounded theory methodology was used for data collection and analysis.

The mothers felt breast pumping was the hurdle they had to navigate to reach their goal of breastfeeding. Two factors influenced their breast pumping, motivators and pressure from others.

The mothers also felt that by breast pumping and providing breast milk, they were closer to their infants. On the other hand, some of the mothers felt providing breast milk did not influence the closeness with their infant. They did, however, expect this feeling of closeness with breastfeeding.

CHAPTER 1

INTRODUCTION

The purpose of this study was to provide insights into mothers' attitudes about providing breast milk for the premature or high-risk infant. The question of maternal attitudes toward providing breast milk for the intensive care infant came to the attention of the researcher when talking with mothers and realizing that little research had been done in this area. Literature which discusses attitudes of mothers providing breast milk for the premature or high-risk infant is based on health care practitioners experienced in neonatal intensive care and anecdotal reports. No actual research has been gathered from the mothers themselves. In this chapter, the cognitive and emotional aspects of providing breast milk will be discussed.

Overview

Breastfeeding has seen many changes as the world has progressed from an agricultural-rural society to an industrial-urban society. Breastfeeding's decline from 1900-1960 was due to different factors, including the convenience of pre-prepared formulas. Additionally, as

women entered the work force, they were faced with time constraints and made the decision more readily not to breast-feed (Riordan and Countryman, 1980). However, since the 1970's, breastfeeding has reemerged as the preferred mode of nutrition for the normal newborn in the United States (American Academy of Pediatrics, 1978).

Controversy exists over whether breast milk is the preferred nutritional source for the premature or high-risk infant (Foman, Ziegler and Vazquez, 1977). In order to view this controversy soundly, we must look to the nutritional, immunological and emotional disadvantages of using human milk for the premature or high-risk infant, and then consider what advantages may counteract these factors.

One nutritional disadvantage from a medical or cultural point of view is that infants who are fed human milk do not gain weight as quickly as those infants who are fed cow's milk formula (Foman et al., 1977). The advantage, however, is that the nutrient composition and anti-infective properties of breast milk are better suited for the premature or high-risk infant than cow's milk formula (Stewart and Gaiser, 1978). Lemons, Brady, Rickard and Schreiner (1982) state that preterm milk is more suited for the premature infant, with higher sodium, protein and chloride content. Once again, to counteract this factor, we find that preterm milk may be lacking adequate calcium

and phosphorous to support normal bone mineralization, leading to osteoporosis or rickets.

A very important emotional advantage, if statistically valid, in utilizing breast milk has been described by Bromberger (1982). She stated that the use of breast milk improved maternal-infant bonding. Bromberger, however, does not support how this would occur. One way improved bonding might occur has been provided by Mitchell and Mills (1983) who state that providing breast milk can influence parent-infant attachment by increasing parental satisfaction and self-esteem. Additionally, Meier (1980) stated that providing breast milk helps the mother retain interest in her infant, which could contribute to maternal-infant attachment. The satisfaction of experiencing the closeness of nursing once the infant is put to the breast may also encourage the attachment process.

According to Bromberger (1982), the mother who is providing breast milk for her premature or high-risk infant benefits psychologically from the knowledge that she is providing an important part of her infant's care. Auerbach (1977) feels the mother of a premature or high-risk infant, who may feel that she has failed in her pregnancy, may decide to breast-feed to prove that she can be successful as a woman and a mother.

Many components are involved in a mother's decision whether to provide breast milk for her premature or high-risk infant. Besides considering the above stated factors, the mother must cope with the possibility that her infant may die (Auerbach, 1977). Support and encouragement, beyond what the hospital staff can provide, are necessary for the mother in order that she have renewed enthusiasm in providing breast milk for the premature or high-risk infant (Meier, 1980).

Most infants in the intensive care nursery are not able to breast-feed in the normal manner and must be fed through a nasogastric tube or soft rubber nipple until they are sucking well and have developed an adequate gag reflex (Meier, 1980). This necessitates that the mother pump her breasts to provide breast milk until such a time as the infant is able to nurse on his/her own.

In conclusion, the controversy over the use of breast milk for the premature or high-risk infant has been discussed. The nutritional disadvantages and advantages have been briefly debated, along with emotional considerations for providing breast milk for the intensive care infant.

Statement of the Problem

What are the attitudes of mothers who, after making the decision to breast-feed their premature or high-risk

infants, must pump their breasts to provide milk until the infant is able to nurse naturally?

Statement of the Purpose

The purpose of this study was to provide insights into maternal attitudes about providing breast milk for the premature or high-risk infant of a midwestern American town. This would include:

1) How the mother perceives the situation about providing breast milk.
2) The mother's beliefs/opinions concerning providing breast milk.
3) The mother's cognitive responses to providing breast milk.
4) The mother's affective responses to providing breast milk.
5) The mother's affective response toward breast pumping.

Significance of the Problem

It is important that nurses understand the mothers' attitudes and perceptions about providing breast milk for the premature or high-risk infant. Nurses knowledge, understanding and respect of attitudes, in this case maternal attitudes about providing breast milk for the intensive care infant, are essential to the mother's well being (O'Brien, 1978). Awareness of the benefits and

burdens for the mother who chooses to provide breast milk for the premature or high-risk infant should increase communication between the mother and the nursing staff.

By understanding and accepting the mother's perceptions and attitudes about providing breast milk, the nurse may be more helpful in supporting and counseling the mother of the intensive care infant. Supportive intervention by the nursing staff could have a positive impact on the mother by promoting attachment between the mother and baby. By acknowledging the attitudes and perceptions associated with providing breast milk for the intensive care infant, nursing care can be given to meet the needs of the mother.

Definitions

1) Premature or high-risk infant: The infant born before 37 weeks gestation period or requiring extended nursing care through an intensive care nursery.
2) Breast pumping: To empty the breast by artificial expression, either by hand expression, electric pump, or a hand-held pump, such as the Kaneson.
3) Attitude: An organization of beliefs/opinions around a situation predisposing a person to respond, either by verbal expression or non-verbal behavior.

Components of attitude:

a) Cognitive-internal mental activities from which knowledge is derived and held with varying degrees of sureness, about what is true or false, good or bad, desirable or undesirable, by which responses are generated;

b) Affective-emotional component, with varying degrees of intensity dealing with positive/negative positions or feelings of liking or disliking the situation;

c) Behavioral-action toward the situation.

Rokeach (1975)

Attitudes

Attitudes about the concept of providing breast milk for the premature or high-risk infant are comprised of the three major attitudinal factors: cognitive, affective and behavioral. An attitude is an organization of interrelated beliefs/opinions around a common object. According to Rokeach (1975), beliefs/opinions have only a cognitive component, while attitudes have both cognitive and affective components.

Additionally, an attitude is a set of interrelated predispositions focused on a situation or object. Certain aspects of any given situation will be the focus of

attention for some people, while completely different aspects may be the focus for others (Rokeach, 1975).

Rokeach stated that past experience is summed, stored and organized as a person approaches a new situation, thus forming an attitude and causing the person to respond in a certain manner. According to McGuire (1969), an attitude is an organized mental state that occurs through experience and exerts a direct influence on behavior. The major determinant of most individuals' attitudes is communication from other people.

This paper attempted to assimilate the previous theories on attitudes and apply them to the mother providing breast milk for her premature or high-risk infant. The manner in which the experience of providing breast milk is perceived by the mother reflects certain cognitive and affective developmental aspects of attitude, and as Reich and Adcock (1976) stated, there is a high correlation between the three components of attitudes. Therefore, a positive value on both the affective and cognitive dimensions will be matched by the remaining component, behavior.

Cognitive Component

The cognitive component of attitudes deals with the act of knowing, including both awareness and judgement. The greater the store of knowledge, the greater the

potential to generate responses required for adaptation to difficult or changeable situations (Hamilton, 1983).

The mother may have knowledge concerning nutritional benefits and immunological values of breast milk. She may have read about breast milk or been informed about it by the nursing staff. The mother may have knowledge of breast milk with varying degrees of certainty about what is true or false, good or bad, desirable or undesirable.

Affective Component

The affective component of attitude deals with emotional factors associated with providing breast milk for the intensive care infant. Ekman (1982) states that there is a stimulus that elicits emotional behavior by innate factors, learned factors or environmental factors. How a person views the situation is dependent on the information received from the environment, his own experience, and personal characteristics.

Providing breast milk for the intensive care infant may reflect the mother's attempt to cope with her infant's illness (Riordan, 1983). According to Lazarus (1975), a person is constantly controlling the normal ebb and flow of his emotions with adaptive behavior. He emphasizes that man's emotional activity is constantly being categorized or appraised as positive, challenging or threatening. The

mother of the premature or high-risk infant may evaluate the situation of providing breast milk and respond in a positive, challenging or negative manner.

The affective component deals with the person's feelings of like or dislike concerning the situation (McGuire, 1969). "Whether the response will be positive or negative will depend on the relative strength of one's beliefs and one's positive or negative feelings. A person will make a 'pro' response to a situation toward which he harbors negative feelings if he believes the object will be sufficiently good for him," (Rokeach, 1975, p. 122). A situation will also be evaluated more positively if a person has been exposed and is familiar with the situation (McGuire, 1969).

Behavioral Component

The final component of attitude is the behavior exhibited toward the situation. The behavioral component is the act of breast pumping to provide breast milk for the premature or high-risk infant. The belief in the situation of providing breast milk must lead to an action (Rokeach, 1975), in this case breast pumping.

Communication of Attitudes

Attitudes may be expressed through communication, both verbal and non-verbal. According to O'Brien (1978),

expression of attitudes is important to self-development. By conscious awareness and expression of positive and negative emotions, the ability to perceive yourself as a person is enhanced. The intensity of emotions, however, varies with the individual.

Verbal Communication

Each person has his own style of expression, and words play an important part of communicating these attitudes. When a person communicates verbally, much of himself is being communicated besides words: his personality, his values, his emotions (O'Brien, 1978). Verbal communication of attitudes involves "...the vocabulary of emotion names, categories, dimensions, attributes or qualities that could be used to describe felt or observed emotional experiences" (Ekman, 1982, p. 10).

Non-Verbal Communication

Non-verbal communication involves a silent language that has a powerful influence on our lives (O'Brien, 1978). The body language communicating between people involves a wide range of activities, from body movements to responses to the message from others (Collins, 1983). Observations help you become more aware of a person's attitudes by gestures, mannerisms, posture, dress and facial expressions (O'Brien, 1978). Emotions may be reflected in muscle

tightening or eye contact. This does not provide concrete evidence of emotions, but provides the basis for "reasonable inferences" (Collins, 1983, p. 75).

Summary

The purpose of this study was to provide insights into maternal attitudes toward providing breast milk for the intensive care infant. This chapter has discussed components of attitudes, including cognitive, affective and behavioral. Attitudes may be expressed through verbal and nonverbal communication.

CHAPTER 2

REVIEW OF LITERATURE

This chapter describes the factors related to providing breast milk for the premature or high-risk infant. This review of literature will discuss the immunological and nutritional considerations and the emotional impact of providing breast milk through pumping for the intensive care infant.

Providing Breast Milk for the Premature or High-Risk Infant

Before deciding to breast-feed her premature or high-risk infant, the mother must weigh the facts and emotions involved to make a knowledgeable decision to either breast-feed or formula feed her newborn. According to Pittard (1981, p. 220), "...breast milk is uniquely tailored to meet the developmental, nutritional and protective needs of the infant." Controversy exists as to whether this same statement can be applied equally to the premature or high-risk infant.

Immunological Considerations

The mother may think about the many desirable features breast milk has for the premature or high-risk infant. Breast milk has immunoglobulins and macromolecules

which stop invasion of microorganisms and impedes pathogenic bacterial growth in the intestinal lumen (Bromberger, 1982).

Lymphocytes and macrophages are the major cells present in all stages of lactation. Neutrophils are also present in the early phase of lactation, thereby aiding in phagocytosis of bacteria. Lymphocytes are responsible for the secretion of IgA, which appears to function by limiting the migration of pathogens across the gastrointestinal tract (Pittard, 1981). Lymphocytes also produce interferon, which is believed to protect the infant against various viral infections (Riordan, 1983).

Macrophages are responsible for phagocytizing debris and bacteria, removing them from the milk. They also secrete a lysozyme which is capable of rupturing the cell wall of many bacteria, a host resistance property (Pittard, 1981). Another host resistance property of macrophages is the release of lactoferon. Lactoferon limits the growth of bacteria by binding to iron, limiting the availability of iron that certain bacteria need for growth (Pittard, 1981).

Breast milk also contains a nitrogen-containing carbohydrate called "lactobacillus factor" that creates a medium conducive to the growth of normal flora by producing acetic or lactic acid from lactose, which decreases the

infant's susceptibility to infection (Stewart and Gaiser, 1978).

Nutritional Considerations

Additionally, the mother may think about several unique nutritional qualities that contribute to the use of providing breast milk for the premature or high-risk infant.

One unique property of preterm breast milk is a higher protein content than term breast milk. A study of preterm breast milk (Atkinson, Bryan and Anderson, 1978) showed that the premature infant fed his own mother's milk would receive 20% more nitrogen than the term breast fed infant. Since premature infants require more protein than is present in term milk (Lemons, et al., 1982), a higher nitrogen content would be advantageous to the rapidly growing premature infant.

The study by Atkinson et al. (1978) showed that the protein nitrogen concentration is higher in preterm breast milk over the first month of lactation. This study also showed that mothers of preterm infants produced the same amount of milk as the mothers of term infants, with adequate volume to reach the fluid requirements of the premature infant.

From a physician's viewpoint, the mineral composition of breast milk provides the greatest

controversy of whether to feed the premature infant breast milk. In a study of preterm milk, Atkinson, Radde, and Anderson (1983) provided clinical evidence that preterm milk has adequate amounts of sodium, potassium and chloride, but the requirements for calcium and phosphorous are not met by preterm breast milk. Bromberger states that although preterm milk has higher concentrations of minerals that are absorbed readily, the minerals are not present in large enough amounts. The volume of human milk required to provide the required amount of calcium is greater than what is ingested.

Lemons et al. (1982) states that human milk has inadequate supplies of calcium and phosphorous to support normal bone mineralization in the premature infant. This leads to skeletal mineralization problems, hypocalcemia and hypophosphatemia (Farnaroff and Martin, 1983). According to Foman et al. (1977), formula fed to infants versus human milk promoted greater mineralization of the skeleton.

Another unique and advantageous quality of breast milk is that the amino acid composition of preterm breast milk is better suited to the infant's ability to absorb amino acids (American Academy of Pediatrics, 1978). The premature infant's liver is insufficient in converting methionine to cystine and in metabolizing tyrosine. The preterm infant lacks his own enzymes to convert tyrosine to

cystine and cystine to taurine. These are essential amino acids for growth for the infant (Fanaroff and Martin, 1983). Since human milk is rich in taurine and cystine (Riordan, 1983), breast milk is more suitable to compensate for the premature infant's immature metabolic system.

Breast milk contains predominantly whey proteins, which aid in the digestion of the breast milk. The whey curds are easily digested. In contrast, the predominantly casein curds in formula, which require a high expenditure of energy for the digestive process (Riordan, 1983), are very difficult to digest. Thus, the premature or high-risk infant who is breast fed can better utilize his energy for growing or healing.

Riordan (1983) states that the presence of lactose in human milk plays an important function in preterm and high-risk infants as it facilitates absorption of iron and enhances calcium absorption. Lactose also metabolizes galactose and glucose, providing energy for the rapidly growing brain of the premature infant.

According to the American Academy of Pediatrics (1978), another desirable feature of breast milk is the presence of significant lipolytic activity, aiding in fat absorption. Pittard (1981) states that lipids in breast milk are better absorbed, especially by the premature infant. Lipase releases free fatty acids into the milk and

gastrointestinal tract, facilitating lipid absorption. Additional support is found in Fanaroff and Martin (1983), who state that the content of unsaturated fatty acids is higher in breast milk than in formula and is more easily absorbed.

Another advantage of breast milk for the premature or high-risk infant is the low potential renal solute load. According to the American Academy of Pediatrics (1978), the low renal solute load in breast milk gives a margin of safety for the physiologically immature renal system of the preterm infant. The renal solute load of breast milk on the immature kidney is one-third of the load on formula fed infants (Riordan, 1983). Since excess salts in formula require increased water excretion, there is greater obligatory water loss. Therefore, breast milk is also conserving in water loss for the premature or high-risk infant.

Iron is more efficiently absorbed in breast milk. This is partly due to the fact that vitamin C levels are higher in breast milk, aiding in absorption (Pittard, 1981). The presence of high levels of vitamin C has also been related to the increased lactose levels in breast milk (Riordan, 1983).

There appear to be minimum amounts of vitamin D in breast milk, which creates a disadvantage to the use of

breast milk for the premature or high-risk infant (Pittard, 1981). This lack of vitamin D has implications to premature infants, since it predisposes them to rickets.

Even though controversy exists over the use of breast milk for the premature or high-risk infant, research has shown that breast milk is more advantageous than formula. Although weight gain is faster in premature infants fed formula versus infants fed breast milk (Foman, et al., 1977), the immunological and nutritional characteristics of breast milk must be considered.

Breast milk may aid in the prevention of infection for the premature or high-risk infant. Milk from the premature infant's mother is more advantageous than term milk because of the higher protein content. Breast milk is more easily digested and absorbed by the infant's immature digestive tract. Breast milk also puts less stress on the premature infant's renal system becuase of the low renal solute load Thus, breast milk would be the most desirable choice of nutrition for the infant in the intensive care nursery.

Emotional Impact

Besides the nutritional and immunological values of providing breast milk, the emotional involvement of the mother in providing breast milk may also be considered.

Family implications. Providing breast milk has implications for the family of the premature or high-risk infant (Meier, 1980), since stress and separation are known to interfere with the bonding process.

Being apart or separated from the baby (Opirhory, 1979, p. 179) "...interferes with the normal acceptance of the infant by the parents. The delayed contact may later affect the feelings of the mother to the baby." According to Minde, Trehub, Corter, Boukydis, Celhoffer and Marton (1978), the timing of the contact between the infant and mother is important in the establishment of maternal attachment. Lack of contact may contribute to the inhibition of the bonding process that occurs between baby and mother.

According to Jelliffe and Jelliffe (1977), bonding is a mutually reinforcing reflex behavior between the infant and mother, determined by close contact through breastfeeding and the baby in a position of attachment. The infant in the intensive care unit, however, rarely has early and prolonged close contact with the mother, an important factor to attachment and the mother's subsequent behavior to the infant.

Even though the mother of the premature or high-risk infant is unable to nurse and have the frequent and close contact promoting bonding, the mother still has the

advantage of being able to provide breast milk. According to Mitchell and Mills (1983), providing breast milk can influence parent-infant attachment by increasing parental satisfaction and self-esteem.

Emotional benefits. Providing breast milk for the premature or high-risk infant is a "tangible contribution" from the mother to her infant (Klaus and Kennell, 1982) . The mother is giving a part of herself (Meier, 1980), something no one else can give. The mother knows that by providing breast milk, she is caring for her baby in an important way. Breastfeeding may be thought of as emotionally beneficial to the mother (Oehler, 1981), with the infant benefitting indirectly from the mother's emotional health.

The psychological benefits from involvement in the infant's care by providing breast milk are strong considerations for encouraging the mother to breast-feed her premature or high-risk infant (Fanaroff and Martin, 1983). Providing breast milk is a task only the mother can do, stimulating the mother to relate to her infant in a unique way.

The mother may feel that she is helping the baby (Opirhory, 1979) by meeting the baby's needs. Supported and encouraged to care for her baby and meet its needs by

providing breast milk, the mother can begin to form her relationship with her premature or high-risk infant.

Deciding to Breast-Feed the Intensive Care Infant

The decision to breast-feed the premature or high-risk infant is complex, when one compares it to decisions concerning breastfeeding the term infant. The mother who decides to breast-feed the intensive care infant has additional concerns and needs beyond those of the mother who delivers a healthy baby. The mother goes through a period of shock (Taylor and Hall, 1979), or inability to comprehend the situation. She also feels guilt or anger, and a need to establish a cause for her infant's problems. The mother may also experience helplessness, or a loss of control (Riordan, 1983).

The nurse can add control to the intensive care situation by having the mother take an active part in the care of her infant. Providing breast milk would be one activity to encourage the mother in caring for her baby (Riordan, 1983). Hawkins-Walsh (1980, p. 34) states "For the parents who so far have failed to meet their expectations surrounding labor, delivery, and early days as parents, being able to carry through with the decision to breast-feed reasserts their roles as decision makers and care givers."

Riordan (1983) found several factors that influence the mother's decision to breast-feed her premature or high-risk infant. The mother's level of education and knowledge of breastfeeding are influential in the decision. Along with this is the reaction to the premature or high-risk infant. The mother must cope with a feeling of loss, while attempting to attach to her infant. This could affect her providing breast milk for the infant.

Riordan (1983) found that deciding to provide breast milk for the premature or high-risk infant could reflect the mother's attempt to cope with the situation. According to Lazarus (1975), coping is an essential factor in the ebb and flow of emotional states. Emotions occur when the mother decides to provide breast milk for her premature or high-risk infant and must pump her breasts until the infant is able to nurse naturally.

By providing breast milk and giving her baby something no one else can (Riordan, 1983), the mother is attempting to control her feelings of helplessness and cope with her feelings of guilt. This may aid the mother in her guilt feelings of having been responsible for her baby's problem. Providing breast milk may be a way of knowing that she has done everything possible for her baby, relieving the guilt of having a premature or high-risk infant (Riordan, 1983). This could help in the acceptance

of the premature or high-risk infant, or even possibly the death of the infant.

Summary

In conclusion, immunological, nutritional and emotional considerations associated with providing breast milk for the premature or high-risk infant have been discussed. Research has been cited concerning the immunological and nutritional benefits to breastfeeding. Anecdotal reports and experiences of neonatal intensive care nurses have been reported concerning the emotional impact to the mother of the premature or high-risk infant. Discovering the attitudes of mothers providing breast milk for the intensive care infant will increase our knowledge of the benefits to breastfeeding the premature or high-risk infant.

CHAPTER 3

METHODOLOGY OF THE STUDY

This chapter describes the research design, the subject criteria and setting, human subjects, reliability and validity, method of data collection and method of data analysis.

Research Design

An exploratory type of design was chosen to discover the attitudes of mothers who provide breast milk for their premature or high-risk infants. The grounded theory method was utilized for data collection and theoretical sampling. This qualitative method of data collection used the interview to obtain information related to mothers' attitudes of providing breast milk for the premature or high-risk infant. Inductive research was chosen to help clarify, explain and interpret these attitudes.

According to Glaser and Straus (1967), grounded theory generates data and does not try to verify the information. The conceptual view for developing theories is derived from the clinical data. The conceptual view is categories of information received from the data. Because

the concepts are based on data and illustrated with examples from the data, new ideas will be generated. This leads to the development of a theory, which helps describe, explain or predict a phenomenon (Walker and Avant, 1983).

The generation of concepts and new ideas is accomplished by the researcher comparing data to other data (Stern, 1980). Comparative analysis is a continual ongoing process throughout data collection. There are no strict rules to follow when generating data. Hunches may be followed up on, or leads may be dropped as the researcher see the concepts developing (Stern, 1980).

Theoretical sampling is used concurrently with comparative analysis to help clarify and identify properties of the major categories of the emerging theory (Stern, 1980). Theoretical sampling added dimension and expanded categories. It was the process the researcher used to decide where and what information to collect next, determined by what had already been collected and coded.

Grounded theory utilizes a process of research where data are collected and analyzed simultaneously (Glaser and Straus, 1967). The researcher "moves back and forth between data collection and data analysis in order to validate emerging ideas and refine concepts and relationships as new data are collected" (Walker and Avant, 1983, p. 85). Comparative analysis and theoretical

sampling was used throughout the research to develop and coordinate data collection.

Sample

Subjects and Setting

The subjects for this study were mothers of infants who were in the Level II or III intensive care nursery. Criteria for including the mother in this study include that she was pumping her breasts to provide any amount of breast milk for her infant in the intensive care nursery. No restrictions were placed on the mother's age or number of pregnancies. The mothers were all able to speak English to converse with the researcher.

The mothers were contacted by the researcher through the Level II nursery in the regional hospital of a midwestern town. They were contacted by the researcher by phone or in person, asking them if they would be interested in participating in the study. This researcher identified herself as a graduate student in maternal/newborn nursing, who was interested in talking with the mother about her attitudes toward providing breast milk for her intensive care infant. Eleven mothers were contacted, and they all agreed to participate in the study.

Seven of the mothers were interviewed in the parenting room in the regional hospital. This is a quiet room with soft lighting and a comfortable couch and rocker.

Four of the mothers were interviewed in their postpartum room in the regional hospital.

Theoretical Sampling

Theoretical sampling gives direction to data collection so as to help coordinate and define the emerging theory (Glaser and Straus, 1967). Several components and comparisons were used with the interviews to guide the researcher in collecting the data.

The first components that evolved from the data were the length of separation and the severity of the infant's illness. The mother was then selected on the basis that her infant was severely ill and had been separated from her for one week. The next mother was chosen because she had not been separated from her infant, even though he was extremely ill. Another mother was selected because at the time of the interview, circumstances led her to still being separated from her infant.

The next component that emerged in developing the research was the comparison of the use of breast milk for actual feeding of the infant versus not being fed at all. One mother was selected to be interviewed because her infant was very sick, but improved rapidly and was able to be fed breast milk on the third day after birth. Another mother was interviewed because her infant was not being fed

breast milk. The instance of the infant being fed breast milk on his first day of life led to the selection of a third mother.

Another component that evolved from data collection and was used in directing the research was the mother holding and touching her infant. One mother was interviewed because she was able to hold and touch her infant immediately after birth, while another had not been able to hold or touch her infant because of his unstable condition.

A different comparison used in the method of theoretical sampling was the length of time involved with breast pumping. A mother required to breast pump for only three days was compared to a mother who had been using the breast pump for eleven days.

Human Subjects

The study was approved by the Human Subjects Committee of the University of Arizona College of Nursing (Appendix A). Permission to interview the mothers intending to breast-feed their intensive care infants was given by the head nurse of the obstetrical unit and the vice-president of nursing in the regional hospital.

A written disclaimer (Appendix B) was given to each mother prior to the interview. The purpose of the study, the subject's voluntary participation, and the subject's

right to withdraw from the study at any time were explained at the time of each interview. Each subject was encouraged to ask questions and was assured of anonymity at the time of the interview.

After each interview, the tapes were transcribed and the data analyzed. The mothers were informed that no one would have access to the tapes except the researcher. They were informed that anonymity would be retained by use of numbers instead of names for the tapes and that the tapes would be destroyed in six months.

Reliability and Validity

The qualitative method of data collection utilized no tools to measure data. Data were generated, not tested. Interview questions, however, may not have meant the same thing to all mothers and bias could not be controlled. Also, the intensity of feelings varied with the individual and could not be controlled in this study (O'Brien, 1978).

However, according to Goodwin and Goodwin (1984), for the research to produce believable information, data must be collected consistently, reliably, and must be a valid indication of what is actually happening. The categories, concepts and relationships developed by the researcher were evaluated by one mother who had provided breast milk for her intensive care infant to validate the information received. This mother reviewed the concepts

and relationships of this research to compare it with her own experience. She felt the concepts and relationships were appropriate to what her experience was in providing breast milk for the intensive care infant.

Short notes, errors in memory and selective attention to data may alter data collection (Walker and Avant, 1983). This was minimized by the use of a tape recorder during the interview. When developing qualitative data, it was assumed that the researcher began data collection with an open mind and no preconceived ideas about what information will be collected and analyzed (Walker and Avant, 1983). The researcher attempted to minimize her own views of the situation. The subjectivity of categorization by the researcher must also be considered.

Method of Data Collection

Data were collected through personal interviews using open-ended questions to elicit maternal attitudes toward providing breast milk for the intensive care infant. Each mother was contacted by phone or in person through the intensive care nursery in the regional hospital. The mothers were interviewed at their convenience. Each interview was tape recorded and lasted from 45 minutes to one hour.

Anecdotal observations were also made at the end of each interview. Behaviors exhibited by the mother, including physical appearance, posture, facial expressions and eye contact were observed.

Each mother was interviewed once about her attitudes toward providing breast milk for her intensive care infant. The mothers had been breast pumping for a minimum of three days and a maximum of 11 days. The mothers all agreed to another interview if necessary to clarify answers and add questions from the first interview.

Focused questions were used for the interview with providing breast milk and pumping as the main focus, but other directions were taken, depending on the information received. The questions were based on information obtained from the literature. Clarification and verification strategies were used, such as asking the subjects to describe or double checking information received. The questions were flexible to allow for differing situations.

A pilot study was done to pretest the interview questions. One mother was questioned on her attitudes about providing breast milk and the questions revised accordingly. The mother did not understand what 'perceive' meant and the question was rephrased to "How do you see the situation of providing breast milk?" Another question was added following the question of "How do you feel about

breast pumping?" This was "How do you feel when you are breast pumping?"

The mother thought breast feeding was "natural", "best for baby", and "tolerates the milk better". Since she was a dairy farmer, she knew the importance of colostrum. She felt closer to her baby and warm inside knowing that she was getting "a part of me". The mother found satisfaction in knowing that she was providing something for her baby.

A negative response was that she felt that it "wasn't real fun", that she felt "like a cow". She also regretted that her husband could not be as close to her infant as she was. This mother dealt with both the cognitive component and the emotional or affective component to attitudes about providing breast milk for the premature or high-risk infant.

Each interview began with the mother giving the demographic data of age, number of children, occupation, verifying that she was pumping and if the baby was using the breast milk provided. To help put the mother at ease with the researcher, she was also encouraged to talk about how the infant was doing in the intensive care nursery.

Initial interviews with the mothers were structured with a general guideline as to the questions asked, but these could be varied, depending on the information

received. Examples of the questions asked were "How did you decide to provide breast milk for your intensive care infant?" and "How do you feel about this?"

One mother, when asked what effect providing breast milk was having on her, responded with the fact "It was becoming hard to pump." From there, unstructured questions were used to identify feelings of the mother toward breast pumping and providing breast milk. Subjects were interviewed until no new information emerged, or saturation occurred.

Method of Data Analysis

With inductive research, analysis closely follows data collection. After each interview, the tapes were transcribed and analyzed line by line. Constant comparative analysis was used to help code the data (Stern, 1980).

Comparative analysis is the process of comparing all statements with each other to form a category. Data were collected looking for similarities and differences, forming the basis for the category. The label, or code, given the category shared characteristics and explained the category. The label may be a word, theme or phrase making an assertion about the subject.

Categories were discovered by examining and identifying processes of the data (Stern, 1980).

Conceptual categories were generated, with the evidence of the category illustrating the concept. It is important to remember that the categories generated from the data must be relevant and applicable to the phenomenon being studied (Glaser and Straus, 1967), in this case, maternal attitudes toward providing breast milk for the premature or high-risk infant.

A category is the conceptual element of the theory. According to Glaser and Straus (1967), lower level categories, or subcategories, emerge quickly during early phases of data collection. These lower level categories were pieces of data that were compared with other pieces of data and clustered together (Stern, 1980). At this level, the data has generated tentative concepts of maternal attitudes toward providing breast milk.

Through comparative analysis, categories were combined to form a higher level of abstraction. According to Walker and Avant (1983), higher level categories, or refined or clarified ideas, are more relevant to the phenomenon. Common properties were identified, categories were put in order and relationship of categories to each other were determined. Memos, or ideas and hunches about categories and their relationships, were used throughout the categorization process. At this point, linkages emerged and categories collapsed to form more general

categories. An emerging theory began to form from the linkages and main categories. The goal of theoretical sampling and comparative analysis was to identify and compare concepts and their relationships. Literature is used to help explain the emerging theory (Stern, 1980). By helping to support the theory, literature plays an integral part in the concepts and relationship discovered.

Summary

Mothers providing breast milk for their intensive care infant were interviewed using open-ended questions. The purpose of the interviews was to provide insights into maternal attitudes toward providing breast milk for the premature or high-risk infant. Comparative analysis and theoretical sampling formed the basis of this inductive research. Through the process of inductive research, data were collected, analyzed and categorized to form an emerging theory. Literature was used to help explain and support the emerged theory.

CHAPTER 4

PRESENTATION AND DISCUSSION OF DATA

This chapter describes the characteristics of the subjects interviewed; the initial interviews, categorizations and rationale for clustering; the reasoning for selecting and focusing further interviews; category refinement and amalgamation; and emerging concepts.

Characteristics of the Sample

Eleven mothers who provided breast milk for the premature or high-risk infant were interviewed for this study. Table 1 presents the demographic information of the mothers; age; number of children; education; and occupation. The mother of one set of twins was included in the study. The mothers' ages ranged from 19 to 38, with a mean age of 29.3 years.

All eleven of the mothers were pumping their breasts. Seven of the mothers fed their babies with their own breast milk. Four of the mothers were saving the milk, since the babies were not being fed any oral nourishment at the time of the interview. The severity of the baby's illness and the time between delivery and the interview varied with each subject.

Age	Number of Children	Education	Occupation	Pumping Yes/No	Baby Getting Milk Yes/No	
27	3	High School	Housewife	X	X	
31	3	M.S.	Counselor	X	X	
25	2	High School	Housewife	X		X
19	1	High School G.E.D.	Pizza Maker	X	X	
37	3	B.S.	Medical Tech.	X	X	
35	4	Medical Schl.	M.D.	X	X	
26	4	1 yr. College	Ward Sec.	X		X
28	2	A.D.	Dental Hygiene	X		X
38	2	M.BA.	Business	X	X	
27	2	A.D.	Landscaper	X	X	
30	1	1 yr. College	Bank Teller	X		X
Mean 29.3	Mean 2.4				7	4

TABLE 1. DEMOGRAPHIC DATA

Initial Interviews

Initial interviews began with several open-ended questions to elicit maternal attitudes on providing breast milk for the intensive care infant. The first questions were "How did you decide to provide breast milk for your baby?" and "How do you feel about your decision?" The questions also focused on the mothers' attitudes toward breast pumping.

The first mother interviewed had been separated from her infant immediately after birth. The infant had been transferred from a small nearby town to the Level II nursery, a center for moderately ill newborns. Because of difficulties recovering from the birth, this mother was not able to see or hold her infant until three days after delivery. This interview took place on her fifth postpartum day.

The mother gave two reasons for her decision to provide breast milk. The first reason was the breast milk was "more nutritious". She added that breast milk was "easier to digest", and "since she's (the baby) so premature she has enough to fight without getting formula." The mother's second reason was that it made her "happy".

This mother stated that "It makes me feel good that I can pump my breasts, because it does make me feel close. Even when I'm gone, at least I know she's getting my milk.

It's the thought that she's getting part of me that makes the difference."

When asked how the mother felt about pumping, she replied that it was "very natural" and "If I don't do it now she won't be able to do it then." She believed that through touching and holding the baby, she could produce more milk. She said, "It's harder to let down at home, then I come here and pump. It comes much easier. I get two more ounces here than at home. It's not the same as her being there (at home)."

This mother, however, also expressed negative feelings toward breast pumping. She stated that "I feel cheated because I'd just as soon it be her than the breast pump. I'm missing something. It's lonely sitting there with the breast pump. I'm missing that closeness of holding and touching her while she's eating. You know that breastfeeding will be a comfort to her."

Additionally, she discussed the family support provided during her breast pumping. She explained that "It's a family affair when I pump my breasts. If I didn't have my family behind me concerned and caring for me, I'd feel like 'what am I doing this for?' It helps." However, she also said that "My husband would like to rent me out for a milk cow, but I don't feel that way because I'm doing it for her."

After reviewing the data from the first interview, the focus of the next interviews was on the motivation behind the decision to breast-feed. The next interviewee was questioned to see if the severity of the infant's illness and/or length of separation produced a different response from that of the first mother. The second mother had been separated from her newborn, who was extremely ill, for one week. The baby had been transferred to a hospital over 350 miles from the mother and, thus, there was no contact during the first week.

The mother was interviewed the day after her baby returned to the Level II nursery. During the interview, the mother concentrated on two aspects of her decision to provide breast milk for her intensive care infant. She echoed the first mother when she said that "Breast-fed babies are healthier and happier, so I feel that breast milk is best." She also stated that "It's important for him to have it (the breast milk)." When asked why, she replied that she "...wanted to give him the best start he could get, especially since he was so small."

Her second rationale focused on the emotional feedback that she received from her decision. She said that "It was the only thing I did do that I felt I could do. It was one of the most positive things that I could do

for him." She also felt that the experience helped replace some of the closeness lost in the week-long separation.

When asked how she felt about breast pumping, she stated that she was starting to get discouraged. "I'm tired of pumping. The baby's not with you and you're not taking care of him. It's a pain in the neck and not much fun to do, but it was the only thing I could do while he was gone." She also felt that "Pumping was a plus I could do to help him over the distance. Sleeping without me, eating without me, it's nice to know he needs me. It makes the difference."

During the next interview, the mother was asked the initial questions in order to determine a commonality of experience regarding infant/mother separation. In the first two interviews, the mothers had been initially separated from the infants. Thus, the third interview was conducted with a mother who was on her fifth postpartum day and who had not been separated from her baby. However, she had not been able to hold or give him breast milk because of his physical condition, and therefore the questions were to determine whether these factors were important.

When asked how she decided to provide breast milk, she said that she "...knew I should because it's better than formula" and "It's more beneficial to baby". She further stated, "I know I'm doing something for my baby

that only I can do. It's about the only thing I can do right now. I haven't even been able to hold him yet." When asked how this affected her providing breast milk, she replied that "When I get to breast-feed, I think it will make us closer. He'll get to know me and I'll get to know him a lot better. I don't feel close to him yet because I haven't got to hold him."

No questions about breast pumping were asked. She did offer, however, that she was not "...real crazy about it, breast pumping, that is. It's a chore, but it's something I have to do if I want to breast-feed. Maybe in a week I'll feel differently, but right now I just don't even think about it."

Categorization and Rationale for Clustering

At the conclusion of the first three interviews, several categories were formed from the data. The first of these was mentioned in various statements by all three mothers. That is, the mothers thought breast milk was "more nutritious" and "better for baby". Thus, the first category: Breast is Best. The other categories developed were more nebulous, although questioning had identified various emotions felt by the mothers when breast pumping. In order to arrive at a proper categorization, it was necessary to explore the subcategories discovered during the first interviews. This was done in the hope that

further study of the secondary areas would point out areas of overlap and, hence, arrive at the proper label.

The first subcategory was The Closer You Get. This was in response to the closeness the mothers felt toward their infants. The mothers said, "It's a good way to get close after being apart"; "When I do get to breast-feed, I think it will make us closer"; and "It's worth it because you're so much closer to them."

In addition, other subcategories were developed. Sharing described how the mother felt when she was giving a part of herself. As one mother said, "It's the thought that she's getting a part of me that makes the difference." Another category developed from the data was Provider. This category shows that the mothers were doing something for their babies. For example, one mother stated that "...it's nice to know that he needs me." She also said, "I'm doing something for my baby that only I can do"; and, "It's the only thing that I felt that I could do. I couldn't touch him, so it was one of the most positive things I could do for him."

The Empty Arm Syndrome developed from responses such as "It's harder to let down at home, then I come here and see her and then pump, it comes so much easier. I get two more ounces here than at home, it's not the same as them being there." This category suggests that, not only

did the absence of the baby from the home make a visible difference in the amount of breast milk produced, but the baby's absence also made it difficult for the mother to feel the milk "let down".

The category A Family Affair describes the support necessary to encourage continued provision of breast milk. One mother had pointed out that "It's a family affair when I pump my breasts. If I didn't have my family behind me, concerned and caring for me, I'd feel like 'what am I doing this for?' It helps."

The mothers exhibited both positive and negative responses to breast pumping. One mother indicated that pumping her breasts made her "feel good" because she realized the baby was getting her milk. She said that the breast pumping also made her feel close to the baby. This category was labeled Closing the Gap. However, the same mother also indicated that she felt cheated since she couldn't put the baby to her breast. As a result, this category was labeled The Cheater. The mother said, "I felt real cheated because I'd just as soon it be her than the breast pump. I'm missing that closeness of holding her and touching her while she's eating."

Other subcategories that emerged include The Necessary Chore. This category developed from data such as "I'm not real crazy about it. It's a chore, but something

I have to do if I want to breast-feed." This suggests that although breast pumping may be a task that is not well liked, it is still a necessary component to achieve the end result of providing breast milk. Without breast milk during the interval when the intensive care infant cannot nurse or digest the breast milk, the ability to provide the breast milk at a later date would be lost.

The category of The Necessary Chore also describes the maternal feelings which sustain the effort necessary for providing breast milk through pumping. The mother may be tired of pumping, but she will also feel that it is better than doing nothing for her baby. As one mother said, "I'm tired of breast pumping, but it's the only thing I could do while he was gone. I think of him, baby's not with you, and you're not taking care of him. It's a pain in the neck and not much fun to do, but it's better than nothing."

In summary, the subcategories and data contained in each has generated tentative categories describing the maternal attitudes toward breast milk through the use of the breast pump. Further interviewing was necessary to identify more categories, and integrate the categories to a higher level of abstraction. Further interviewing would also help clarify and define ideas.

Procedure for Focusing Interviews

The next interviews focused on the mother's feelings toward breast pumping and how this affected the breast milk. It was also necessary to clearly define the emerging factors which could correlate breast pumping, maternal attitudes and breastfeeding. The interviews were expected to identify primary categories as well as additional subcategories.

The fourth mother was chosen because her infant was very sick, although the baby stayed in the Level II nursery. This mother was able to touch her infant, but could not hold her until the baby's third day. The mother was also unable to give the baby any of her breast milk until the third day. The question was whether these circumstances would make a difference in the mother's attitude toward providing breast milk. The mother's responses indicated that the category The Closer You Get would apply to her situation when she stated that she provided the breast milk to "satisfy myself. It's the closeness I feel with her."

Two subcategories were highlighted during the interview. The first was in relation to the statement: "I feel helpless because there was nothing I was doing. I had not got to hold her, I had not got to hear her cry. There was no connection." This data described the category of

The Empty Arm Syndrome. This category dealt with the mother's feelings of ineffectiveness, of not being able to do anything for her baby, including giving her baby breast milk. However, the mother realized that the burden of not breastfeeding could be offset by pumping.

In fact, after this mother discovered that the baby was going to receive her breast milk, she exclaimed that "I'm excited about her getting my milk, because I feel like I will be helping her get better. I thought it would make a difference, I'm not sure how, but someway it will make a difference."

When asked how she felt breast pumping could make a difference, the mother replied, "Emotionally, for myself, I feel better. I feel closer to her already. Because I felt so helpless I feel like I'm helping her. It's fun for me to bring my milk in." This was included under Closing the Gap because the category's data indicates that through feeding breast milk to the babies, the mothers felt that they were helping the infants in a meaningful way.

The fifth mother interviewed also had not been able to breast-feed her premature infant. However, the mother was able to hold the baby immediately. This was because there were no complications. She gave the baby her breast milk through a gavage tube. Her responses supported the category Breast is Best when she replied to the question of

why she chose to breast-feed. The mother replied that it was "Because of the nutrients and the importance of the first milk."

The mother also mentioned closeness, affirming the category The Closer You Get, because she felt providing breast milk served as a connection to her child. She said, "The closeness, the moments you have with him, because he's getting my milk, and I'm able to give it to him." Closing the Gap was also affirmed by this mother, who was afraid the baby's premature birth would cause her to miss the experience of providing breast milk. She stated, "By not breast pumping, I'd feel like I was missing out on an experience, with him being premature. Also, with me having a cesarean and him being in the ICN, you miss out and there's a gap there."

The category of Closing the Gap was important to this mother as she added other supporting data to the category. She said, "I just feel like I'm helping him. I'm not saying he'll do less if I didn't breast-feed, but like I'm adding something to him." She also felt that she was "...watching out for him. He comes first, so whatever I can do to help him is important to me." This data bit describes the mother's need to protect her infant with breast milk.

This mother included further data that advocated the category Closing the Gap. The mother, who felt that pumping and giving her baby her milk was an extension of herself, said, "His little lifeline or foodline, that's still our connection, just like when he was inside me." Thus, through providing the baby with breast milk, this mother felt that she was still linked to the baby. This category also noted the mother's attitudes toward touching the baby while breastfeeding. The mother's comments included: "The touching is important and I relate breastfeeding to that. He's mine and I'm his." This mother clearly related that the touching which accompanies breastfeeding is a further connection to the baby, a way of making him closer.

Midway through the interview process, it became clear that the mothers' concern about breastfeeding was tightly woven into their attitudes toward the breast pumping. Even if no questions were asked regarding breast pumping, all the mothers referred to the problems and benefits of breast pumping. Interviews number six and seven focused on how breast pumping affected the attitudes of the mothers toward providing breast milk. The first mother was interviewed on her eighth postpartum day. She delivered twins prematurely and they had just returned to the Level II nursery from a Level III nursery in another

state. The questions were to determine if a multiple birth inhibited the mother in her attempt to provide breast milk. Additionally, information was needed to assess the effect of the separation from the twins on the mother's attitudes toward breast pumping.

The responses of this mother supported the Empty Arm Syndrome category. She stated, "I had a picture of my babies and that would sometimes increase my milk let down. Since they've been back, the milk let down is much easier." To this mother, her attitudes toward the physical separation did not make a visible difference in the amount of milk. However, her attitudes did impact on the let down reflex.

Other responses also fit within the parameter of the Empty Arm Syndrome category. The mother felt that it was harder to get started pumping when the mother and children were apart. She said, "It was harder to get started because it was frustrating, and it was frustrating not being able to see them and pump and not give them the milk at all." This frustration clearly was the result of being separated by distance and not being able to see or hold the twins. This conclusion is supported by the mother's statement: "Now that I can see them and they're getting the milk I've been storing up, it makes me feel

really good that they'll be growing and getting stronger on what I can contribute."

This mother's struggle with the concept of the breast pump as a machine and not a responding infant led to a category entitled Overcoming. "Particularly before I could feel much let down, there was something with the machine that I had to overcome, it wasn't nearly the same as breastfeeding." Overcoming describes the emotion the mother experienced trying to cope and getting used to the machine.

The category Making the Grade was formed in response to the mother's feelings that she had been influenced by the family pediatrician in her decision to breast-feed. Even though she had her own doubts she said that "The doctor said it would be better for them to have my milk. Since they're premature, my milk is better for them." Her sister also agreed with the doctor and said she "...thought it would be terrible not to breast-feed." The mother felt that breastfeeding was necessary to satisfy the doctor and her family. The question which recurred was whether the influence of others to provide breast milk was a factor in maternal attitude's toward providing breast milk. Further interviews were needed to thoroughly investigate this general category. However, it appeared

likely that the influence of others was a factor in the mother's attitude toward providing breast milk.

This mother's response exemplified the category A Family Affair, as well as the first mother interviewed. This category suggested that family support increased the likelihood of success in breast pumping. In this mother's case, the husband's support helped her decide that breast pumping could be a manageable task.

The seventh mother was selected because of the short duration of breast pumping of just three days. The mother was interviewed on her third postpartum day. At the time of interview, the baby had not received any breast milk. In addition, the mother had not held her child, but because of her baby's improved condition, was hoping to hold and breastfeed her later in the day. The mother believed that her attempts at breast pumping did not produce much milk because she had not held the baby for three days. Her feelings describe the Empty Arm Syndrome category. "I didn't have real good luck pumping and I think it was because I didn't have her to hold and touch and cuddle. I felt like I really wished I could be nursing her and so I didn't think I was getting real effective pumping. I couldn't get any let down, and I just didn't feel like it was what I wanted."

She also realized there was a correlation between holding her baby and breastfeeding. "I felt real inadequate-that I couldn't be real mothering because something had been taken from me. Breastfeeding is a once in a lifetime thing to do...I missed that initial being able to hold her and cuddle her." This statement reflects The Cheater category in that she did not actually feel like a mother because she had been denied breastfeeding.

Anticipating that breastfeeding would make her feel closer to her baby, the mother quickly realized that pumping to provide breast milk did not affect her the same way. She stated, however, "I guess I kept a positive thought that I'd be able to give her my milk eventually or I'd be able to nurse her." Review of the data bits and comparison of similar themes showed that the second mother interviewed believed that she too would feel closer when she could breast-feed (Her infant also was not being fed any breast milk). These mothers' responses indicated that another category labeled Great Expectations was needed. This category would deal with those mothers who did not feel close to the infant but were anticipating this closeness when the baby was able to nurse.

The mother also believed that it was necessary to keep an optimistic outlook. She said, "I felt that she'd have a really short course in the ICN, just that she

wouldn't be here long. Because I felt very strong that she wouldn't be sick very long, I felt that there would be a reprieve very soon, and if it hadn't come about I probably would have gone in the opposite direction." Thus, the category Confidence, which describes the feelings of the mother that the infant would not be sick very long and would be able to breast-feed soon.

Category Refinement and Amalgamation

In order to move to a higher level of abstraction, the interviewer reviewed the subcategories. Several of the categories were similar, thus, clarification and integration were required to make the categories more clearly address maternal attitudes toward providing breast milk for the premature infant. The remaining interviews would form linkages and elaborate upon factors in maternal attitudes toward breastfeeding that emerged during the early interviews.

Breast is Best was a category that needed no further intugration. Instead, this category was such a basic concept relating to breast milk that it was left as first labeled. The nutrients and importance of the first milk were mentioned by all the mothers.

Making the Grade was refined to The Persuaders after reviewing the data bits and using the last three interviews to clarify the category. This refinement better

related the feelings of pressure placed on mothers to provide breast milk for the infant in the ICN. Several of the mothers described how "the doctors and nurses encouraged you to breast-feed"; "the doctor is pretty adamant about breastfeeding, too"; and "the doctors seem to think it will be really good for him if he can have breast milk, so that's incentive enough for me." Another mother stated, "I was surrounded by people that I knew who said breastfeeding was part of the childbirth process--a certain amount of peer pressure."

The categories of Sharing and Providing merged and formed the category of The Ties That Bind. This category described the mothers' feelings as they provided breast milk as "giving a part of themselves." Other statements were "I want to give as much of myself as possible and maybe the baby would feel that and respond and love me more" and "I know that I'm putting forth as much effort as possible to make things good for him. You know, a combination of providing and feeling successful as a mother." These statements contribute to the mothers feeling that they have a connection or tie to their baby. The Ties That Bind is supported by another mother when she stated, "I'm contributing more than just being there. For the time being since we're not together, giving him my milk

helps. I know that when I'm home, I'm doing something for him, so it makes me try a little harder."

The Ties That Bind shares similar qualities as those in the category The Closer You Get. The mothers' responses included: "I can't see him or hold him now. I still feel this (points to the breast milk) is strengthening the bond somehow. I just feel closer to him." The mother who made this statement was the only mother unable to feed her baby breast milk, and yet she still felt closer to her baby because she was breast pumping. Another mother stated, "It's the whole concept: holding her, giving her my milk. It's the closeness, the feeling that she's mine." These statements support the theory behind the category. By providing the breast milk and by being able to feed their babies, the mothers feel closer to the babies.

The category Great Expectations expresses the idea that the mothers expect to feel closer to their babies once they begin breastfeeding. This idea is supported by the mother who stated, "I'm looking forward to breastfeeding and the closeness it will bring. Right now I feel like he's a stranger."

The category Closing the Gap is supported by the statement "It gives me a way of being able to give milk to the baby until it gets to the point where he can breast-

feed from me." This describes how pumping her breasts was the mother's way of reaching the result of breastfeeding. Closing the Gap describes the mother's feelings that providing breast milk for their babies by breast pumping bridges the gap until the time when breastfeeding begins. One mother stated, "It's satisfying to bring milk into the nursery and see it in the freezer. I'm saving the most important thing (the milk), and it's satisfying seeing the containers with my son's name on them. I'm counting down time till he'll be back and able to breast-feed."

Closing the Gap also describes those maternal attitudes which present a feeling of closeness because the infant was receiving mother's breast milk. The data bit supporting this idea was found in this answer to why provide breast milk: "The closeness, the moments you have with him, because he's getting my milk and I'm able to give it to him." Another mother felt that providing breast milk would make up for the infant's illness and said, "Providing breast milk helps alleviate the guilt. I know it's nothing I'd done, but I can make up for it by saving the milk he will benefit from." This data bit fits under the category Closing the Gap. This category established that the mother's contributions toward her baby's health via breast pumping made her feel less guilty because she could make up for what had happened to the baby.

The category To Have and Not To Hold developed from the subcategories The Cheater and Empty Arm Syndrome. In this category mothers express their concern over not touching or holding their infants while the babies feed. One mother said, "I feel cheated because he's not there to bond and I wonder how it will affect our life. I want to get to know him and feel that breastfeeding is the best way to secure that bond." The mothers not only realized that they did not produce as much milk with the breast pump, but they also had to cope with the loss inherent in the separation from the newborn. As one mother stated, "When I'm pumping and hearing babies cry and seeing fathers come and go, I feel really sad and resentful that he's not here."

The category To Have and Not to Hold shows that the mothers feel that while using the breast pump, they miss an important aspect of the relationship with their baby. One mother stated, "I felt real inadequate, that I couldn't be real mothering, because something had been taken from me. It's a once in a lifetime thing to do. I missed that initial being able to hold her and cuddle her and breast-feed her." Another supporting data bit was the statement: "I'm not getting a lot of milk, so I feel inadequate. I feel that he won't know me, that he won't love me and that my milk won't come in." These data bits reflect the fact

that though the mothers were providing breast milk, they believed that breastfeeding was the true measure of the contribution toward nurturing their infant.

The category Confidence describes the mothers' hopes that the infant would not be sick long. The category also deals with the mothers' worries about the impact of not breastfeeding. One mother said, "If I didn't breast-feed, I'd think I'd be missing something. We have lots of faith. I feel really good about how everything is going to turn out." The mothers felt that because they felt confident in their baby's condition, they would be able to breast-feed soon.

The category A Family Affair was renamed Support. This category describes the role the family member or spouse can play in helping the mother provide breast milk. One mother stated, "My husband is really supportive. He calls and asks me if I've pumped, asks me how much I get. He likes to be here when I do." The support was important for continued successful breast pumping as well as making the initial decision to pump. "It's a family affair when I pump my breasts. If I didn't have my family behind me, concerned and caring about me, I'd feel like 'what am I doing this for?'...It helps," recalled one mother.

The category The Necessary Chore describes the mothers' attitudes toward the amount of work required for

breast pumping. Most of the mothers felt that it was worth the effort to provide breast milk for the intensive care infant. Since breast pumping is essential to the mother if she wants to breast-feed, the mother is forced to deal with the problems inherent in breast pumping. As one mother stated, "It's painful, but I just think about his coming home. I just want to get over the hump of breast pumping."

The category Overcoming relates to the mother's attitude and adjustments to the breast pump. One mother described the pump as a milking machine. She said, "I feel like a cow because it pulls on you. It's not human and my breasts are tender and it hurts. It takes time to get used to the suction." This category is important in that the mothers need to overcome their apprehension regarding the machine in order to provide breast milk.

The data bits, categorization and labels chosen to describe the categories were reviewed by a mother who had provided breast milk for her premature infant. This mother approved of the categorization and felt the labels chosen for each category were appropriate.

Emerging Concepts

Four concepts emerged from the data collected from the mothers providing breast milk for their intensive care infants. Table 2 presents the developed concepts and categories. Three of the concepts were Motivators,

Concept: The Hurdle

The Necessary Chore
Overcoming
To Have and Not to Hold

Concept: Pressure

The Persuaders
Support

Concept: Attachment

Great Expectations
The Ties That Bind
The Closer You Get

Concept: Motivators

Confidence
Closing the Gap
Breast is Best

TABLE 2. CONCEPTS AND CATEGORIES

Pressure, and Attachment. These concepts were integral to the understanding of maternal attitudes toward breastfeeding and breast pumping. Additionally, breast pumping is the concept central to providing breast milk. This concept was labeled The Hurdle. This section will describe the importance of and the definition of each of these concepts.

The Hurdle

A key concept, The Hurdle, was arrived at after evaluating the mothers' feelings toward breast pumping as a task that needed to be accomplished. The category The Necessary Chore was part of this concept. The mothers' reactions show that they often feel that breast pumping is essential to achieve the end result of breastfeeding, but not always enjoyed. The category Overcoming explains the mothers' fears as they become accustomed to the breast pump in order to provide breast milk. It was included as a part of The Hurdle since the mothers' apprehension and adjustment toward working the machine and the pain that the machine could inflict accompanied their attitudes toward breastfeeding and breast pumping.

The Hurdle concept also contains the attitudes summarized in the category To Have and Not to Hold. To Have and Not To Hold expresses the mothers' idea that using the breast pump causes them to miss an important aspect of

the relationship with their baby. These mothers felt that they had not contributed to their baby since they could not breast-feed. The category To Have and Not to Hold also describes the mothers' feelings of loss that accompanied the use of the breast pump if the mothers could not touch or hold their infants. The mothers also feel that they have been cheated out of bonding and miss the closeness that comes with the touching and holding during breastfeeding.

Motivators

Motivators, the stimuli to help the mothers overcome breast pumping, is a major concept necessary to understand maternal attitudes in providing breast milk through breast pumping. One aspect of the concept is defined best as the mothers' feeling that there is no better nutrition for their infants than that which they can provide through breast milk. The category of Breast is Best is part of this concept. The mothers' first response when deciding to provide breast milk for their baby is "I know it's best for my baby." The mothers believe that breast milk is easier to digest, more nutritious and, therefore, are convinced that the importance of the first milk offset the problems of breast pumping.

A second aspect to the concept of Motivators is the category Confidence. This category explains the mothers'

hopes that their babies would not be sick long and because of that, would be able to breast-feed soon.

The category Closing the Gap is the third aspect of the Motivators concept. Closing the Gap describes the feeling that the mothers' ability to pump their breasts and provide breast milk bridge the gap to the time the mothers will breast-feed. The category explains how breast pumping provides the means to achieve the end result of breastfeeding. It also expresses the idea that the mother feels closer to her infant knowing that the infant is receiving breast milk that she provided. These categories, Breast is Best, Confidence, and Closing the Gap are the motivators for mothers to provide breast milk through pumping.

Pressure

The second concept related to providing breast milk through breast pumping is Pressure. This concept describes the pressure that others place on the mother to provide breast milk for the intensive care infant. This group includes: doctors; family; and friends. The category The Persuaders is part of this concept because it describes how the mothers feel the decision to provide breast milk for the intensive care infant is influenced by opinions of others.

The category Support is also part of the concept of Pressure because it describes the positive pressure influencing mothers providing breast milk for the intensive care infant. Support notes the importance of family members' support to the adequate production of breast milk. Support is necessary not only in breast pumping, but also during the initial decision to provide breast milk.

Attachment

The last concept which emerged from the data relating to providing breast milk through breast pumping is Attachment. Klaus and Kennel (1982, p. 2) define attachment "...as a unique relationship between two people that is specific and endures through time...behaviors that serve to maintain contact and exhibit affection..." This concept explains that the mothers see providing breast milk as a means of maintaining contact and of feeling closer to their infants. Some mothers expect to feel closer to their babies when they breast-feed, and this is expressed in the category Great Expectations.

The categories The Ties That Bind and The Closer You Get also are included in the concept of Attachment. The category of The Ties That Bind describes the mothers' feelings toward the connection or tie found in providing breast milk to the premature infant. The mothers also believe that in giving a part of themselves, they are

providing for their infant as no one else can. This helps the mothers feel like they are maintaining contact with the infants.

The category The Closer You Get is included under the concept of Attachment because the category describes the closeness that the mothers feel to their infants when they provide breast milk. The mothers may not be with the infant, but pumping the breast milk can strengthen the bonding process.

Summary

In conclusion, this chapter describes the characteristics of the mothers interviewed; the initial process for categorization; category refinement and amalgamation; and the concepts which emerged from the data.

Mothers providing breast milk for the intensive care infant feel that Pressure, Motivators and Attachment are concepts of attitudes toward providing breast milk. Central to these concepts is The Hurdle, or breast pumping, which is necessary to reach the end result of breastfeeding. The next chapter will describe the relationships between these concepts.

CHAPTER 5

CONCLUSIONS AND IMPLICATIONS

This chapter presents the conclusions on maternal attitudes toward providing breast milk. The limitations are described, along with implications for nursing practices. Recommendations for further study are also included in this chapter.

Conceptual Model

This section of Chapter 5 will describe the conceptual model and the relationships between concepts. Literature will be used to support the final concepts and relationships.

Figure 1 depicts the conceptual model of maternal attitudes toward providing breast milk for the intensive care infant. A model of the maternal attitudes toward providing breast milk can be divided into four components, The Hurdle, Motivators, Pressure and Attachment. These conclusions were drawn from data obtained through this research.

The concept The Hurdle is best described as breast pumping and is central to providing breast milk for the intensive care infant. Providing breast milk by breast

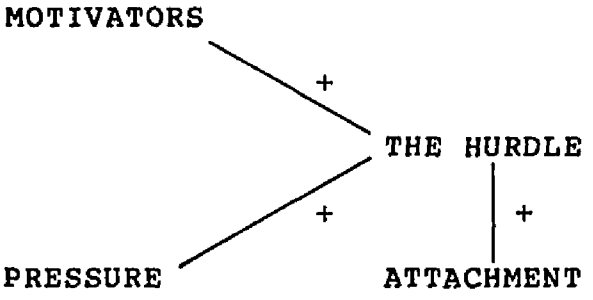

Figure 1. Conceptual model of maternal attitudes toward providing breast milk for the intensive care infant.

pumping is the task mothers must accomplish before the rewards of breastfeeding can be reached.

The mothers feel breast pumping is The Necessary Chore, but an essential component to reaching the end result of breastfeeding. Overcoming the breast pump is also an aspect of The Hurdle. If the mothers wish to provide breast milk, they must first cope and adjust to breast pumping. To Have and Not to Hold describes how the mothers feel they are missing an important aspect of their babies life while using the breast pump. Not being able to actually touch and hold their babies while releasing their milk gives them a sense of loss.

Rokeach (1975, p. 122) states: "A person will make a 'pro' response to a situation toward which he harbors negative feelings if he believes the object will be sufficiently good for him." In this situation the mothers may have negative feelings toward using the breast pump, but they realize the end results will be beneficial to both of them.

Centered around the concept of The Hurdle are the concepts of Motivators, Pressure and Attachment. Motivators has a causal relationship to The Hurdle. Motivators are the stimuli that influence the mothers to provide breast milk and overcome breast pumping. The mothers believe Breast is Best is the very best way that

they can provide a nutritional start in life for their infants. They know the child is receiving optimum benefits from milk the mother is providing. Being informed of the nutritional value of breast milk leads to breast pumping, with the final result ending in breastfeeding. The mothers believe this means a healthier and happier child.

Confidence, the feeling that their infant is going to be able to breast-feed soon, is also a stimulus to providing breast milk through pumping. The mothers are confident that their infant would not be sick long and thus would be breastfeeding within a short time.

The mothers feel breast pumping bridges the gap to the time they are able to actually breast-feed. Closing the Gap is a stimulus to provide breast milk because it is the only avenue open to the mothers of intensive care infants who wish to breast-feed. It supplies the mother with a method of providing breast milk until the infant is able to nurse.

Motivators is one aspect involved in the components of maternal attitudes toward providing breast milk. Pressure is another component with a causal relationship to The Hurdle. The mother is made aware through Persuaders of the importance and the value of providing breast milk through pumping, especially for the intensive care infant. This is accomplished through opinions of other people; for

example, the family doctor friends and relatives. Support is a positive pressure predisposing the mothers to provide breast milk for the intensive care infant. These are all factors which influence or pressure the mother to provide her child with breast milk.

A mother of twins felt she could not cope with breastfeeding two children. However, due to her doctor, who explained the importance of breastfeeding, and the support of her husband, she decided to give them the benefit of breast milk.

Both concepts, Motivators and Pressure, are concerned with an awareness of the importance of providing breast milk for the intensive care infant. Bogs and Rau (1983) state breastfeeding the intensive care infant requires 'caring support' from a knowledgeable nursing staff. A large amount of time and effort is necessary to support and guide the mother of the intensive care infant. However, this extra time helps avoid misunderstanding and confusion by increasing communication between staff and the mother. Increased communication prevents anxiety and helps form a more secure attachment between the mother and baby (Taylor and Hall, 1979).

According to Hamilton (1983), the greater the store of knowledge, the greater potential to adapt to difficult situations. This statement is particularly applicable with

mothers whose children are in the intensive care unit. Breast pumping is alien to them. They want to breast-feed, but have qualms about pumping. The situation is difficult but through acquiring knowledge in this area, they are able to accomplish the task of breast pumping, with breastfeeding the end result.

The concept of The Hurdle has a causal relation to Attachment. By providing breast milk for their baby through breast pumping, the mothers feel they maintain a tie they otherwise would not have. They are giving a part of themselves that no one else can furnish. This creates a closer relationship with their child. Three of the mothers in this study did not feel that providing breast milk led to the feeling of attachment. However, the mothers expected to feel that closeness when they were able to hold and breast-feed their baby.

Fanaroff and Martin (1983) state that providing breast milk is a task only the mother can do. This stimulates the mother to relate to her infant in a unique way. She may also feel that by meeting the babys needs she is helping and caring for her baby in an important way. Supported and encouraged to care for her baby and meet it's needs by providing breast milk, the mother can begin to form her relationship with her premature or high-risk infant (Opirhory, 1979).

According to Mitchell and Mills (1983), providing breast milk can influence parent-infant attachment by increasing parental satisfaction and self-esteem. This would be important to the mother who has not delivered the expected baby, and experiences a feeling of failure and a loss of self-esteem (Taylor and Hall, 1979). The American Academy of Pediatrics (1978) also feel that breastfeeding may promote maternal-infant bonding.

Limitations

1. The sample is not representative of the whole population providing breast milk for the intensive care infant because of the level of education of the mothers. All of the mothers had a high school education, with eight of the mothers having advanced education.

2. The data were collected by an intensive care nursery nurse. This may have biased the mothers' responses to the questions. The mothers may have responded with answers they believed the nurse wanted to hear.

3. The findings of this study are limited to the specific population of mothers in a midwestern town who have provided breast milk for their intensive care infant.

Recommendations

Although there have been several studies on how breastfeeding affects bonding of the mother and her normal

newborn baby, there has been limited research on breastfeeding and bonding in the intensive care nursery. More research is needed if the intensive care nursery staff wishes to know how to encourage the trend of providing breast milk for the intensive care infant. For example, one mother in this study had pumped her breasts for two weeks and was already feeling the effects of frustration and fatigue upon her success with the breast pump. The question is, "How does breast pumping for even longer periods affect the success of providing breast milk for the intensive care infant?"

The investigation makes the following recommendations for further study:

1. This study should be replicated with a larger population sample utilizing the same method of data collection and theoretical sampling. This would both validate the research and expand the concepts and their relationships.

2. A longitudinal study could be initiated to recognize the changes in maternal attitudes toward breastfeeding and providing breast milk for the intensive care infant over an extended period of time.

3. Interview mothers making the decision not to provide breast milk for their intensive care infant.

Implications for Nursing Practices

The concepts presented in this study could be utilized in the intensive care nursery to help nurses better understand maternal attitudes toward providing breast milk. With an awareness of The Hurdle, Motivators, Pressure and Attachment, the nurse could more effectively communicate with the mother who is providing breast milk for the intensive care infant. This awareness is important because there is frequently a lack of communication in the intensive care unit between the mother and the nurse caring for the baby. This could be accomplished by planning and implementing more effective and more individualized nursing interventions.

Open communication between mother and nurse promotes the development of attachment between mother and baby (Klaus and Kennell, 1982). Bonding between the infant and mother is facilitated by physical, visual and sensory stimulation. Mothers who have been separated from their intensive care infants 'miss out' on this bonding process. Knowing that the mothers who provide breast milk either feel closer or expect to feel closer to their infants is an incentive for the nurses to encourage continued breast pumping. The nurse can provide the necessary support and counseling to help the mother reach the goal of breastfeeding.

The nurse can also help the mother deal with her feelings by understanding the motivators behind providing breast milk through pumping. If the breast milk is not being utilized, the mother may feel she is not providing for her infant. The nurse can remind the mother that the breast milk will be used at some point in the future. The nurse can help by ensuring the mother continues breast pumping to help bridge the gap to the time the infant is able to actually breast-feed.

Pressure was another concept leading to providing breast milk for the intensive-care infant. The nurse, therefore, needs to remember to be a positive support, not just a persuader. Otherwise, the mother could feel guilty if she stops breast pumping. The mother might continue breast pumping merely to satisfy the nurse. Obviously, the mother's decision to continue breast pumping must be vested in a concern for her infant if the mother is to be successful. Awareness of maternal attitudes can increase communication between the nurse and the mother and, thus, the nurse can provide the necessary support. Hopefully, this will lead to successful breastfeeding between the mother and baby.

Summary

In summary, the mother providing breast milk for the intensive care infant felt that she motivated to

provide breast milk through breast pumping for her intensive care infant. She also felt that the opinions of others and support influenced her to provide the breast milk. Additionally, the mother believed that breast pumping was something she had to "get over" and accomplish before reaching the end result of breastfeeding. By providing breast milk through breast pumping, she either felt closer to her infant or expected to feel closer with actual breastfeeding.

Nurses can help the mother achieve the goal of breastfeeding by supporting and counseling the mother who is providing breast milk for her intensive care infant. Nurses can increase effectiveness in helping the mother by acknowledging and understanding the maternal attitudes toward providing breast milk.

APPENDIX A
HUMAN SUBJECTS FORM

THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721

COLLEGE OF NURSING

MEMORANDUM

TO: Catherine L. Allan, BSN
Graduate Student
College of Nursing

FROM: Ada Sue Hinshaw, PhD, RN ASH
Director of Research

Katherine Young, PhD, RN
Chairman, Research Committee

DATE: May 29, 1985

RE: Human Subjects Review: Maternal Attitudes About Providing Breast Milk for the Intensive Care Infant

Your project has been reviewed and approved as exempt from University review by the College of Nursing Ethical Review Subcommittee of the Research Committee and the Director of Research. A consent form with subject signature is not required for projects exempt from full University review. Please use only a disclaimer format for subjects to read before giving their oral consent to the research. The Human Subjects Project Approval Form is filed in the office of the Director of Research if you need access to it.

We wish you a valuable and stimulating experience with your research.

ASH/fp

APPENDIX B
DISCLAIMER

DISCLAIMER

You are being asked to voluntarily give your opinion in this interview. The title of this project is maternal attitudes about providing breast milk for the intensive care infant. The purpose of this study is to provide insights into mothers' attitudes about providing breast milk for the premature or high-risk infant. The objectives of this study are to determine mothers' perceptions/opinions about providing breast milk and their knowledge and feelings toward providing breast milk and breast pumping.

Your name will not be included in the study, and you may choose not to answer some or all of the questions, if you so desire. Whatever you decide, your care will not be affected in any way. Your questions will be answered and you may withdraw from the study at any time. There are no benefits to you for participating in the study, but nurses will better understand mothers' attitudes toward providing breast milk for the premature or high-risk infant. There are no known risks.

APPENDIX C
CONCEPTS

CONCEPT: The Hurdle

The Necessary Chore

"I'm not real crazy about it. It's a chore, but something I have to do if I want to breast-feed."

"It's painful, but I just think about his coming home. I just want to get over the hump of breast pumping."

"I'm tired of breast pumping, but the only thing I could do while he was gone, I think of him, babe's not with you and you're not taking care of him, pain in the neck and not much fun to do, but it's better than anything."

Overcoming

"Particularly before I could feel much let down, there was something with that machine I had to overcome, it wasn't nearly the same as breastfeeding."

"When I looked at this machine and saw how it worked, I thought this has got to be like a milking machine. I feel like a cow because it pulls on you--it's not human and my breasts were tender and it hurts. It takes time to get used to the suction."

To Have and Not to Hold

The Cheater

"I feel real cheated because I'd just as soon it be her than the breast pump. I'm missing that closeness of holding her and touching her while she's eating."

"I feel cheated because he's not there to bond and wonder how it will affect our life. I want to get to know him and feel that breastfeeding is the best way to secure that bond."

"I feel real inadequate--that I couldn't be real mothering, because something has been taken from me. It's a once in a lifetime thing to do, I missed that initial being able to hold her and cuddle her and breast-feed her."

Empty Arm Syndrome

"It's harder to let down at home, then I come here and see her and then pump, it comes so much easier. I get two more ounces here than at home. It's not the same as them being there."
"I had a picture of my babies and that would sometimes increase my letdown. Since they've been back, the letdown is much easier."

"When I'm pumping and hearing babies cry and seeing fathers come and go, I feel really sad and alone. I feel like someone has cut off my arm and feel sad and resentful that he's not here."

"I'm not getting a lot of milk, so I feel inadequate--that he won't know me, that he won't love me, and that my milk won't come in."

"I felt helpless because there was nothing I was doing. I had not got to hold her, I had not got to hear her cry. There was no connection."

"It was harder to get started pumping because it was frustrating and it was frustrating not being able to see them and pump and not give them the milk at all."

"I didn't have real good luck pumping and I think it was because I didn't have her to hold and touch and cuddle. I felt like I really wished I could be nursing her and so I didn't think I was getting real effective pumping. I couldn't get any let down and just didn't feel like it was what I wanted."

CONCEPT: Motivators

Breast is Best

"more nutritious"

"better for baby"

"easier to digest"

"healthier and happier"

"more beneficial for baby"

"nutrients and importance of first milk"

"it's natural"

"my milk is better for them"

"best nutrition"

Confidence

"I felt like she'd have a really short course in the ICN, just that she wouldn't be here very long. I felt like there would be a reprieve very soon, and if it hadn't come about, I probably would have gone in the opposite direction and gotten really depressed."

"If I weren't doing it, I think I'd be missing something. We have lots of faith--I feel really good about how everything is going to turn out."

Closing the Gap

"Makes me feel good that I can pump my breasts because it does make me feel close, even when I'm gone, at least I know she's getting my milk."

"By not breast pumping, I'd feel like I was missing out on an experience, with him being premature.

Also, with me having a cesarean and with him being in the ICN, you miss out and there's a gap there."

"It's satisfying to bring the milk into the nursery and see it in the freezer. I'm saving the most important thing and it's satisfying seeing my containers with my son's name on them. I'm counting down time till he'll be back."

"I want to make up for what happened. Providing breast milk helps alleviate the guilt. I know it's nothing I'd done, but I can make up for it by saving the milk he will benefit from."

"His lifeline or foodline, that's still our connection. Just like he was inside me."

"The touching is important and I relate breastfeeding to that. He's mine and I'm his."

"It gives me a way of being able to give milk to the baby until it gets to the point where he can breast-feed from me."

"In the future reap the reward of a happy and healthier baby and feel that I had contributed to his health, especially since he had surgery."

"I'm excited about her getting my milk because I feel like I will be helping her--help her get better. Emotionally, for myself, I feel better. I feel closer to her already. Because I felt so helpless, I feel like I'm helping her."

"I just feel like I'm helping him. I'm not saying he'll do less if I didn't breast-feed him, but like I'm adding something to him."

"It makes me feel really good that they'll be growing and getting stronger on what I can contribute. It makes me feel as if they depend on you a little bit."

"I know that I'm putting forth as much effort as possible to make things good for him. You know, a combination of providing and feeling successful as a mother."

"I'm watching out for him. He comes first, so whatever I can do to help him, it's important to me."

"In this kind of situation, I'm contributing to her getting better, I don't feel so helpless."

"I don't feel so helpless, I feel like I'm at least doing something for him. If I can't hold him and cuddle him and wash him and change him and do all those other things, at least I think eventually, this will be something he'll benefit from."

CONCEPT: Pressure

The Persuaders

"Doctor said it would be better for them to have my milk. Since they're premature, my milk is better for them."

"Sister thought it would be terrible not to breast-feed."

"The doctors and nurses encouraged me to breast-feed."

"The doctors seem to think it will be really good for him, if he can have breast milk, so that's incentive enough for me."

"A certain amount of peer pressure--surrounded by people breastfeeding who said it was part of the childbearing process."

"The doctor is pretty adamant about breastfeeding, too."

Support

"It's a family affair when I pump my breasts. If I didn't have my family behind me, concerned and caring about me, I'd feel like what am I doing this for...it helps."

"My husband's support made me decide it would be easier to do."

"My husband is really supportive--he calls and asks me if I've pumped, asks me how much I get. He likes to be here when I do."

CONCEPT: Attachment

Great Expectations

"When I do get to breast-feed, I think it will make us closer."

"I'm looking forward to breast-feeding and the closeness it will bring. Right now I feel like he's a stranger."

"Being able to actually breast-feed is very important to me. I feel like I'll be closer to her."

The Ties That Bind

Provider

"Providing the milk makes me feel as if I'm contributing more than just being there. I know that I'm doing something for him. It means a lot to me that I'm producing milk for the baby."

"I'm doing something for my baby that only I can do."

"It's the only thing that I felt that I could do. I couldn't touch him, so it was one of the most positive things I could do for him."

"Not seeing them, I knew I was doing something for them, it was the only thing I was doing for them."

"Breastfeeding is something only I can do for him. I feel nobody can comfort my baby, provide for him like I can."

"I'm providing her with the best thing she could have, because it is, that's what it's put there for."

"Sleeping without me, eating without me, it's nice to know he needs me. He still needs something extra."

"I'm contributing more than just being there. For the time being since we're not together, giving him my milk helps. I know that when I'm home, I'm doing something for him. So it makes me try a little harder."

Sharing

"Thought that she's getting part of me that makes the difference."

"I want to give as much of myself as possible and maybe the baby would feel and respond and maybe love me more."

"It's very soothing, knowing that I'm giving him a part of me."

"You know you're giving something of yourself."

"I feel that the baby is getting such a part of you. It's one of those special things that only a woman and a child can experience."

The Closer You Get

"Good way to get close after being apart."

"It's worth it because you're so much closer to them."

"Something to satisfy myself--it's the closeness I feel with her."

"The closeness, the moments you have with him, because he's getting my milk and I'm able to give it to him."

"It was the only thing that made me feel at least a little bit closer to them."

"He's still getting the basic nutrition from me and all the antibodies in my blood, so that makes me feel closer to him."

"It's the whole concept, holding her, giving her my milk. It's that closeness, the feeling that she's mine."

"I can't see him, or hold him now, I still feel this (points to the breast milk) is strengthening the bonding somehow. I just feel closer to him."

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