

BREAST FEEDING SUCCESS RATE: GROUP INSTRUCTION
VS INDIVIDUAL INSTRUCTION

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ABSTRACT

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The problem studied was: Will mothers who receive breast-feeding instructions in a group be more successful than those who receive individual instructions? A convenience sample of primiparous mothers who had vaginal deliveries was used. During the study some mothers received breast-feeding instructions in an individual setting and others in group settings. A questionnaire regarding breast-feeding success was sent to the mothers 3 weeks following delivery. A chi-square analysis was conducted on the resulting data. No significant difference was found in the success rate of breast feeding between mothers who were taught individually or in a group setting. The conclusions were that the role and participant modeling derived from vicarious experience in the group setting did not influence breast-feeding success.

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CHAPTER 1

INTRODUCTION

Breast feeding is generally recognized to be the best method of infant feeding available (Fitzpatrick, Reeder, & Mastroianni, 1971; Mangus, 1978; Weinstein, 1980). In England in 1974, the Government Working Party Report is quoted as recommending breast feeding for a minimum of 2 weeks, and preferably for 4 to 6 months (Hill, 1979). Neifert (1978) cited the Committee on Nutrition of the American Academy of Pediatrics' recommendation that all full-term infants should be breast fed. In spite of breast feeding being advocated by numerous authorities (Winikoff & Baer, 1980), data collected by Ross Laboratories indicated that in the mid 1970s only 41.6% of new mothers attempted breast feeding and only 27.3% were still breast feeding at 2 months (Neifert, 1978). Early breast-feeding difficulties are most common in the first 2 weeks (Neifert, 1978), and many women give up breast feeding in the first few weeks (Mangus, 1978; Selby, 1977). In order to increase

the percentage of women breast feeding their infants, some form of intervention is considered desirable as well as justified (Neifert, 1978).

Winikoff and Baer (1980) stated that breast feeding interventions fall into two broad categories:

(a) information with support and (b) changes in hospital routines. Winikoff and Baer further maintained that information and support type interventions are more widely accepted by hospital employees than are changes in hospital routines. Wainwright (1981) proposed that breast-feeding success rates can be significantly raised if mothers are provided with information, support, and advice. Another study by Gulick, (1982) indicated that mothers who were successful in breast feeding scored much higher in overall knowledge about breast feeding than mothers who were not successful in breast feeding. Teaching programs are considered good and acceptable nursing interventions by health care providers (Winikoff & Baer, 1980), and such programs provide the information and support which are believed to be greatly significant in the success of breast feeding (Gulick, 1982; Wainwright, 1981). The purpose of this study was to evaluate whether or not a

teaching program using a group setting plays a significant role in rates of successful breast feeding.

Problem Statement

The problem statement addressed by this study was: Is there a difference in the success rate of breast feeding in mothers who receive breast-feeding instructions individually as compared to mothers who receive breast-feeding instructions in a group.

Justification of the Problem

Because breast feeding does not appear to be an instinctive ability, most women need some instruction (Grassley & Davis, 1978). There is great variety in the type of instructions about breast feeding of infants that is provided to new mothers (Maclean, 1977). Some authors (Gardener, 1978; Whitley, 1978; Vanderzanden, 1979) felt that nurses do as much to hinder breast feeding as they do to promote it. This may be due to a lack of facts (Whitley, 1978) or to ineffective methods of distributing information (Mangus, 1978). A later study (Klein, 1983) indicated that an increase in the knowledge level of the nursing staff did not result in a significantly higher percent of mothers who were successful in breast feeding.

Demographic variables, such as age, race, income, educational level, sex of baby, and the health of both mother and baby have been shown to have a significant influence on the incidence and duration of breast feeding (Martinez & Nalenzieski, 1979).

Avery (1978) argued that nurses have an ethical responsibility to provide information to parents about the benefits of breast feeding. Avery further stated that nurses have an ethical responsibility to facilitate breast feeding through appropriate protocols.

Bandura (1978) asserted that any psychological procedure, regardless of form, serves to strengthen self-efficacy expectations. Therefore, any teaching program could be expected to have a positive effect on the learner's self-efficacy expectations, and consequently, on their accomplishments.

Successes increase expectations of mastery while failures lower them. A first-time mother does not have a previous successful breast feeding experience for reference. Other forms of accomplishment can be cited, such as the delivery of a healthy infant, production of colostrum, and mobility. Successes in any area can create and enhance self-efficacy expectations which can then be generalized to other situations. Conversely,

performance failures can have a negative effect on self-efficacy expectations and can be generalized to other situations (Bandura, 1978).

Watching others successfully perform threatening activities without adverse consequences can reassure a person that he/she can also successfully achieve under similar circumstances (Bandura, 1978). Breast feeding is not frequently seen in public (Selby, 1977) and young women often begin breast feeding without observing another woman breast feed (Nichols, 1978). The vicarious experience concept is a major source of justification for the group instruction method. The group instruction method provides opportunities for each new mother to actually see other women breast feed. Through this vicarious experience, all the women in the group would be expected to gain an increased self-efficacy expectation that would lead to a higher rate of successful breast feeding.

Klein (1983) recommended that a study be done to "evaluate the effects of educational programs for parents on the success rate of breast feeding" (p. 56). The present study compares the effectiveness of providing breast-feeding instructions individually with the effectiveness of providing the same instructions in a

group setting. The findings from this study contributes to the body of knowledge regarding maternal/child nursing and provides guidance for perinatal nurse educators as to more effective methods of helping new mothers breast feed.

Theoretical Framework

The theoretical framework for this study was Bandura's (1978) self-efficacy theory. Self-efficacy theory hypothesizes that a person's "expectations of self-efficacy determine whether coping behavior will be initiated, how much effort will be expended, and how long it will be sustained in the face of obstacles and adverse experiences" (Bandura, 1978, p. 99). In the theoretical model, an individual's expectations of self-efficacy are derived from four principle sources of information: (a) performance accomplishments, (b) vicarious experiences, (c) verbal persuasion, and (d) psychological states.

Performance accomplishments are those things which an individual actually does. Vicarious experience pertains to the learning achieved by watching others. Verbal persuasion is what an individual is told. Finally, emotional arousal or psychological states

are the feelings and emotions that influence learning (Bandura, 1978).

Bandura's (1978) theory of self-efficacy involved multiple determinantes. Because people have had different experiences, individuals have differing self-efficacy expectations. The theory of self-efficacy explains the variety of results in patient education that is achieved by nurses, doctors and educators, and also provides a rationale for developing new methods of presenting information and encouragement to mothers desiring to breast feed.

Assumptions

The assumptions of this study were:

1. Self-efficacy expectations are a major determinant of an individual's choice of activity, effort expended, and persistence of effort.
2. Successes increase expectations of mastery, failures lower expectations of mastery.
3. Once a person establishes a sense of self-efficacy, the effects tend to be generalized to other situations.
4. Participants reported honestly the success or failure of their breast-feeding efforts.

Hypothesis

The hypothesis of this study was: There will be a significant difference in the success rate of breast feeding in mothers who received breast feeding instructions individually as compared to mothers who received breast feeding instructions in a group setting.

Definition of Terms

For the purpose of this study, the definition of terms were:

1. Mothers--English-speaking primiparas who had normal vaginal deliveries of full-term healthy babies and who indicated a desire to breast feed.
2. Full-term healthy babies--babies placed in the routine newborn nursery and discharged with the mother.
3. Group instruction--a regularly scheduled class using the hospital protocol presented by the nurse researcher for all mothers on the unit who wished to breast feed.
4. Individual instruction--individual instruction using the hospital protocol presented by the nurse researcher in the mother's room.
5. Successful breast feeding--the mother continued breast feeding to her own satisfaction for

the 3 weeks of the study (Klein, 1983). Success was measured by a score of 40 points out of a possible 60 points on the Klien Breast-Feeding Questionnaire.

Limitations

The limitations of this study were:

1. Participants were from only one hospital in one geographic location; thus, the results may not be generalizable to other communities or individuals.
2. The patient population varied in terms of knowledge level regarding breast feeding and in terms of personal support and resources.
3. The study relied on information reported by the mothers to determine success at breast feeding.
4. Mothers may have received varying amounts of information and support from the other members of the nursing staff.

CHAPTER 2

REVIEW OF LITERATURE

This chapter presents a review of the information found in the literature related to breast feeding and instructional methods. The first section describes the benefits of breast feeding. The second area covered is the incidence of breast feeding. The third section discusses a variety of information regarding breast-feeding instructions. Fourth, the self-efficacy theory of Bandura (1978) and the effect on teaching are discussed. Finally, the relationship of self-efficacy theory and breast feeding instructions are considered.

Benefits of Breast Feeding

The American Academy of Pediatrics' Committee on Nutrition cited in Fleishman and Finberg (1979) has recommended that all full-term infants should be breast fed. This recommendation is based on the belief that breast milk is nutritionally superior to all infant formulas. Evidence of this superiority is seen in the fact that the large industrial suppliers

of formula use breast milk as the standard for the protein, fat, carbohydrate, vitamin, and mineral contents of infant formulas (Weinstein, 1980). Human milk has evolved over the history of mankind to the optimal food for human babies (Fleischman & Finberg, 1979; Riordan & Countryman, 1980a).

A wide range of clinical experiments have established the value of breast feeding in preventing gastroenteritis, respiratory tract infections, necrotizing enterocolitis, otitis media, shigella infections, hypocalcemia, hypernatremia, obesity, cow's milk allergy, asthma, and a variety of other diseases (Winikoff & Baer, 1980). At birth, the infant has an immature immune system and a poor ability to respond to invasion by foreign agents (Grams, 1978). The immunoglobulins present in colostrum and in mature breast milk are believed to play a significant role in preventing infections (Fallot, Boyd, & Oski, 1980). Human milk has been demonstrated to contain all of the five classes of immunoglobulins (Grams, 1978), the anti-infective enzyme Lysozyme, and other protective factors (Riordan & Countryman, 1980a). Numerous authors (Fallot et al., 1980; Grams, 1978; Neifert, 1978;

Riordan & Countryman, 1980a, Weinstein, 1980; Winikoff & Baer, 1980) concluded that breast feeding definitely reduces the incidence of infections in infants.

During the first 6 months of extra-uterine life, the infant's intestinal lining is immature and permeable to proteins (Riordan & Countryman, 1980a). Ingestion of foreign proteins, such as cow's milk, allows these proteins to pass through the intestinal wall and into the blood stream. The infant may then develop an allergy to the foreign protein. The incidence of allergy is believed to be decreased or even prevented by breast feeding for the first 6 months, which avoids the introduction of foreign protein until the infant's immune system matures (Chandler & Roush, 1982). Other types of allergic problems believed to be reduced or prevented by breast feeding include asthma, eczema, hay fever, and ulcerative colitis.

Breast feeding is an important, although not essential factor in the establishment of maternal-infant bonding (Klaus & Kennell, 1976). Klaus and Kennell described breast feeding as a subfactor in the reciprocal interaction portion

of their theory on maternal-infant bonding. Bonding can certainly occur without breast feeding, but it is slower and more difficult. Chandler and Roush (1982) stated that because breast-feeding mothers have earlier and more frequent contact with their infants, those mothers demonstrate more attachment behaviors. Wienstein (1980) asserted that a significant increase in in mother-infant bonding starts in the delivery room and continues through weaning. Beske and Garvis (1982) argued that the early maternal-infant contact may have important consequences for the total breast-feeding experience. Winikoff and Baer (1980) concluded from their survey of studies that early contact has a major effect on the success of breast feeding, and successful breast feeding is related to improved maternal-infant bonding. However, Lamb (1982) stated that there has been no scientific research to substantiate the concept of bonding.

Breast Feeding Incidence

Scientific evidence continues to provide increasing justification for promoting breast feeding (Winikoff & Baer, 1980). Infant nutrition experts, as well as groups

such as the American Academy of Pediatrics, have issued statements recommending breast feeding (Neifert, 1978). However, there is a wide discrepancy between the ideal, where all infants are breast fed for the first 6 months and the actual infant feeding practices in this country (Neifert, 1978). The percentage of mothers breast feeding has risen since the low point of 18% in the 60s, but the majority of mothers still opt for bottle feeding (Winikoff & Baer, 1980). Of the mothers who desire to breast feed, many discontinue within the first few days or weeks (Gulick, 1982). The major problems experienced in breast feeding reportedly occur in the first few days or weeks of breast feeding. The first 3-4 days are vitally important, perhaps even crucial to the new breast-feeding mother. Mothers who are poorly prepared in terms of information and support are most apt to be unsuccessful at breast feeding (Winikoff & Baer, 1980).

Breast Feeding Instructions

At one time, knowledge about breast feeding was common. Girls grew up watching others breast feed without difficulty. The "how to's" of breast feeding were learned socially (Nichols, 1978). Due to sociological factors,

such as the decline of the extended family and the strong anti-breast-feeding sentiment of the 50s and 60s, very few young women today have ever seen another woman breast feed a baby (Nichols, 1978; Wainwright, 1981). There is scientific evidence that providing information about breast feeding increases the percentage of new mothers who are successful at breast feeding (Gulick, 1982; Wiles, 1984). The pro-breast-feeding movement of 70s and 80s has emphasized teaching new mothers how to breast feed (Wiles, 1984).

Prenatal breast-feeding education has been studied as one method of increasing success rates of breast feeding. One study showed that women who attended prenatal breast-feeding classes were more frequently successful at breast feeding and perceived their infants in a more positive manner at 2 days and at 1 month after delivery (Wiles, 1984). In another study (Gulick, 1982) women who attended prenatal classes which contained breast-feeding instructions and who scored high on questionnaires testing knowledge about breast feeding, were also more frequently successful at breast feeding. Whitley (1978) found that women who had attended

attended prenatal classes with extra breast-feeding instructions breast fed longer than women who attended the same classes but chose not to attend the extra breast-feeding sessions. This may be due to some amount of self-selection; that is, that the women who attended the breast-feeding class were more dedicated to breast feeding than the other women were prior to attending classes. Teaching breast feeding in the prenatal class has the additional benefit of including the father. The father's support can be essential to the success of the nursing relationship (Leighton, 1978).

Frequently, the mother does not receive breast-feeding instructions until after the birth of her child. Many hospitals provide some form of breast-feeding classes on the postpartum ward (Winikoff & Baer, 1980). Whitley (1978) proposed that instructions provided in the immediate postpartum period are optimally tailored to the most appropriate time in the maternity cycle. Others (Winikoff & Baer, 1980) felt that breast-feeding instructions and support techniques are so interdependent that classes

should be taught during the postpartum period to be most effective. Weinstein (1980) asserted that new mothers must receive adequate support and instruction in the postpartum period to assure proper initiation into breast feeding.

Descriptions of breast-feeding classes dwell on two concepts, information and support. Studies found in the literature compare groups who receive information with groups who do not receive information (Winikoff & Baer, 1980). Whitley (1978) found that mothers who went to extra classes on breast feeding had a higher success rate than other mothers. Gulick (1982) found that mothers who went to extra classes and who scored high on tests of knowledge regarding breast feeding had higher success rates. Mothers who attended prenatal classes with extra information on breast feeding were more successful and perceived their infants in a more positive light at 2 days and at 1 month following delivery than mothers who did not attend classes (Wiles, 1984). Wainwright (1981) reported that mothers who received extra information had a 45% success rate at breast feeding as opposed to a 12% success rate among mothers who did not receive extra information.

Certainly providing information to mothers increases the chances of successful breast feeding.

The support aspect of helping new mothers is not as well-documented in studies. Winikoff and Baer (1980) reported one study where breast-feeding classes favored a longer duration of nursing, due to extra support and encouragement provided in the classes. The authors further stated that support and information must go hand-in-hand, one will not work without the other. La Leche League is considered to be valuable to mothers as much for the group support it provides as for the information aspect (Riordan & Countryman, 1980b). Whitley (1978) acknowledged that the peer support that the women received from other breast-feeding mothers probably accounts for some of the differences found in her study. Grassley and Davis (1978) included as goals for their breast feeding classes; (a) to provide a supportive environment and (b) to encourage support relationships among the mothers. Fitzsimons Army Medical Center in Denver, Colorado included in its pediatric program a group discussion session for breast-feeding mothers which is very popular (Selby, 1977). Support is believed by many to influence

successful breast feeding but the scientific evidence is scarce.

Self-efficacy Theory

Bandura (1978) presented a theory of behavioral change titled self-efficacy. Bandura postulated that individuals achieve according to what they expect to achieve and further stated that there are four ways of changing an individual's expectations and, therefore, their achievement levels. The four ways are: (a) the individual's own accomplishments, (b) observing other's accomplishments, (c) verbal encouragement, and (d) emotional conditions. Bandura stated that increasing a person's self-expectation through these four methods will in turn increase the person's ability to achieve the desired goal (Bandura, 1978).

The original research (Bandura, 1978) done with this theory involved teaching phobics to overcome their fears of snakes. Participants were observed to significantly increase their ability to handle a snake following role modeling and participant modeling. The self-efficacy theory has been studied in relation to maintaining behavioral changes (Marlatt & Gordon, 1980), and has been studied most in relation

to alcoholics and their continued abstinence after treatment. Greater belief in the alcoholic's own ability to "stay on the wagon" proved to be related to continued abstinence (Nathan, 1980). Rollnick (1982) also referred to Bandura's theory to explain why some treatment methods for alcoholism might be more effective than others. However, Smedslund (1978) stated that Bandura's theory may be logical but is not empirically testable. Smedslund felt that the concept of self-efficacy makes sense but is impossible to test due to all the intervening variables.

A study by Avant (1981) found that a high level of anxiety affects maternal-infant attachment. Attachment and successful breast feeding have been found to be related (Wiles, 1984). Gulick (1982) maintained that an environment which provides no support to the would-be breast feeder might cause stresses that would lead to an unsuccessful breast-feeding experience.

Very few new mothers receive much support from other mothers (Beske & Garvis, 1982); however, those who receive peer support from other mothers tend to be more successful at breast feeding (Whitley, 1978). The lack of breast-feeding role models has contributed to the low

rate of breast-feeding successes in this country (Schlegel, 1983). In one study, most mothers stated that it would have been useful to have seen another mother successfully breast feed her baby (Wainwright, 1981). Weinstein (1980) stated that most breast-feeding failures that do occur are secondary to a lack of confidence and knowledge about breast feeding. Bandura proposed that instructions provided in a group setting which provides role modeling and/or participant modeling serves to decrease anxiety and to enhance the participant's expectations of success (Bandura 1978). Borovies (1984) agreed that group settings generate peer support but argues that individual sessions are probably more effective.

Summary

Breast feeding is recognized to be the optimal method of infant feeding. Breast feeding provides nutritional as well as immunological benefits to babies and is also believed by many to enhance the maternal infant bonding process. Despite these advantages, few women try to breast feed, and many who try are unsuccessful. A variety of methods of instructions about breast feeding have been used on expectant mothers and newly-delivered mothers.

Most studies show that increasing the mother's knowledge increases her chance of success at breast feeding. Many authors feel that knowledge must be accompanied by support. Bandura's self-efficacy theory provides a theoretical framework for providing support. Bandura showed how role and/or participant modeling can decrease anxiety and increase self-efficacy expectations and theorized that high expectations lead to success.

CHAPTER 3

PROCEDURE FOR THE COLLECTION AND TREATMENT OF DATA

The study used a quasi-experimental, two-group posttest only research design. The study was quasi-experimental because it failed to control for the initial equivalence between the two groups and the many possible extraneous factors (Polit & Hungler, 1983). The independent variables were the individual and group instructions about breast feeding for new mothers, and the dependent variable was the rate of success at sustaining breast feeding for at least 3 weeks. The research setting, population and sample, protection of human subjects, instrumentation, data collection, and treatment of data are described in the remainder of this chapter.

Setting

The setting for the study was a private hospital in an affluent suburb of a large metropolitan area in the southwestern part of the United States. Multiple settings within the hospital were used. The first sample

received group instructions in a small pleasantly furnished classroom adjacent to the nursery. The second sample received individual instruction in their hospital rooms. Mothers in semi-private rooms had the curtains closed around their beds. The mailed questionnaires were completed wherever the participant chose.

Population and Sampling

The population consisted of 44 primiparous mothers who delivered full-term healthy babies at the hospital where the study was conducted. The sample consisted of 33 primiparous mothers who delivered full-term healthy babies at this hospital during the timeframe of the study who received breast feeding instructions from the nurse researcher, and who returned the questionnaires. The sample was chosen by convenience sampling. The 8-week timeframe of the study was divided into 1 week periods. Four slips of paper marked "group" and four slips of paper marked "individual" were placed in a hat. Each week was randomly assigned to either group instruction or individual instruction by drawing slips marked "group" or "individual" from a hat. All mothers who delivered in any 1 week were offered the

information from the breast-feeding protocol of the hospital and the method of instruction in use that week. A minimum of 15 participants were obtained in each group.

Protection of Human Subjects

Written permission was obtained from Texas Woman's University graduate school (Appendix A). The study was in compliance with Category 1 of the risk categories of the Federal Register, 1981, and did not necessitate full committee review. Written permission was obtained from the hospital to conduct the research (Appendix B). Privacy of the participants was protected, and confidentiality was maintained. Questionnaires were marked "group" or "individual". No names appeared on the questionnaires or in the study, and all personal records were destroyed at the end of the study. The statement "I understand that the return of this questionnaire constitutes informed consent to act as a subject in this research" was typed on each questionnaire. Participants were informed of the purposes of the study and of the risks and the benefits involved in the study (Appendix C).

Instrument

The instrument used for this study was the 1983 Klein Breast Feeding Questionnaire (Appendix D), the use of which was granted by Klein (Appendix E). Part I of the questionnaire contained demographic data. Seven questions were asked in order to describe the population in terms of the sex of the baby, the mother's age, ethnic background, income level, educational level, whether or not the mother was breast fed as an infant, and whether or not the mother was working outside the home. Two additional questions were asked about the health of the mother and the baby.

Part II of the instrument investigated whether the mother who chose to breast feed her infant was successful in sustaining breast feeding for at least 3 weeks. This section of the questionnaire was composed of five questions regarding the frequency of breast feeding, the reason for supplementation, and whether the infant had a satisfactory weight gain. Each of the five questions was assigned a value, with the total possible score being 60 points. The scoring of each question was as follows:

Question 1: Are you still breast feeding your baby?
"Yes" answers received 10 points, "No" answers received

0 points.

Question 2: How many times a day do you breast feed your baby? Answers indicating any number of feedings per day received 10 points. Questionnaires with no feedings, as indicated by a "No" answer to question 1, received 0 points.

Question 3: Are you giving your baby any food or liquids? Answers that indicate breast milk and water only received 10 points. Answers indicating that babies received formula, juice, or solids received 0 points.

Question 4: Why did you begin feeding your baby the above item? Answers indicating "no supplement" or "right time" received 10 points. Answers indicating "inconvenience" received 5 points. Answers indicating "not enough breast milk" received 0 points.

Question 5: Is the baby growing/gaining weight to your satisfaction? "Yes" answers received 20 points, "No" answers received 0 points.

There was a possible total of 60 points for this instrument. A score of less than 40 was considered unsuccessful. A score of 40 or above was considered successful. This method of scoring is exactly as described in Klein's (1983) study. Klein stated that the instrument was designed and modified with the advice

of a panel of experts (1983). Klein further stated that face validity of the instrument was confirmed by the panel of experts composed of (a) a neonatologist, (b) an M.D. specializing in family medicine, and (c) a doctorally-prepared, professional breast-feeding consultant. The scoring system was evaluated and agreed upon by this panel of experts.

Data Collection

After permission was obtained from the agency and Texas Woman's University, the nurse researcher conducted breast-feeding instructions for the mothers who chose to breast feed their infants. The nurse researcher randomly assigned eight 1-week periods to either group instruction or individual instruction, with four of the 1-week periods randomly assigned to each setting. Instructions were provided on a regular basis during the study and were available to all breast-feeding mothers. All mothers who fit the sampling criteria were given an introductory letter and a verbal explanation of the study (Appendix F). Mothers were told that they could receive instruction without obligation and that they could withdraw from the study at any time up until they returned the questionnaires. Instructions for both groups and individuals was provided by the nurse researcher using

the hospital's protocol (Appendix G). The instructions provided for each of the subjects were the same.

Group instruction was provided in a small, private, pleasantly-furnished classroom adjacent to the nursery. Classes were held during a feeding time. Mothers could have their babies with them and were encouraged to breast feed in class.

Individual instruction was provided by the nurse researcher on a one-to-one basis. Teaching took place in the mother's room with the door closed and/or the curtains closed around the bed. Individual teaching also took place at a feeding time. The baby was in the room and the mother was encouraged to breast feed during the instruction period.

Names, addresses, and phone numbers were obtained during the first contact. The questionnaires were mailed to the participants approximately 21 days after the delivery. A cover letter (Appendix H) was included to ask for the mother's cooperation, and a stamped, self-addressed envelope was enclosed. Three days after the questionnaires were mailed, the researcher contacted the participants by telephone to remind them to return the questionnaires. No further contact were made, and no attempt was made to determine who did or did not

return the questionnaire. The list of names, addresses, and phone numbers was destroyed immediately after the study was completed.

Treatment of Data

Descriptive statistics were used to summarize the demographic variables. Demographic data included maternal age, ethnic background, income, education, whether or not the mother was breast fed as an infant, and whether or not the mother was working outside the home. The chi square test was used to determine if there was a significant difference in the success rate of breast feeding sustained for at least 3 weeks between women who received breast-feeding instructions in a group setting and women who received breast-feeding instructions individually. The .05 level of significance was used.

CHAPTER 4

ANALYSIS OF DATA

This study examined the breast feeding success rate of two independent groups. The Klein Breast Feeding Questionnaire was used as a tool to evaluate success or failure in establishing breast feeding in the first 3 weeks following delivery. The hospital's breast-feeding instructions were provided to new mothers in two different settings. The two independent groups studied were the mothers who received breast-feeding instructions in an individual setting and mothers who received breast-feeding instructions in a group setting. The hypothesis for the study was: There is a significant difference in the success rate of breast feeding in mothers who receive breast-feeding instructions individually as compared to mothers who receive breast-feeding instructions in a group setting.

Description of Sample

The 44 participants in the study were English-speaking women who just had their first baby

and expressed a desire to breast feed. The mothers had each had a normal vaginal birth of a full-term healthy baby. All mothers who received questionnaires met the criteria for the study.

A total of 44 questionnaires were mailed out. Twenty-four were mailed to subjects who received individual instructions, and 20 to subjects who received group instructions. Thirty-three usable questionnaires were returned. Eighteen (82%) questionnaires were returned by the individual teaching participants, and 15 (75%) questionnaires were returned by the group teaching participants.

The mothers who returned questionnaires ranged from 18 to 35 years of age, with the average age range of 26-30 years. The majority (8 or 24%) of the subjects who received individual instructions were in the 18-25 year age range; and the majority (9 or 27%) of those who received group instructions were in the 26-30 year age range. The average income was in the \$20-40,000 per year bracket. The majority (7 or 21% of those in individual teaching and 9 or 27% of those in group teaching) of the subjects' income levels were between \$20-40,000 per year. Thirty-two of the women were White and one was

Black. The subjects averaged 2-4 years of college education. The majority (14 or 42% who received individual teaching and 12 or 36% who received group teaching) of the subjects had 2-4 years of college education. Nineteen of the women had male infants, the other 14 had female infants. The majority (10 or 30%) of the subjects in group teaching had male infants. The subjects who received individual teaching had an equal number (9 or 27%) of each male and female infants. Eleven of the mothers had returned to work outside of the home at the time the questionnaires were completed and the other 22 mothers were not working outside of the home. Only 8 of the mothers were breast fed as infants. The remaining 25 were not breast fed. All mothers and babies were healthy at the time of the study.

Findings

The hypothesis; There will be a significant difference in the success rate of breast feeding in mothers who receive breast-feeding instructions in an individual setting as compared to mothers who receive breast-feeding instructions in a group setting, was tested using the chi-square test with one degree of

freedom. The values obtained were $\chi^2 = 0.435$, $p = 0.510$. The hypothesis was not supported by these findings, indicating that role and participant modeling do not influence the success rate of breast feeding.

An overall breast feeding success rate (defined as a score of 40 or better on the Klein Breast Feeding Questionnaire) was found to be 75%. The distribution of breast feeding success rates within the two groups is illustrated in Table 1.

Table 1

Distribution of Breast Feeding Success Rates in Individual Teaching Settings and in Group Teaching Settings

	<u>Individual Instruction</u>		<u>Group Instruction</u>	
	#	%	#	%
Successful	14	78	13	87
Unsuccessful	<u>4</u>	<u>22</u>	<u>2</u>	<u>13</u>
Total	18	100	15	100

Additional Findings

Some uncontrolled factors were included in the demographic section of the questionnaire. Statistical

analysis of the variables was run in order to evaluate whether or not any of these variables had an overriding influence on the results of the study. None of the demographic variables was found to have any statistically significant influence on the results of the study.

The data were analyzed according to the subjects' income level and breast-feeding success rate. This analysis indicated that the majority (8 or 24%) of the subjects who were successful at breast feeding received group teaching and were in the \$20-40,000 income level. The next largest group (7 or 21%) who were successful at breast feeding received individual instruction and were in the over \$40,000 income level. These data are reflected in Table 2.

Table 2

Breast Feeding Success as Related to Maternal Income

	<u>Successful</u>				<u>Unsuccessful</u>			
	<u>Individual</u>		<u>Group</u>		<u>Individual</u>		<u>Group</u>	
	#	%	#	%	#	%	#	%
\$10-20,000	1	3	0	0	1	3	2	6
\$20-40,000	6	18	8	24	1	3	0	0
Over \$40,000	7	21	5	15	2	6	0	0
	—	—	—	—	—	—	—	—
Total	14	42	13	39	4	12	2	6

The data were analyzed according to the subjects' educational level and breast-feeding success rate. The analyses indicated that the majority (7 or 21%) of the subjects who were found to be successful had from 2 to 4 years of college and received individual instructions. The next largest (6 or 18%) group who were successful at breast feeding had 4 years of college. These data are shown in Table 3.

Table 3

Breast Feeding Success as Related to Education

	<u>Successful</u>				<u>Unsuccessful</u>			
	<u>Individual</u>		<u>Group</u>		<u>Individual</u>		<u>Group</u>	
	#	%	#	%	#	%	#	%
12 years	1	3	1	3	1	3	1	3
Some College	7	21	5	15	3	9	0	0
4 years College	4	12	6	18	0	0	1	3
Grad School	2	6	1	3	0	0	0	0
	—	—	—	—	—	—	—	—
Total	14	42	13	39	4	12	2	6

The data were analyzed according to the subjects' age and breast-feeding success rate. This analysis indicated that the majority (8 or 24%) of the subjects who were successful at breast feeding and received individual teaching were in the 18-25 year age range. An equal number (8 or 24%) who were successful at breast feeding and received group teaching were in the 26-30 year age range. These data are reflected in Table 4.

Table 4

Breast Feeding Success as Related to Maternal Age

	<u>Successful</u>				<u>Unsuccessful</u>			
	<u>Individual</u>		<u>Group</u>		<u>Individual</u>		<u>Group</u>	
	#	%	#	%	#	%	#	%
18-25 years	8	24	4	12	1	3	1	3
26-30 years	4	12	8	24	3	9	1	3
31-35 years	2	6	1	3	0	0	0	0
	—	—	—	—	—	—	—	—
Total	14	42	13	39	4	12	2	6

Table 5 shows the ethnic background of the participants. The majority of the subjects were White.

Table 5

Breast Feeding Success as Related to Ethnic Group

	<u>Successful</u>				<u>Unsuccessful</u>			
	<u>Individual</u>		<u>Group</u>		<u>Individual</u>		<u>Group</u>	
	#	%	#	%	#	%	#	%
White	14	42	13	39	4	12	1	3
Black	0	0	0	0	0	0	1	3
	—	—	—	—	—	—	—	—
Total	14	42	13	39	4	12	2	6

The data were analyzed according to whether or not the mother was employed outside of the home at the time the questionnaire was filled out and the breast feeding success rate. The questionnaires were sent to the subjects to be filled out when the baby was three weeks old. The majority (10 or 30%) of the subjects who were successful at breast feeding received group instructions and were unemployed. The next largest group (9 or 27%) who were successful at breast feeding, received individual instructions and were unemployed. Table 6 shows the employment status of the mothers.

Table 6
Breast Feeding Success as Related to
Maternal Employment Status

	<u>Successful</u>				<u>Unsuccessful</u>			
	<u>Individual</u>		<u>Group</u>		<u>Individual</u>		<u>Group</u>	
	#	%	#	%	#	%	#	%
employed	5	15	3	9	2	6	1	3
unemployed	9	27	10	30	2	6	1	3
	—	—	—	—	—	—	—	—
Total	14	42	13	39	4	12	2	6

The data were analyzed according to whether the mother was breast fed as a baby and breast feeding success rate. Eight of the subjects reported that they had been breast fed as an infant, the remaining 25 subjects denied having been breast fed. The majority (10 or 30%) of the subjects who were successful at breast feeding received group instructions and were not breast fed as infants. The next largest (9 or 27%) group who were successful at breast feeding received individual instructions and were not breast fed as infants. The data is reflected in Table 7.

Table 7

Breast Feeding Success Rate As Related To Whether
The Mother Was Breast Fed As Baby

	<u>Successful</u>				<u>Unsuccessful</u>			
	<u>Individual</u>		<u>Group</u>		<u>Individual</u>		<u>Group</u>	
	#	%	#	%	#	%	#	%
Yes	5	15	3	9	0	0	1	3
No	9	27	10	30	4	12	1	3
	—	—	—	—	—	—	—	—
Total	14	42	13	39	4	12	2	3

The data was analyzed according to the sex of the infant and breast feeding success rate. Nineteen of the infants born to participants were males, and 14 of the infants were females. The majority of the subjects (9 or 27%) who were successful at breast feeding received group teaching and had male infants. The next largest group (8 or 24%) who were successful at breast feeding received individual teaching and had female infants. These data are reflected in Table 8.

Table 8

Breast Feeding Success as Related to
The Sex of the Infants

	<u>Successful</u>				<u>Unsuccessful</u>			
	<u>Individual</u>		<u>Group</u>		<u>Individual</u>		<u>Group</u>	
	#	%	#	%	#	%	#	%
Boy	6	18	9	27	3	6	1	3
Girl	8	24	4	12	1	3	1	7
	—	—	—	—	—	—	—	—
Total	14	42	13	39	4	12	2	6

Summary of Findings

A study was conducted over an 8-week time period to compare the breast-feeding success rate of mothers who received individual instructions and mothers who received group instructions. Forty-two eligible subjects agreed to participate in the study, and were sent questionnaires 3 weeks following delivery of their infant. Twenty-two of the participants received individual instructions, and 20 received group instructions. A 75% response rate yielded 33 questionnaires. The overall success rate was 82%. None of the sociological variables included in the questionnaire were found to have a significant influence on the outcome of the study.

A chi-square analysis was done on the Texas Woman's University computer. Although the group instruction method had a higher percentage of breast feeding successes, a statistically significant difference between the two groups did not exist. The hypothesis was not supported.

CHAPTER 5

SUMMARY OF THE STUDY

This study has considered the rate of success at breast feeding. The study investigated the concept of improving success rate by providing breast feeding instructions in a group setting. The hypothesis for the study was: There is a significant difference in the success rate of breast feeding in mothers who receive breast feeding instructions individually as compared to mothers who receive breast feeding instructions in a group setting.

Summary

Breast feeding is recognized as the optimal method of infant feeding. The nutritional and immunological benefits of breast feeding are well-documented. Breast feeding is believed by some to enhance maternal-infant bonding. Health care professionals have a duty to assist mothers who choose to breast feed their infants. Most researchers advocate providing information and support to breast-feeding mothers.

The question addressed by this study was: Is there a difference in the success rate of women who receive breast-feeding instructions individually as compared to women who receive breast feeding instructions in a group setting. Bandura's (1978) self-efficacy theory was utilized to identify factors which would affect the mother's belief in her ability to breast feed. Increasing the mother's self-confidence and expectations of success should increase the success rate of breast feeding. Providing breast-feeding instructions in a group setting could provide some role modeling and could reduce anxiety.

The setting utilized was a 350-bed community hospital which delivers 2,500 babies annually. Two independent convenience samples were chosen. One group of mothers received the hospital's breast-feeding instructions individually. The other group received the same breast-feeding instructions but in group settings. Both samples completed a questionnaire approximately 3 weeks after delivery. The questionnaire determined the success or lack of success at breast feeding.

Discussion of Findings

The hypothesis was not supported by the findings of the study. The mothers who attended group breast feeding instructions had a higher percentage of successes, but the finding was not statistically significant. The mothers in this study had a higher-than-average income and educational level, so it is reasonable to assume that their self-efficacy expectations may have been high prior to the instructions. Winikoff and Baer (1980) reported higher success rates among higher socioeconomic groups, which could also be related to high expectations. Klein (1984) stated that groups with high breast-feeding success rates cannot be expected to show as great a change when an intervention is applied as groups with low success rates.

There was a high overall breast feeding success rate and a high socioeconomic level of the participants. Seventy-five percent of all participants were successful. The average income was above \$26,000 and the average educational level was 2-4 years of college. These findings agree with those of Winikoff and Baer (1980) and Gulick (1982) that high socioeconomic levels are related to high rates of success at breast feeding.

Additional Findings

Numerous sociological factors have been reported to influence breast feeding success in previous studies found in the literature. Some of these factors such as parity and type of delivery were controlled by the criteria for the samples. Some uncontrolled factors were included in the demographic section of the questionnaire.

Beske and Garvis (1982) asserted that the level of education a mother has achieved and the rate of success at breast feeding are related. Winikoff and Baer (1980) reported that higher income levels and higher educational levels are related to higher breast-feeding success rates. The review of Winikoff and Baer's study also stated that while some evidence on demographic factors is contradictory, higher socioeconomic level, maternal age above 25 years and having been breast fed do seem to correlate with breast-feeding success. The sex of the infant is another variable which may affect the success of breast feeding. Numerous authors (Niefert, 1978; Riordan & Countryman, 1980b; Winikoff & Baer, 1980) related breast-feeding failures to the mother being employed outside the home.

Conclusions and Implications

The conclusions which can be drawn from this study are:

1. Role and participant modeling did not significantly influence breast feeding success in new mothers.

2. The vicarious experience of the group participants did not significantly influence breast-feeding success in new mothers.

3. The overall breast feeding success rate of 75% is higher than noted in most of the similar studies found in the literature.

The nursing implications derived from this study are:

1. Mothers in the community of the study do not seem to gain any significant benefit from either setting, individual or group, for breast-feeding instructions. Group instruction, while it is not significantly more effective, is cheaper and a more efficient use of nursing time. There is no evidence that group instruction is any less effective than individual instruction.

2. Mothers in an affluent community may have higher success rates than mothers in less affluent

communities regardless of interventions. Thus, studies such as this one might obtain clearer data in a lower socioeconomic community.

Recommendations

The following recommendations for future studies are suggested:

1. A study be designed using a larger sample to evaluate individual or group instructions on the rate of success at breast feeding.

2. A study similar to this be conducted using a population with a lower socioeconomic level to determine rate of success at breast feeding.

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APPENDIX A

Texas Woman's University Permission

TWU  Texas Woman's University
P.O. Box 22479, Denton, Texas 76204 (817) 383-2302, Metro 434-1757, Tex-An 834-2133
THE GRADUATE SCHOOL

May 22, 1985

Ms. Anita Patton-McHaney
1517 Coffeyville Trail
Plano, TX 75203

Dear Ms. Patton-McHaney:

I have received and approved the Prospectus for your research project. Best wishes to you in the research and writing of your project.

Sincerely yours,

Leslie M. Thompson IV
Leslie M. Thompson
Provost

tb

cc Dr. Oneida Hughes
Dr. Anne Gudmundsen

APPENDIX B

Agency Permission

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE _____

GRANTS TO Anita Patton-McHaney R.N., B.S.
a student enrolled in a program of nursing leading to a
Master's Degree at Texas Woman's University, the privilege
of its facilities in order to study the following
problem.

Breast Feeding Success Rate: Group Instruction Vs
Individual Instruction

The conditions mutually agreed upon are as follows:

1. The agency (may) (may not) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) (may not) be identified in the final report.
3. The agency (wants) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) (unwilling) to allow the completed report to be circulated through interlibrary loan.
5. Other Request copy of final thesis

3-2-85 Ursula Henrich, RN
Date Signature of Agency Personnel
Anita Patton-McHaney Anita M. Henrich
Signature of Student Signature of Faculty Advisor

*Fill out & sign 3 copies to be distributed: Original-student; 1st copy-Agency; 2nd copy-TWU School of Nursing

APPENDIX C

Introductory Letter

Dear Participant,

I am involved in a study to evaluate the success rate of breast feeding following special instruction, and I am asking for your help.

You will not receive any pay or compensation for participating, but you may feel some satisfaction in knowing that you are helping with this study. The goals for the study are to identify and clarify ways in which the hospital nurse can help the mother/infant pair develop a good breast-feeding relationship.

There are two parts to the study which affect you:

1. You will be provided instructions about breast feeding by an R.N. after your baby is born. These instructions will take 30-45 minutes.

2. When your baby is 3 weeks old, you will receive a short questionnaire in the mail. You will be asked to spend 5-10 minutes to fill it out and return it in the stamped, self-addressed envelope enclosed.

All questionnaires will be handled anonymously, and results will be compiled without any attempt to identify the participants. Some descriptive questions are included to help identify other factors which may contribute to the success of breast feeding. Please do not answer any question that you feel is too personal. Your return of the questionnaire will be interpreted as informed consent to participate in this study.

If you wish any further information regarding this study, I will be happy to answer your questions.

Thank you very much for participating.

Sincerely,

Anita Patton-McHaney, B.S., R.N.
Graduate Student
Texas Woman's University

APPENDIX D

Klein Breast Feeding Questionnaire

COMPLETION AND RETURN OF THIS QUESTIONNAIRE WILL BE
CONSTRUED AS INFORMED CONSENT TO SERVE AS A SUBJECT
IN THIS STUDY

Klein Breast Feeding Questionnaire

Today's date _____ Baby's birth date _____

Group instruction _____ Individual instruction _____

PLEASE CHECK THE CORRECT ANSWER

1. Are you still breast-feeding your baby?
☐ Yes
☐ No
2. How many times a day do you breast-feed your baby?
☐ 1 time
☐ 2 times
☐ 3 times
☐ 4 times
☐ more
3. Are you giving your baby any other foods or liquids?
☐ breast milk only
☐ water
☐ formula
☐ juices
☐ solids
☐ other _____
4. Why did you begin feeding your baby the above items? CHECK ONE ANSWER ONLY
☐ It was the right time to start, the baby was old enough.
☐ I didn't have enough breast milk.
☐ It was too inconvenient to breast feed all the time.
5. Is your baby growing and gaining weight to your satisfaction?
☐ Yes
☐ No

- IF YOU HAVE ANY ADDITIONAL COMMENTS, PLEASE USE THE BACK OF THIS PAPER.

APPENDIX E

Letter of Permission to use Questionnaire

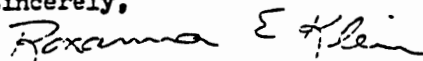
606 Misty Glen
Dallas, Texas 75232
July 28, 1984

Anita Patton-McHaney
1517 Coffeyville Trail
Plano, Texas 75203

Dear Anita,

I hereby grant my permission for you to use the questionnaire which I developed to measure success in breast feeding. I understand that you will refer to the questionnaire as the Klein Breast Feeding Questionnaire.

Sincerely,


Roxanna Klein, B.S.N., M.S.

APPENDIX F

Verbal Explanation to Subjects

VERBAL EXPLANATION TO SUBJECTS

Hello, my name is Anita Patton-McHaney, and I am a graduate student at Texas Woman's University. I am conducting a study regarding breast feeding. Your name is on the list of breast-feeding mothers so I am here to ask you if you will participate in my study.

This letter explains what I am doing, and you may keep the letter to refer to. I am offering the instruction to all breast feeding mothers without any obligation on your part. You do not have to fill out the questionnaire unless you so desire. You can drop out of the study at any time until you mail the questionnaire. There will not be any identification on the questionnaires so I cannot give them back to you.

The question being investigated here is: What is the best setting for teaching mothers about breast feeding, in a group or individually? The information provided is exactly the same for both. The teaching this week is being done in (a group) (an individual) setting.

If you would like to see the questionnaire before you decide, I have one with me. I will leave this letter for you to read, and I will check with you in 30 minutes.

APPENDIX G
Hospital Teaching Guidelines

GUIDELINES FOR PATIENT TEACHING - NURSERY

Feeding

Make a note if breast or formula feeding.

Schedule and/or Demand

Feedings are usually a combination of schedule and demand to meet the needs of both mother and baby. Formula-fed babies are usually hungry 3-5 hours after a previous feeding. Breast-fed babies often need to be fed more frequently than formula babies, especially in the beginning while the mother's milk supply is being built up and at intervals later on when the baby is having a growth spurt. Breast milk is digested more quickly than formula. Breast babies may be hungry 2-4 hours after the previous feeding.

Position During and After Feeding

Hold the baby with his head up and his back comfortably straight, head aligned with his body, the chin neither flexed on his chest nor neck hyperextended. If the mother and baby are lying on side, place the baby's mouth slightly below the nipple so the baby will raise his head and reach for the nipple. After the feeding

always position the baby on his stomach or on his side with a roll at his back to keep him there. He is less apt to choke in either of these positions if he spits up any of the feeding.

Burping

Burp the baby at the middle and end of each feeding, more often if necessary, for example, if the baby is very hungry and takes his feeding so eagerly at the beginning that he gulps it, he may swallow more air, and burping him sooner will help him get rid of it and may slow him down a little. Positions:

(a) Hold him over your shoulder.

(b) Sit him on your lap, with one hand supporting his head, by supporting his chin and upper chest. You can rub his back with your other hand.

(c) lay him on his abdomen across your lap. Some mothers find that this position helps to soothe a fussy baby.

The position the mother chooses does not matter, if one does not work try another. The idea is to have him have his back straight (not curled up in a ball) the way an adult instinctively does in order to belch.

Choking Intervention

Turn the baby on his side with his head slightly downward, and pat him on the back to help dislodge whatever is blocking his airway. Suction his mouth and/or nose with the bulb syringe if indicated, clear the mouth first.

Use of the Bulb Syringe

The bulb syringe may be used to aspirate secretions from the mouth and/or nose. Compress the bulb to remove the air from it BEFORE the tip is placed in the baby's mouth or nose. Insert the tip into the secretions, not pressed against mucus membranes, and release the pressure on the bulb. This will aspirate the secretions, then expel the contents onto a diaper, paper towel, etc., and repeat if necessary. Clean out the mouth first.

Be aware of keeping the syringe clean, a dishwasher can't get clean inside that narrow tip. Squish warm soapy water in and out of it, rinse thoroughly, and allow to dry. Remember that a bulb syringe is contaminated if it falls on the floor or any other dirty area. Bulb syringes are very inexpensive and should be replaced frequently.

Breast Feeding

Position/offering the Breast

1. It's important for the mother to be comfortable and relaxed while she is breast feeding, whether she is lying down, sitting up in bed, or sitting in a chair. Her arms may be more comfortable and therefore, more relaxed if they are supported by pillows or the arms of the chair. She may be more relaxed with her feet up or on a stool so that there is no strain on the lower back. A rocking chair can be relaxing for both mother and baby.

2. When the baby is put to breast, his whole body is turned toward the mother, not just the head. The phrase "belly to belly" has been used to describe the positioning. Demonstrate football hold. Demonstrate C hold with hand and V hold with hand.

3. The baby needs to take a sufficient amount of the areola into his mouth that he will not suck only on the tip of the nipple. To do this, he needs to open his mouth widely enough to accommodate nipple and areola. Sometimes a baby can be encouraged to open his mouth more widely by lightly touching his lips with the nipple, from the upper lip to the lower lip.

4. The baby needs to be able to breathe through his nose while nursing. Be sure his nose is not pressed against the breast tissue, the mother may make a little breathing space for him by slightly pressing the breast tissue just in front of his nose down and towards his mouth. Or sometimes just holding him in a slightly altered manner tilts the head so that his nose is clear of the breast while he nurses.

Frequency and Length

1. Varies according to baby's needs.
2. In the beginning many mothers find it helpful in preventing sore nipples if the length of time the baby nurses at each breast at each feeding is increased gradually. For example, beginning with about 2-3 minutes on each side at each feeding on the day of birth and increasing the time by about 2-3 minutes each day following, to a maximum of about 10-15 minutes on each side at each feeding. If the nipples do become sore, sometimes it is helpful to decrease the length of feeding but increase the frequency.

Other Points

1. Check with the pediatrician regarding his/her advice about offering the baby water after going home.

2. For her own feeling of well-being, the mother needs a well-balanced, nutritious diet and fluids to satisfy her thirst.

3. Rest is very important. The mother needs time to rest, relax, and perhaps nap during the day while her sleep is being broken at night for feedings.

4. The mother should nurse the baby on both breasts at each feeding. A safety pin in the bra strap on the side the baby finished on helps some mothers remember which to start on. Since the first breast is usually emptied more completely than the second, alternating the side started on helps stimulate both equally and helps the mother to be more comfortable.

Breast Care

Remember, the breast is not dirty, hands are dirty! Wash hands before cleansing the breast. Rinse the nipples off with plain water using a cotton ball. Avoid soap on the nipples while in the shower. To rinse the nipples, use a circular motion beginning at the tip of the nipple and moving back toward the chest wall so that bacteria is not brought from the skin further away to the open ducts at the tip of the nipple. Air drying the nipples after the feeding helps in preventing and

treating sore (chapped) nipples. If breast cream is used, apply it after the nipple has air dried. Use only a very thin coat. Breast cream over moist skin traps the moisture and allows bacterial growth.

For the first 2-4 days after birth the breasts have colostrum, a golden or straw colored fluid. It is good food for the baby as it contains protein, vitamins, and substances to help protect the baby from infection. After 2-4 days the "milk" comes in. Human milk looks thin and bluish at first, not like cow's milk. Later on it will look richer in appearance.

The mother may wish to waken the baby for feeding if he sleeps more than 4 to 5 hours during the day, but let him sleep at night unless instructed to awaken him by the doctor. It helps if the baby learns to be awake during the day when the rest of the family is awake.

An occasional bottle of formula is okay; however, if supplementary formula is given often, especially in the first few weeks, it may delay the building up of the mother's milk supply and babies can learn that it is easier to take milk from the bottle than from the breast. Instead of supplementary formula, the mother may wish to express breast milk into a sterile container (plastic is preferable to glass) ahead of time, chill it

immediately, and refrigerate it if it will be used within 24 hours or freeze it if it is to be saved longer. Breast milk may be frozen for 1 month, label the container with a date. Just before using, the milk should be brought to room temperature by setting the bottle in warm water. Do not use a microwave oven.

In trying to assess the adequacy of the breast-fed baby's intake, watch for 6-8 wet diapers in a 24-hour period.

APPENDIX H

Follow up letter

Dear Participant,

I am sure that you are very busy getting adjusted to your new baby. I would like to ask you to spend 5-10 minutes to fill out the questionnaire that we discussed while you were in the hospital. Please return it as soon as possible in the stamped, self-addressed envelope which is have enclosed. Your cooperation will help nurses learn more about helping new mothers who want to breast feed. Thank you very much.

Sincerely,

Anita Patton-McHaney, B.S., R.N.
Graduate Student
Texas Woman's University