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AN EVALUATION OF POSTPARTUM TEACHING

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ABSTRACT

AN EVALUATION OF POSTPARTUM TEACHING

by Judith A. Bamber

This thesis evaluates both new mothers' retention and application of information taught by nurses. A telephone survey was used to collect data from a group of 26 first time mothers. Each woman had a normal vaginal delivery.

Content areas that were most frequently recalled were: (a) breastfeeding, (b) self care, and (c) infant hygiene. The women also stated that they found the knowledge gained in these three areas to be applicable or helpful in the postpartum period.

Women were also asked about other sources of postpartum information. They frequently described written materials and family and friends as sources of information. The most frequent selections of teaching method were in-hospital teaching by a nurse and written materials. The most frequent second choices were postpartum classes and a phone call from a nurse.

Review of the data suggests content and methods for postpartum teaching. Suggestions for further research are also indicated.

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To the families who participated in the study and to the nursing staff and administration who so graciously cooperated.

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Chapter One

INTRODUCTION

The postpartum period is one of transition. Transition periods can be times of stress, crisis, or disequilibrium for some individuals, and may require special support and adaptation. Giving birth has been described as both a maturational crisis (Tilden, 1980) and as a life transition (Hobbs & Cole, 1976). Pregnancy and birth are events that bring many changes in a short period of time. There are biological changes, psychological changes, role changes, and changes in family relationships (Rubin, 1961; Tilden, 1980). One change during pregnancy is from the role of pregnant woman to the role of mother (Mercer, 1981a). This requires acquisition of new knowledge. The new mother must learn about infant needs, infant care, and the growth and development of a baby. She is also changing stages in life, from the stage of pregnancy to the postpartum stage. This change requires knowledge about self care and expected physical and emotional changes (Ludington-Hoe, 1977; Mercer, 1981b). Therefore, the new mother finds herself in the middle of a significant life transition, attempting to acquire new knowledge that will help her in the care of her infant and herself.

When a woman is ready to give birth, she usually enters a hospital. During the last two decades, the postpartum

stay was three to four days. The current stay is two days or less. Women often leave the hospital within 24 hours after delivery (Hampson, 1989). During this period, nurses are challenged to provide education which will be relevant to the needs of the new mother as her role and her body are changing.

Postpartum teaching consumes a major portion of nursing time. Nurses employ different teaching techniques, such as audio-visual presentations, written information, and classroom activities, but much of the teaching is done one-to-one. However, the current nursing shortage demands that care be delivered in the most efficient and cost-effective way possible. With these considerations in mind, nurses must determine the best way to teach new mothers the information necessary to care for themselves and their infants. Nurses need to evaluate the retention and application of this information during the postpartum period.

Purpose and Research Questions

The purpose of this study was to evaluate the postpartum teaching program of a local community hospital. The chosen hospital is typical of middle-class community hospitals in that the population served is of middle-range socioeconomic status. The postpartum teaching program was evaluated in terms of the stated educational needs of the

postpartum women themselves.

The questions that this research attempted to answer are:

1. Do primiparous women, who have had a term vaginal delivery, recall the nurse's discussion of topics of postpartum teaching?

2. Did these new mothers find the nurse's teaching beneficial?

3. What other areas of teaching would have been helpful to these women?

4. What other sources of information about postpartum topics did these women have?

5. What other means of receiving postpartum teaching would be beneficial to these new mothers?

Definition of Terms

Terms used in this research project are defined as follows:

1. Postpartum: the first four weeks following the delivery of a baby.

2. Primipara: a woman who has delivered one viable infant.

3. Term: 37 to 42 weeks of gestation.

4. Postpartum teaching/education: information regarding care of self or the infant in the postpartum period.

Significance

Evaluation of the effectiveness of nurses' educational efforts is significant for several reasons. Such evaluation may determine whether or not the postpartum woman has received the information necessary for self and infant care. If nursing interventions using the current teaching program have accomplished this goal, the nurse's time and effort can be judged to be productive. However, if the evaluation indicates that postpartum education has been ineffective or irrelevant, nurses may need to devise new and creative ways to educate women during the postpartum time period.

Research Design

This study used a telephone survey design. Participants were primiparous women who had a vaginal delivery at term. Telephone interviews were conducted in order to investigate the educational needs and interests of the participants. Each participant was asked to verbalize opinions and thoughts about several areas relating to postpartum education. These questions elicited information about the education actually received by the participant as well as areas that she wished had been covered. She was also asked about teaching strategies that have been or might have been helpful.

Chapter Two will review the related literature and present a conceptual framework. Chapter Three will provide

the reader with the details of the methodology of the study. Chapter Four will include analysis and interpretation of the findings. Chapter Five will present conclusions and recommendations.

Chapter Two

RELATED LITERATURE AND CONCEPTUAL FRAMEWORK

Introduction

This chapter provides the background and theoretical framework for the study. Several elements relating to postpartum education are discussed in this review of the literature. The first part addresses the transition to parenthood as a maturational event. The second area addresses the specific demands of the role of motherhood, including the changes caused by the birth process and termination of pregnancy. This section also identifies maternal concerns. The third section addresses the educational techniques and nursing interventions used to accomplish postpartum teaching. A conceptual model that includes these three elements is presented in this literature review.

Transition to Parenthood

The birth process brings with it the new status of parenthood. This transition, from a relationship that does not include children to one that does, initiates many changes. Silverman (1982) describes transition as a disequilibrating event, or series of events, where role change is involved. This description is appropriate for the transition to parenthood. Pregnancy and birth qualify as

disequilibrating events that involve role change. This role change takes place during pregnancy and in the postpartum period (Mercer, 1981a, 1985).

This transition period includes three adaptive phases (Silverman, 1982). These are: (a) the impact phase, (b) the recoil phase, and (c) the phase of accommodation. When a transition first impacts a person, an initial period of numbness occurs. As a person grows to recognize the reality of the change, the recoil phase is entered, bringing increased tension, anxiety, or frustration. The phase of accommodation begins only after one is able to change personal assumptions, which affect one's personal identity.

Tilden (1980) lists some of the key facets of pregnancy that involve change. First, the biological aspect of pregnancy brings profound physiologic changes resulting in altered endocrine and systemic function. The change in body size also leads to readjustment of one's body image. Second, psychologic processes are altered and certain ego functions may be affected. Pregnant women or couples often reevaluate relationships with their own parents. In doing this, long held views of reality may change. This relates to a third change, that of social relationships. Pregnancy influences interpersonal relationships and social roles. Changes often result in these relationships. All of these changes that occur during pregnancy may continue into the

postpartum period and parenthood.

McCubbin and Figley (1983) discuss changes that are required in family life when parenthood happens. If maladjustment occurs during the transition to parenthood crisis results and adaptation is necessary. This requires restructuring and consolidation of the family as a new unit.

Many authors have examined the process of parenting. LeMasters (1957) found that 83% of new parent couples reported moderate or extreme stress during the first year of parenthood. LeMasters concluded that new parents lack sufficient preparation for the strains of having a family. This idea was echoed by Gilberg (1975), who stated, "Few rites of passage in life bear the import that comes with the decision to raise children, yet society in general has not created institutions to facilitate this monumental change in life-style" (p. 60).

These changes in life-style seem to affect many marriages or relationships. Belsky, Spanier, and Rovine (1983) studied 72 couples from the last month of pregnancy through the ninth postpartum month. They found that the birth of an infant has a general negative impact on the marital relationship, particularly when the partners had not ranked themselves high in marital functioning during the last trimester of pregnancy or first month postpartum. Cowan and Cowan (1986) concluded that the transition to

parenthood causes couples to experience shifts in their sense of self, their role arrangements, their communication patterns, their relationships with their own families, and their life stress and support systems outside their own relationship as a couple.

After studying gender differences related to the transition to parenthood, Cowan et al (1985) concluded that men and women come to parenting at different rates and by different paths. A woman's transition is more radical and requires a significantly larger personal commitment to infant and self care. A man first experiences changes in his role as a provider. Later he becomes more involved in child care responsibilities. In addition, they experience mutual changes during this transition. Both men and women experience an expansion of themselves as parents along with a diminution of themselves as partners and lovers. In general, marital conflict increases. Partners are challenged to work together closely in order to enhance adaptation and decrease distress during this transition to parenthood.

Postpartum instruction needs to be responsive to the stressful changes involved in the transition to parenthood. Couples need to recognize these changes and be willing to restructure their relationship to adapt to the requirements of parenthood.

The Maternal Role

Once the birth of an infant has occurred, the mother must make a transition to the maternal role. Attainment of the maternal role is marked by completion of certain tasks in certain phases (Rubin, 1961; Mercer, 1981a, 1981b, 1985).

Rubin wrote her hallmark article "Puerperal Change" in 1961. This work has been accepted and referred to throughout the postpartum literature. Rubin sets the stage for understanding postpartum change by describing the puerperium (the immediate postpartum period) as a "complex state of the childbearing experience, during which the physical and psychological work of gestation and delivery becomes final. And, during this stage, a new role, with a complete set of new tasks is begun" (1961, p. 754). Some of the physiologic changes that Rubin describes during the postpartum period are: (a) a profound diuresis, (b) a precipitous weight loss due to birth, and (c) a resulting rapid shift in placement of internal organs.

Rubin (1961) also describes energy changes during the postpartum period. She states that labor is characterized by an inward direction of energy required by the work of birth. During the postpartum period a reverse direction of energy occurs. She states, "Slowly (in comparison with labor), and over days, the sphere of psychic and physical energy progresses and extends from herself to others in the

immediate environment, and then outward to encompass persons and events beyond what is immediately present" (1961, p. 754).

This regeneration takes place in two phases, according to Rubin (1961). The first is the "taking-in" phase, which lasts two to three days. During this period, the mother focuses on sleep and food. Her behavior is described as passive and dependent. She is a recipient of instructions, initiating very little action herself. One of her primary interests is to review the birth process in order to assimilate it and move on.

The second phase is that of "taking-hold." This is an active and stressful time in the new mother's life. Rubin states that "there is almost a drive to get on with it, to get going, to get organized" (1961, p. 754). At this time, the mother finds herself much more concerned with her infant and able to begin some of the tasks of mothering. Rubin estimates that this phase lasts about ten days.

These phases, taking-in and taking-hold, are similar to Silverman's (1982) first two phases of transition, "impact" and "recoil." The taking-in phase and the impact phase are characterized by passivity or numbness. The taking-hold phase and the recoil phase are characterized by anxiety and activity.

Although Rubin's concepts have been the basis for many

obstetrical nursing assumptions about new mothers, they have not been validated by systematic observation or research. Martell and Mitchell (1984) attempted to duplicate Rubin's population and setting. Through questionnaires, they searched for taking-in and taking-hold patterns. They found few taking-in actions and a much shorter taking-hold period which peaked on the second postpartum day. They suggested that these findings are due to social and economic changes that require earlier maternal adaptation, as well as changes in nursing care that emphasize thorough nursing assessment of patient functional level and encouragement of self-care activities. However, many nurses continue to accept the validity of taking-in and taking-hold based on personal patient observations and experiences, as well as continued presentation of these concepts by nursing educators.

Rubin's later writings do not specifically refer to these phases. She emphasizes that mothers need "a chance to recover themselves before they assume full care of a newborn and their other roles and responsibilities" (1975, p. 1684). She also alludes to the difficulty of the first few postpartum days by describing the third postpartum day as the day of major physical stress (1984, p. 112). She reiterates the need for sleep and regeneration due to the extreme fatigue experienced in the postpartum period.

Other authors have described tasks, behaviors, and

stages identified with the postpartum period. Ludington-Hoe (1977) lists ten behaviors that form the parameters for "maternicity, the characteristic quality of a woman's personality that supplies her with the emotional energy for feeling that her infant occupies an essential part of her life as determined by bonds of affection" (p. 1171). These behaviors include (a) touching, (b) positioning, (c) eye contact, (d) verbal identification, and (e) emotional interaction with the infant. This author also includes taking-in and taking-hold among the significant maternal behaviors.

Mercer (1981b) explored the maternal tasks of early postpartum. She agrees with Rubin that assimilating the events of the birth experience is a vital foundational step. Next comes certain grief work, as the woman relinquishes certain fantasized expectations for herself and her infant and accepts what is real. This enables her to identify herself as the mother of her infant and to deal with a changed body-image, one that may not be what she expected. Another task is to learn about the baby's functional abilities. As the mother observes her infant's physical functioning, she is able to perceive it as real and to identify and claim the baby as her own. Mastering infant care skills, redefining roles, and resuming responsibilities are other tasks necessary for the assumption of the maternal

role. Mercer (like Rubin) refers to a passive-dependent stage that is experienced by the mother in the first few days of the postpartum period.

A number of key variables have been described by Mercer (1981a) as having an impact on the maternal role. These are: (a) age (women in their twenties may have a greater psychosocial readiness for mothering than either older or younger women); (b) favorable perception of the birth experience; (c) early maternal-infant separation (extended contact during the early postpartum period has been related to increased maternal attachment behaviors); (d) social stress; (e) support system (adaptive maternal behavior is favorably influenced by positive support); (f) self-concept and personality traits (ego strength, self-confidence, and nurturant qualities have been observed to be basic determinants of maternal capacity); (g) maternal illness (illness can lower self-esteem and drain energy); (h) child-rearing attitudes; (i) infant temperament (an infant with an easy temperament is related to higher adaptive maternal behavior); and (j) infant illness (severe illness may cause the mother to withhold affection due to fear of infant death).

These factors have been supported by other authors. The need for a strong support system is emphasized by Siegel, Bauman, Schaefer, Saunders, and Ingram (1980).

Tulman and Fawcett (1988) discuss the slow return to functional ability after childbirth. The fatigue and lack of energy felt by the postpartum woman may relate to low self-esteem, feelings of failure, and delayed assumption of the maternal role. Majewski (1986) found that mothers who experienced role conflict or marital dissatisfaction had more difficulty in making the transition to the maternal role. This is similar to Mercer's proposition that self-concept, ego strength, and support are key factors in the transition to the maternal role.

Variables relating to adaptation to the maternal role were also studied by Curry (1983). She found that previous experience with infants, help from husbands and postpartum nurses, and self-concept were the only significant differences between women who adapted easily to motherhood and women who had a difficult adaptation. Shereshefsky and Yarrow also demonstrated that previous experience with infants had a positive relationship to maternal adaptation (1973, p. 167).

As women adapt to the role of motherhood, they voice a number of concerns. Gruis (1977) asked mothers to identify their concerns, rank them, and note the resources they used to meet their concerns. Most primiparas had these concerns, in the following order: (a) return of figure to normal, (b) regulating family demands, (c) infant behavior, (d) infant

feeding, and (e) emotional tension. The majority of these women sought help from their husbands in order to deal with their concerns. Harrison and Hicks (1983) used a similar study design and found almost identical results.

A study of mothers' postpartum teaching priorities was conducted via questionnaire by Davis, Brucker, and MacMullen (1988). They found that infant illnesses, postpartum complications, feeding the baby, and stitches/episiotomy were ranked as "very important" topics for teaching by more than half the respondents.

A different design was used by Sumner and Fritsch (1977). They monitored phone calls to health care providers during the postpartum period. They found that 88% of all primiparas who were eligible to call the health care facility, did so. They interpreted this as a continued dependency during the postpartum period. The greatest number of questions related to infant feeding; the second most frequently discussed topic was gastrointestinal symptoms exhibited by the baby.

Friesen and Weirman (1984, March) investigated the value of enhanced postpartum teaching. They conducted a postpartum education project in which teaching was done via written material, an in-hospital visit from a nurse educator associated with a physician's office, and at least one post-

hospital telephone call. Although the authors do not cite any statistics, they report a general decrease in calls to the physician's office from new mothers as well as greater patient satisfaction. The most common topics for telephone advice were breastfeeding and postpartum blues.

Postpartum Teaching

This section examines some of the elements of postpartum teaching. Nurses are challenged to provide meaningful education within the context of the short postpartum hospital stay. The tasks of planning and implementing educational interventions that meet the varied needs of new mothers and families consume much nursing time.

Nurses often identify "knowledge deficit" as a postpartum nursing diagnosis. However, when women were asked to identify their own postpartum nursing diagnosis, knowledge deficit ranked tenth on the list (Tribotti, Lyons, Blackburn, Stein, & Withers, 1988). Instead, mothers selected "alteration in comfort," "potential for growth," "alteration in body fluids," "impaired mobility," and "sleep pattern disturbance" with greater frequency. Given these immediate needs of mothers, along with the current short hospital stay, nurses report conflicts, stress, and frustration as they attempt to give the kind of care and teaching required by new mothers and their infants (Stolte & Myers, 1987).

Postpartum home visits have been suggested by several authors (Rubin, 1975; Sullivan & Beeman, 1981; Brucker & MacMullen, 1985; and Norr & Nacion, 1987). Hampson (1989) also suggests that postpartum care be extended to the home. If home visits are not feasible, group support and telephone follow-up may be options for many women.

Telephone follow-up was evaluated by Donaldson (1987). She found that telephone calls alone, without other forms of teaching, such as printed material, did not have a measurable effect on maternal adaptation outcome.

Methodological aspects of the study (for example, sample size and attrition) may have had an impact on the lack of statistically significant findings.

Since most postpartum teaching still occurs in the hospital, an evaluation of the effectiveness of this kind of education is important. Bull and Lawrence (1985) explored the usefulness of information received in the hospital. They also asked postpartum women about other information that would be helpful during the early postpartum weeks. The usefulness of postpartum information varied. More than 70% of mothers reported information regarding self-care as useful. Most mothers also found information about infant care and behavior to be helpful. When asked about information that would be of further help, a number of mothers referred to the need for more information about

infant care and feeding. Other mothers asked for more information about self-care. Bull and Lawrence suggest various methods of extended postpartum teaching, such as written materials, support groups, telephone follow-up, and home visits, in order to meet the needs of new mothers.

Much in-hospital teaching is done one-to-one or in small groups. Leff (1988) compared the effectiveness of videotape versus live group infant care classes. She found that there were no significant differences in measures of convenience, ease of understanding, level of interest, amount learned, and level of relaxation of the mother. This teaching technique may offer flexibility and economy of time for the postpartum patient and nurse.

This body of research provides strong evidence that new mothers need a wide variety of information in order to meet their needs during the time of adaptation to the maternal role. Nurses need to provide teaching that is carefully planned, implemented, and evaluated in order to best facilitate this transition. Nurses also need to examine previous methods of providing postpartum teaching. Because of economic and social changes, learning needs of new mothers have increased while the hospital time available for teaching has decreased.

There are few studies that evaluate the retention of in-hospital postpartum teaching. New mothers are

experiencing transitional impact according to Silverman (1982), or taking-in according to Rubin (1961). These experiences may hamper learning and retention of the information and skills needed by these women.

Conceptual Framework

In order to study these areas of interest, a conceptual framework that includes nursing interventions within the context of maternal adaptation is necessary. Donaldson's "Conceptual Model Proposing Effect of Nursing Services During the Postpartum Period on Maternal Adaptation" (1987) was chosen (see Figure 1). This model describes the relationships among the primiparous postpartum woman, maternal adaptive demands, coping activities, nursing interventions, and finally, healthy maternal adaptation.

Donaldson's study focused on postpartum nursing actions such as information giving, support, planning, and referral. Coping efforts and postpartum adaptation were not studied specifically. The author assumes that effective postpartum education provides a coping resource and will enhance the new mother's sense of competence as a caregiver. However, since this study was designed to evaluate teaching in terms of the mother's perspective, coping and competence were not measured as specific variables.

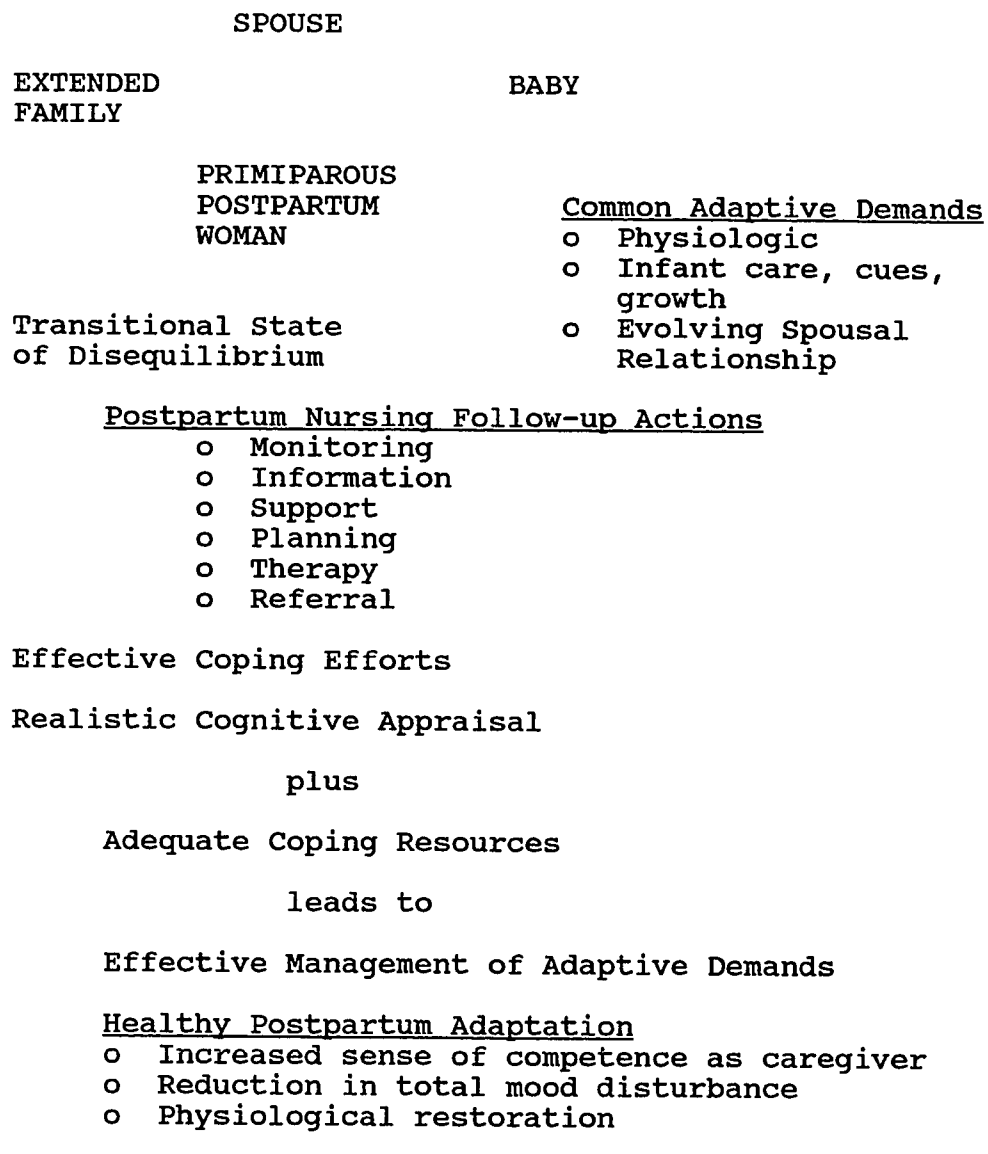

Figure 1. Donaldson's Conceptual Model Proposing Effect of Nursing Services During the Postpartum Period on Maternal Adaptation

Chapter Three

METHODOLOGY

Overview

This study was designed to evaluate the importance, application, and retention of specific aspects of postpartum teaching. In order to accomplish this, new mothers who delivered at a chosen community hospital were asked open-ended questions related to postpartum teaching. The participants were also asked limited-response type questions related to their memory about specific areas for which they received teaching. A telephone questionnaire, administered by the researcher, was used to evaluate postpartum teaching in a group of 26 primiparous women who had vaginal deliveries.

Research Questions

The research questions were as follows:

1. Do primiparous women, who have had a term vaginal delivery, recall the nurse's discussion of topics of postpartum teaching?

2. Did these new mothers find the nurse's teaching beneficial?

3. What other areas of teaching would have been helpful to these women?

4. What other sources of information about postpartum topics did these women have?

5. What other means of receiving postpartum teaching would be beneficial to these new mothers?

Setting

Each participant in the study had delivered her baby at a community hospital in San Jose, California. Consent and cooperation of the Women's Services nursing managers and the hospital's Institutional Review Board was obtained (see Appendix A). The hospital has 456 inpatient beds, including 45 nursery beds. The hospital's postpartum unit has a capacity of 30 patients. During the period of this study, January through April, 1990, the hospital averaged 299 deliveries per month. The participants were recruited from this unit during their postpartum stay, although the actual study was conducted via telephone interview from the researcher's home or office to the home of the women who agreed to participate.

Sample

A convenience sample consisting of 26 primiparous women who had vaginal deliveries was recruited. Potential participants were identified from census lists on the postpartum unit. Women were selected for interview about the study according to their availability. If women were otherwise occupied by interaction with hospital staff, physicians, or visitors, they were not approached for interview. In addition, eight women were approached who did

not consent to participate. Four other women who consented to participate did not complete the study; one withdrew and three could not be reached by telephone. Women were excluded from the study if their hospital stay was longer than two days postpartum or if their deliveries included any obstetrical complications.

Instruments

Three instruments were used for data collection. These were: (a) a demographic questionnaire, (b) a postpartum interest and information questionnaire, and (c) a postpartum teaching evaluation sheet (see Appendix B).

The demographic questionnaire was designed to provide information about: (a) level of education, (b) category of persons with whom the participant lived, (c) level of income, (d) whether participant attended childbirth preparation classes, and (e) distance participant lived from her nearest female relative. This information is presented in Chapter Four.

The postpartum interest and information questionnaire was designed to provide information about: (a) general topics that the participant remembered being taught during the postpartum stay, (b) areas of teaching that were beneficial, (c) other areas that the participant wished had been covered by postpartum teaching, (d) other methods that the participant had of receiving postpartum teaching

information, and (e) the participant's opinion about the best way for her to receive postpartum teaching.

The postpartum teaching evaluation sheet was a reproduction of the teaching summary used by hospital nurses to document postpartum teaching. For each topic listed, the participant was asked if she remembered any teaching about the subject. If there was no recollection of teaching about the topic, the researcher prompted the participant by describing a few facts or concepts that were often presented when nurses taught about that topic. Therefore, for each topic, there were three possible responses: (a) remembered, (b) remembered with prompting, or (c) did not remember.

The content validity of these tools was evaluated by another nurse researcher. No difficulties with the tools' clarity of meaning were identified during preliminary use. Therefore, a separate pilot study was not done and all data collected were included in the study.

In order to determine the reliability of the postpartum teaching evaluation sheet, nurses were observed performing postpartum teaching. They were also interviewed about interpretations of the meaning and subject content included for each topic on the sheet. Widespread agreement was found among the postpartum staff. This reflects the common use of a postpartum teaching protocol on this unit (see Appendix C).

Research Procedures

During the study period this researcher was employed by the hospital in which the research was conducted. The study participants were approached during their postpartum hospital stay. The potential participants were asked if they would be interested in participating in the study. If they indicated interest, further information was given and an informed consent was signed (see Appendix D).

Anonymity and confidentiality were assured. The participants were informed of the procedures that were used to preserve confidentiality: (a) data were kept under lock and key, (b) no names were used on the questionnaires, (c) code numbers were used to identify participants, and (d) the information would be reported as group data only.

Once informed consent was obtained, the participant completed the demographic information form during her hospitalization. The researcher advised parents of the schedule of phone calls that could be expected during the time of the study.

The participants were then called by the researcher on the fourth, the seventh, and the fourteenth postpartum day. The women were questioned about: (a) their memory of topics of teaching, (b) the usefulness of that information, (c) areas where more information would have been helpful,

d) other ways they had of receiving postpartum information, and (e) their opinion about the best way to receive postpartum teaching. The telephone interviews varied in time from 5 to 20 minutes. The postpartum teaching evaluation sheet was only used at the first telephone contact. The interest and information sheet was administered at each telephone interview.

If the participant was unavailable on the fourth postpartum day, she was called on the seventh day in order to administer the questionnaire. Participants who were unavailable on both the fourth and seventh postpartum days were dropped from the study.

Because of availability problems, not all participants were able to complete the series of three telephone interviews. Therefore, the information will be reported in two groups. The mean interval between delivery and the first telephone call was 4.69 days (SD = 1.26). The information that was collected during the second and third calls will be grouped together as one set. The mean interval between delivery and the second data collection was 10.97 days (SD = 3.52).

Analysis Procedures

A descriptive analysis of the data is presented in Chapter Four. A demographic profile, consisting of means and frequencies has been constructed. When appropriate, the

demographic information is compared to existing demographic data about the population that uses the obstetrical services of the hospital. Permission to use this data has been obtained (see Appendix A).

The multiple responses to the open-ended questions regarding postpartum teaching have been categorized. These responses are presented as frequencies. The data collected from the first telephone call are presented separately from that collected during subsequent contact.

The responses gathered from the postpartum teaching evaluation sheet are also presented as frequencies. The responses have been categorized according to the ability of the participant to remember the information without prompting, with prompting, or not at all.

Chapter Four

FINDINGS AND INTERPRETATION

Demographic Information

This chapter discusses the findings of the study. The discussion begins with a description of the demographic characteristics of the 26 women participating in the study.

Age. The mean age of the sample was 27.8 years. The range was 21 to 37 years. A 1989 hospital survey (Kevorkian, personal communication, October 2, 1990) indicated that the mean age of primiparous women using the hospital for delivery was 28.25 years. The sample size for the hospital survey was 181. The hospital surveyed all primiparous women who delivered during a specific time period. The sample for this study appears to be comparable in age to the primiparous population that uses the hospital.

Zip code. The mode zip code for this sample was 95118, a zip code that borders the hospital's zip code. The mode zip code for the 1989 survey sample was 95123. This zip code borders 95118. Based on the researcher's knowledge of these geographical areas, the investigator is assuming that both samples represent similar neighborhoods.

Education. Participants were asked to state the last year of school that had been completed. The mean was 15 years. The range was 12 to 18 years, with the mode being 16 years of education. This represents the relatively high

educational level of the population which this hospital serves.

Living arrangements. The participants were asked, "Who do you live with?" Twenty-three (88.5%) responded that they lived with the father of the baby. Three stated that they lived with their parent(s).

Household income. The responses to this question are listed in Table 1.

Table 1

Household Income

Category	Number	Percent
Under $20,000	2	7.7
$20,000-$34,000	2	7.7
$35,000-$49,000	5	19.2
$50,000 or more	17	65.4

The findings show that 84.6% of the sample has a household income greater than $34,000. The 1989 survey (Kevorkian, personal communication, October 2, 1990) also reported on household income; however, the categories differed. That survey indicated that 77.9% of the population had a household income greater than $40,000.

Although the categories are not directly comparable, the population of the sample for this study was assumed to be economically similar to that of the previous hospital study.

Proximity to nearest female relative. In order to determine an aspect of family informational support, participants were asked, "In miles, approximately how far away does your nearest female relative live?" The responses are presented in Table 2. In this sample, 84% of the participants live 50 miles or less from their nearest female relative.

Table 2

Proximity to Nearest Female Relative

Category	Number	Percent
Under 5 miles	8	32.0
5-10 miles	4	16.0
11-20 miles	3	12.0
21-50 miles	6	24.0
51-100 miles	1	4.0
101-500 miles	1	4.0
More than 500	2	8.0

Attendance at childbirth class. The participants were asked, "Did you attend Childbirth Preparation Classes?" Twenty-four women attended classes to prepare for birth; two women did not attend classes.

Postpartum Interest and Information Questionnaire

The Interest and Information Questionnaire was administered to each woman at each telephone call. The responses were categorized by content areas. These categories are reported here in two groups: (a) responses to the first call, and (b) new or differing responses to subsequent calls.

Question one. The first question that participants were asked was, "What do you remember the nurse on the postpartum unit teaching you?" Each participant could give up to five responses. The responses to the first call were categorized and are presented in Table 3.

The women in the study demonstrated strongest recall of teaching related to breastfeeding, self care, and infant hygiene. Infant hygiene included topics such as bathing, dressing, care of circumcision, and care of the umbilical cord.

Comparisons were made between the demographic categories and the questions on the Interest and Information Questionnaire using a *t*-test. It was found that women who attended childbirth classes were significantly more likely

to remember the following categories of information ($p < 0.05$): (a) feeding information, (b) perineal care, (c) other self care, (d) infant safety, (e) other infant issues. It may be that information presented in the hospital reinforced information received in childbirth classes.

Table 3

What do you remember the nurse teaching you?

Response	Number of Responses	% of Sample
Breastfeeding	20	76.9
Other feeding	5	19.2
Perineal Care	8	30.8
Other Self Care	15	57.7
Infant Hygiene	15	57.7
Diapering	3	11.5
Infant Safety	6	23.1
Other Infant Issues	4	15.4

When women were asked about their memory of postpartum teaching during the subsequent phone calls, two women recalled breastfeeding. Other categories that were recalled

once were: (a) perineal care, (b) other self care, (c) diapering, (d) other infant issues, (e) other, and (f) nothing.

Question two. The participants were next asked, "Of these things, what has been helpful, so far?" The categories of responses are the same as Question One. The responses are shown in Table 4.

Table 4

What has been helpful?

Responses	Number of Responses	% of Sample
Breastfeeding	11	42.3
Other Feeding	3	11.5
Perineal Care	4	15.4
Other Self Care	3	11.5
Infant Hygiene	4	15.4
Diapering	2	7.7
Infant Safety	0	0
Other Infant	1	3.8
Nonspecific (Positive)	5	19.2
Nonspecific (Negative)	3	11.5
Nothing	1	3.8

One can see that teaching about breastfeeding was regarded as helpful by the largest percentage of the sample. On subsequent calls, there was not a specific category that was mentioned a remarkable number of times.

Question three. This question was phrased, "What else do you wish the nurse had covered?" These responses are presented in Table 5.

Women gave answers in the original categories and in several new categories. New categories of responses that occurred were: sleep, relating to infant sleep patterns, and expectations, relating to anticipatory guidance about what things to expect in the early postpartum period. Specifically, this category included statements describing such things as: (a) maternal physical and emotional feelings, (b) fussiness of the baby, (c) husband's role, and (d) how to determine whether to go out or stay home.

On subsequent calls, five women stated that they wished the nurse had covered more information on breastfeeding. Also, five women wished that more guidance about expectations had been given by the nurse. It is notable that, on the first phone call, 76.9% of the sample remembered receiving teaching about breastfeeding and 42.3% of the sample felt that the teaching had been helpful.

Table 5

What else do you wish the nurse had covered?

Response	Number of Responses	% of Sample
Breastfeeding	7	26.9
Other feeding	3	11.5
Perineal Care	4	15.4
Other Self Care	3	11.5
Infant Hygiene	1	3.8
Diapering	5	19.2
Infant Safety	2	7.7
Other Infant	1	3.8
Sleep	2	7.7
Expectations	8	30.8
Other	2	7.7
Nothing	5	19.2

However, 26.9% of the sample stated that they wished that more information about breastfeeding had been presented to them. This may reflect the multifaceted nature of breastfeeding. Initial teaching is designed to meet the needs of the new mother as she begins the nursing process. As women progress through the first days and weeks of breastfeeding, new educational needs often arise.

Question four. In this part of the questionnaire, the researcher asked the women, "Where else have you gotten postpartum information?" The responses indicate a frequent use of written materials such as books, pamphlets, and magazines, or videotapes, among the women in this study.

Table 6

Other Sources of Postpartum Information

Responses	Number of Responses	% of Sample
Pediatrician	10	38.5
Obstetrician	8	30.8
Classes	8	30.8
Written Mtls, Tapes	25	96.2
Family/Friends	19	73.1
Other	3	11.5
Subsequent calls yielded the following responses:		
Pediatrician	3	
Classes	1	
Written mtls, tapes	3	
Family/friends	6	
Other	4	

The women also used their network of family and friends for advice and informational support about the postpartum period.

Question five. The participants were asked, "What would be the best way for you to receive postpartum teaching?" They were given six options and asked to choose a first and second choice from among the options. The options were: (a) in-hospital teaching by a nurse, (b) postpartum classes that I could attend, (c) printed information that I could read, (d) a hot line number that I could call, (e) a call from a nurse to me at home, and (f) a visit to my home from a nurse. The results of the question are found in Table 7.

The data indicate that this sample preferred, as its first choice, teaching that is done in the hospital by a nurse, followed by written materials. A second choice seems to be postpartum classes or a telephone call by a nurse. Subsequent phone calls did not yield any information that would change these interpretations.

Table 7

Best Way to Receive Postpartum Teaching

Option	Number of 1st Choice	Number of 2nd Choice
In-hosp. teaching	10	2
Postpartum classes	3	7
Printed information	7	3
Hot line number	2	4
Call from RN	0	6
Visit by RN	4	4

Postpartum Teaching Evaluation Sheet

In this portion of the interview the researcher asked each participant whether or not she remembered the postpartum nurse teaching her about specific content areas. If the participant did not recall receiving the teaching, the researcher prompted her by reminding her of several facts or concepts commonly included when this area was taught by the nursing staff. Sometimes the prompting aided recall. Therefore, the responses fell into one of three categories: (a) remembered, (b) remembered with prompting, or (c) did not remember. The responses pertaining to maternal postpartum information are summarized in Table 8. The responses pertaining to infant care information are

presented in Table 9.

These patterns of recall may reflect emphasis given by nurses on certain content areas. For example, all postpartum women must deal with perineal care. Therefore, teaching in this area is obligatory. This accounts for frequent recall of teaching about use of Kotex, wipes, sitz baths, episiotomy and hemorrhoid care, and lochial changes. Physicians do not universally prescribe ointment to be applied to perineal stitches. This may account for less frequent recall for this content area. There is also less recall of teaching about activity and stress management. This may reflect the fact that these areas are not of immediate postpartum concern. Nurses and new mothers may choose to focus on the physical needs.

Breastfeeding topics stimulate consistently more frequent recall. This is apparent from the findings from the Postpartum Interest and Information Questionnaire, as well as the Postpartum Teaching Evaluation Sheet. New mothers know that one of their major tasks in the postpartum period is to feed their baby. They ask frequent questions about breastfeeding and seek to have previous knowledge and skills validated. Women desire assurance that they will be capable of performing this task. During the postpartum

Table 8

Postpartum Information

Topic	Remembered	Remembered with prompt	Did not remember
Kotex, wipes	24	1	1
Tucks, sprays	19	2	5
Ointments	6	1	19
Breast cream[a]	18	0	6
Sitz Bath	23	1	2
Nipple care[a]	18	1	5
Engorgement	17	1	6
Manual expression/ Use of Breastpump[a]	8	2	14
Epis/Hemorrhoid Care	15	2	9
Lochia Changes	19	2	5
Bowel/Bladder Function	14	2	10
Activity/Exercise	10	2	14
Diet	13	2	11
Stress	6	2	18
Family Planning	13	2	11

Note:

[a] Asked only of breastfeeding mothers

Table 9

Infant Care Information

Topic	Remembered	Remembered with prompt	Did not remember
Infant appearance	7	2	17
Senses	2	1	23
Reflexes	7	4	15
Bathing/dressing/etc.	22	3	1
Nutrition: formula[a]	2		
Nutrition: breast milk[b]	7		17
Stools/urine	10	2	14
Safety	14	5	7

Note:

[a] Asked only of formula feeding mothers

[b] Asked only of breastfeeding mothers

period, breastfeeding is the focus of many nurse-patient interactions.

Intensive teaching and subsequent recall of breastfeeding information may also be related to the fact that the hospital has a lactation counselor who visits most postpartum women who are breastfeeding. Her teaching may be a strong reinforcement for this area of knowledge.

One area related to breastfeeding that is not frequently recalled is the use of the breastpump or manual expression of breast milk. Teaching these skills requires time and materials that may not be available to the busy nurse. This is a content area that nurses may delete when pressed for time, resulting in infrequent recall by new mothers.

Topics of teaching relating to infant care reveal varied levels of recall. Bathing, dressing, and infant hygiene are frequently recalled. All but one mother remembered these areas of teaching, either spontaneously or with prompting. This may reflect the fact that a videotape on these tasks is shown on the hospital's closed circuit television system. This videotape is used in addition to, or instead of, nurse demonstration of bathing, dressing, and other infant care tasks.

Mothers recall other areas of infant care with less frequency. Safety is recalled with moderate frequency. This topic is usually presented in the context of car seat safety. Nurses often teach about the legal requirements regarding the use of infant car seats.

Other areas such as infant appearance, senses, and reflexes are recalled with even less frequency. This could be attributed to the organization of nursing care at the hospital. The nurses with the greatest expertise in infant

behavior are usually those who work primarily in the nursery and thus have less direct contact with mothers. The infants are often brought to mothers and picked up from mothers by nursing assistants.

Summary

An overall view of the data indicates that the women in this sample recalled nursing teaching about self care, breastfeeding, and general infant care with highest frequency. They recalled teaching about activity, stress, use of a breastpump, infant appearance, senses, and reflexes with less frequency. When asked about areas about which they wished they had received more teaching, the women most frequently mentioned breastfeeding and expectations about feelings, roles, and decisions.

When asked about methods of receiving teaching that were most desirable, in-hospital teaching and printed information were most frequently mentioned as first choices. Postpartum classes and a phone call from a nurse were most frequently mentioned as a second choice of teaching methods.

The next chapter will discuss the implications of these findings. The scope and limitations of the study will be discussed. Suggestions will be made for further study in this area. Recommendations will be made for application to nursing practice in the area of postpartum teaching.

Chapter Five

DISCUSSION

Summary of the Study

This study was a telephone survey designed to evaluate postpartum education on a nursing unit at a community hospital in San Jose, California. Mothers who delivered their first infant vaginally and without complications were included in the study. The participants were called during the postpartum period and surveyed about their recall of postpartum teaching. The mean time of the first telephone call was 4.69 days after delivery; the mean time of subsequent telephone contact was 10.97 postpartum days.

A demographic profile of the sample was developed. The mean age was 27.8 years. The participants had a mean educational level of 15 years. Income data showed that 84.6% of the sample had a household income of at least $35,000. Many of the participants (84%) lived 50 miles or less from a close female relative. Most of the participants (92.3%) attended childbirth preparation classes.

The researcher questioned mothers about their recall of general areas of teaching, as well as the helpfulness of that teaching. The women were asked to describe further areas of teaching that would have been helpful to them. Participants were also asked to describe other ways that they had of obtaining postpartum information, and to choose

the method of postpartum teaching that they felt to be most desirable for themselves.

The content areas that were most frequently recalled were: (a) breastfeeding, (b) perineal care, and (c) infant hygiene. Content areas where more information was needed were breastfeeding and guidance about what to expect once at home.

The most frequently listed sources of postpartum information were written materials and family or friends. When asked about their first choice of method for receiving postpartum teaching, the women most frequently chose in-hospital teaching from a nurse and written materials. The most frequently listed second choices were postpartum classes and a telephone call from a nurse.

When mothers were asked about recall of specific content area, the major categories most frequently remembered were: (a) perineal care, (b) breastfeeding and breast care, and (c) infant hygiene.

Implications for Practice

The research findings indicate that many of the participants recalled and used the information they learned about breastfeeding, perineal or other self care, and infant hygiene. The mothers also listed breastfeeding as well as guidance about appropriate postpartum expectations as areas where more teaching would have been helpful.

Breastfeeding seems to be an area of intense maternal focus. Mothers remembered and appreciated the teaching that they received, but they wished for more once they were home. Postpartum nurses are challenged to provide comprehensive breastfeeding education both in the hospital and after discharge. Since the participants indicated that both in-hospital teaching by nurses as well as written materials are desirable methods of receiving postpartum education, postpartum nurses could focus their teaching efforts on intensive one-to-one teaching as well as the distribution of quality take-home materials.

The participants often commented on the valuable teaching provided by the lactation counselor at the hospital. This individual is only available on a part-time basis. Full-time availability of lactation counseling could be an effective way to meet the additional educational needs of breastfeeding mothers.

When questioned about recall of teaching about infant developmental areas (infant appearance, senses, and reflexes) and maternal growth issues (stress and activity level), mothers had low frequency of recall. This low level of recall may relate to several conditions that exist during the postpartum period.

First, postpartum women may not be able to absorb large amounts of information during the first few days after

delivery. One participant stated, "I was so tired, it was like a dream." Another new mother said, "It's like I left my brain somewhere for those three days." These comments describe the tired, passive state characteristic of the first few postpartum days that Rubin has defined as the taking-in phase. The statements also express the difficulty these mothers had in focusing on cognitive material.

Mothers may also realize that they have other basic needs to meet in the postpartum period. In order to meet these needs, they require knowledge of infant feeding, self care, and basic infant care. This can be understood better in terms of Maslow's hierarchy of needs (Lefrancois, 1988, p. 268). Basic needs must be met before one can consider the higher growth needs, such as infant development or interaction, or maternal emotional or physical adjustment. New mothers may only have enough energy and motivation to learn the basics in the immediate postpartum period.

One could also view these findings in terms of "readiness"--a concept in teaching-learning theory (Lefrancois, 1988, p. 28). Mothers may not realize the relevance of specific kinds of information until they are called upon to use it later in the postpartum period. The need for certain information may be after the mother has gone home. In such cases, written take-home information could be very helpful. Mothers may also find themselves

ready to learn new information that a nurse could offer in a follow-up telephone call.

Another factor in the postpartum period relates to time. The hospital stay is short and nursing educational time is limited. Nurses are constrained by the many other tasks that must be accomplished, such as responding to physician visits, treatments, bathing, medication administration and family interactions. Nurses on this unit often have responsibility for a team of ten patients. Such a workload allows the nurse only limited time to sit down at the bedside and provide intensive, one-to-one education. Because of time pressures, nurses may feel that they are only able to provide the information that they consider essential.

However, the new mothers in this study identified a need for more teaching to help them meet some of their postpartum growth needs. Women in this sample stated that they would have benefited by increased anticipatory guidance about appropriate expectations of themselves, their partners, and their infants during the postpartum period.

Several authors have discussed the benefit of teaching new mothers to recognize and respond to infant cues and capabilities. Myers (1982) demonstrated that parents who received teaching about their infant's interactive capabilities later scored higher in knowledge about their

infants. A study by Widmayer and Field (1981) suggests that teaching mothers about infant skills may facilitate early parent-infant interaction.

The findings and assertions of these studies, as well as the responses of the mothers in the study, suggest that nurses need to find ways to teach mothers about their infant's interactive cues and capabilities. Knowing more about infant behavior might give many mothers the guidance and support that they need as new parents. Personalized teaching by an infant specialist, similar to the lactation counselor, might be one way to meet this need. Another strategy would be mother-baby nursing. In this model, both mother and infant are cared for together by one nurse. This often results in less fragmentation of care, more efficient use of time, and more frequent opportunities for teaching.

Because of the short hospitalization period, it is imperative that postpartum teaching be extended to the home. This can be done by several of the methods that were chosen by the women in the sample. For example, much greater use could be made of written materials developed specifically for this population. These references reinforce teaching received in the hospital and can be a resource for further learning in the postpartum period. Mothers may be able to more effectively incorporate cognitive information once the taking-in period has passed.

Another choice that was identified from the study was a telephone call from a nurse to the new mother. This call can be a way to extend the personal teaching of the hospital nurse to the home. The new mother has the opportunity to ask questions and validate her knowledge and understanding. The nurse can use the conversation to screen for potential physical and emotional problems, both for mother and infant.

The women in the study also identified postpartum classes as a desirable method for postpartum teaching. This hospital sponsors a new mother's support group that meets weekly. Postpartum nurses may need more information about this group so that they can refer new mothers more frequently.

This study lends validation to Donaldson's (1987) conceptual model relating the effect of postpartum nursing services to maternal adaptation. Although maternal adaptation was not specifically studied, data gathered emphasized the importance of the nursing interventions of monitoring, giving information, support, assistance with planning, and appropriate referrals.

Scope and Limitations

This study was designed to evaluate a specific teaching program at a certain community hospital. Although the sample size was small, it was felt to be representative of the socioeconomic status of the obstetric clientele of the

hospital. The results are not generalizable to other hospital teaching programs. The way that nursing is practiced at this hospital is assumed to have had an influence on the findings. Other institutions may emphasize different content areas in postpartum teaching, so that their clients would have different patterns of recall.

The sampling techniques used in this study may have also influenced the findings. Since the women in the study were volunteers, bias may exist in their motivation to participate. The participants who volunteered may not accurately represent the primiparous patient population of this hospital.

There is a potential "Hawthorne effect" in this study. Although the women were not told specifically what the interview focus would be, they knew that the researcher would be questioning them about aspects of their hospital stay. This knowledge may have enhanced their memory of nursing interventions.

Several participants were lost to the study due to the researcher's inability to complete all of the telephone calls that were planned. Participant involvement might have been maintained if the researcher had used assistants dedicated to making repeated phone calls in order to achieve the maximum number of responses possible.

Recommendations for Future Study and Practice

Replicating this study in different settings would provide information regarding perceived teaching needs among various populations of primiparous postpartum women. Nurses need more information about the effectiveness of various methods of postpartum teaching. It would be valuable to repeat this study in hospitals that use different teaching techniques.

Changes in methodology would increase the quantity of data collected. Since some women were lost from the sample partially due to the prolonged time frame of the phone call schedule, the schedule could be altered. Each participant could only be called once during the postpartum period--at four, seven, or fourteen days. If a sample size larger than thirty was selected, this new design would yield much more information than the design that was used.

This study, along with previous work by Gruis (1977), Sumner and Fritsch (1977), and Bull and Lawrence (1985), indicates that traditional, in-hospital postpartum teaching is often inadequate to meet the educational needs of new mothers having a first baby. This researcher recommends extending postpartum teaching by developing written materials for mothers to take home, providing postpartum follow-up telephone calls, and more frequent referral and encouragement to attend the new mother's support group

offered to the hospital.

Postpartum nurses have a key role in the first stages of effective family development. By creating and implementing methods of postpartum education that will enhance a new mother's ability to care for herself and her infant and to plan for changes in family life, postpartum nurses will provide outcomes that are positive, effective, and produce growth in parents and infants.

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APPENDIX A

CONSENT LETTERS

THE
GOOD
SAMARITAN
HOSPITAL
OF SILICON VALLEY

2425 SAMARITAN DRIVE
SAN JOSE, CALIFORNIA 95124
408-559-2011

An Affiliate of
HEALTH
DIMENSIONS
INCORPORATED

November 30, 1989

NOV [illegible]

Judith A. Bamber, R.N.
1264 Foxworthy Avenue
San Jose, CA 95118

Dear Ms. Bamber:

On November 15, 1989 the Institutional Review Committee reviewed your protocol for research project, "Evaluation of Postpartum Nursing Interventions." Your protocol had previously been given Expedited Review and the Committee ratified that action.

A Bill of Rights which must be included with the Consent Form and presented to the subject was not submitted (copy enclosed).

Your approval date is 11/15/89; however, you could start your project from the expedited review date.

Approval is granted with the understanding that no changes will be made in the procedures followed or the Consent Form used (copies of which we have on file) without the knowledge and prior approval of the committee. All adverse reactions/complications or problems arising during or as a result of this treatment or procedure must be reported to the committee within five (5) working days.

In compliance with the committee guidelines, all research projects require semi-annual review. If the project is to continue beyond the expiration date of May 15, 1989, it must be renewed in accordance with the committee's renewal instructions. As a courtesy reminder, the Renewal Application will be mailed to you approximately one month prior to expiration date.

Should you have any questions, please contact Sharon Trueblood, 559-2386.

Sincerely,

Carmelo S. Sgarlata, M.D.
Chairman
Institutional Review Cte.

ST/enc.

Memorandum

Date October 2, 1990

To Judy Bamber, Nursing Education, HDI

From Gina Fogelstrom, Admin. Director, Women's Services

Subject Request for use of Solana Suites survey

As we discussed on September 19, 1990, I see no problem with your reference to the Solana Suites' survey for your Masters' thesis. I trust that the selected data will remain confidential and patient anonymity will be preserved.

Good luck on the completion of your thesis, I would be very interested in reviewing it upon completion.

GF:mw

APPENDIX B

DATA COLLECTION INSTRUMENTS

DEMOGRAPHIC INFORMATION

NAME:_____

ADDRESS:_____

_____

TELEPHONE
NUMBER_____

AGE:_____ HIGHEST YEAR OF SCHOOL FINISHED:_____

WHO DO YOU LIVE WITH? (CIRCLE ONE)

1. THE FATHER OF MY BABY
2. ALONE
3. MY PARENT(S)
4. OTHER FRIEND(S) OR RELATIVE(S)

WHAT IS THE APPROXIMATE INCOME OF YOUR HOUSEHOLD? (CIRCLE ONE)

1. UNDER $20,000/YEAR
2. $20,000 TO $34,000/YEAR
3. $35,000 TO $49,000/YEAR
4. $50,000 OR MORE/YEAR

DID YOU ATTEND CHILDBIRTH PREPARATION CLASSES?

1. YES
2. NO

IN MILES, APPROXIMATELY HOW FAR AWAY DOES YOUR NEAREST FEMALE RELATIVE (MOTHER, SISTER OR OTHER CLOSE WOMAN) LIVE?

_____

POSTPARTUM INTEREST AND INFORMATION QUESTIONNAIRE/
GUIDELINE FOR TELEPHONE INTERVIEW

Code Number:_____

Date of Delivery:_____ Today's Date:_____

Introduction: There are several ways that nurses give postpartum information to new mothers. Some of these are: formal classes, video tapes, group discussions, or one-to-one teaching, where the nurse comes to your room and talks with you. I would like to ask you some questions about things that you remember about this last type of teaching during your recent stay at Good Samaritan Hospital.

1. What do you remember the nurse on the postpartum unit teaching you?

2. Of these things, what has been helpful, so far?

3. What else do you wish the nurse had covered?

4. Where else have you gotten postpartum information?

5. What would be the best way for you to receive postpartum teaching?
   a. In-hospital teaching by a nurse
   b. Postpartum classes that I could attend
   c. Printed information that I could read
   d. A hot-line number I could call
   e. A call from a nurse to me at home
   f. A visit to my home from a nurse

POSTPARTUM TEACHING EVALUATION SHEET

Code Number:_____
Today's Date:_____ Date of Delivery:_____

Topics:	Remembered Without Prompting	Remembered With Prompting	Did not Remember With Prompting
POSTPARTUM INFORMATION			
I. Personal Care:			
Kotex, wipes			
Tucks, sprays			
ointments			
breast cream			
sitz bath			
II. Breast Care:			
A. Not breast feed.			
B. Breastfeeding			
1. Nipple care			
2. Engorgement			
3. Man. express. Breastpump			
III. Episiotomy and/or hemorrhoid care			
IV. Involutional and lochial changes			
V. Bowel/bladder funct.			
VI. Activity, body mech. exercise			
VII. Diet			
VIII. Stresses			
IX. Family Planning			
INFANT CARE INFORMATION			
I. Characteristics & Appearance			
II. Senses			
III. Reflexes			
IV. Bathing, dressing, vital signs, circ. and cord care			
V. Infant Nutrition			
A. Formula			
B. Breast Feed			
C. Stools/Urine			
VI. Safety			

APPENDIX C

POSTPARTUM TEACHING PROTOCOL

POST PARTUM MATERNAL TEACHING GUIDE

I. PERSONAL CARE

Stress handwashing before and after all personal hygiene procedures and infant care.

A. Patients should be instructed to change their pads each time they go to the restroom for the first 48 hours. After that, they may be changed prn or at least four times a day.

Pads should always be "put on" and "taken off" from front to back to avoid contamination from the rectal area to the vagina or urethra.

Patients should be instructed not to use tampons until they have an OK from their doctor.

B. Moist wipes should be used instead of tissue to cleanse the perineal area.

If "stitches" are still painful after wipes are all finished, or if irritation occurs from wipes, warm water may be poured over the perineal area for cleansing. "Peri bottles" are available in needed.

C. If breast cream is ordered, the patient should be instructed to apply it after nursing and air drying nipples.

If patient thinks she may be allergic to wool, have her "skin test" an area on her inner arm with the lanolin before using it on her nipples.

Some patients have been told not to put cream on the tip of nipples as it will "clog the openings and prevent milk from coming out". No test results or literature supports this statement.

POST PARTUM MATERNAL TEACHING GUIDE (Continued)

D. Tucks provide a soothing, astringent effect on external perineal area; i.e., episiotomy, hemorrhoids or lacerations. They should be placed on the perineum after cleansing and left in place until the next pad change.

E. Episiotomy sprays are topical anesthetics that provide temporary relief from episiotomy or hemorrhoidal pain. The aerosol can should be held 6-12 inches from the perineum and sprayed liberally.

F. Hemorrhoidal ointments; i.e., Americaine, Xylocaine, Nupercainal, etc., should be applied to Tucks and then put directly on hemorrhoids and left in place until the next pad change.

G. Sitz baths are given per doctor's order. The disposable sitz unit should be "set up" and explained to the patient the first time it is used. Assistance should be given as needed thereafter.
Patient should be told to tighten her gluteal muscles until seated in the sitz and then to relax them so that the water can "bathe" the perineal area. (Sitz bath procedure is found in the procedure manual.)

H. Ice packs reduce swelling during the first 24 hours after delivery. Patients should be instructed to leave the gauze wrapped around the ice pack to avoid "burns" from contact of glove to skin.

I. Early ambulation has been found to be advantageous to increase circulation and to stimulate bowel and bladder function; therefore preventing thrombophlebitis, constipation and urinary retention.

POST PARTUM MATERNAL TEACHING GUIDE

II. BREAST CARE

A. N.T.B. (Not to Breast)

Encourage patients to wear a bra for support for a couple of weeks after delivery.

Remind patients that they may have some breast fullness and leaking even if they have had the suppressant injection. If this occurs, encourage her to wear a "snug bra" or binder and use intermittent ice packs for pain or discomfort. Remember, intermittent cold application causes the desired vasoconstriction, but prolonged application produces the reverse effect and marked dilation may occur.

Breast manipulation (expression of milk, massage, hot compresses, etc.) should be avoided as this will increase milk production.

Oral fluids should neither be pushed nor restricted; rather, the patient should drink as she normally does. This fullness or engorgement rarely lasts for longer than 48-72 hours.

Patients who receive Parlodel rarely have any fullness or milk leakage. Remind the patients to finish the prescription and to take the Parlodel with meals.

B. B.T.B. (Baby to Breast)

1. Nipple Care

Special glands around the nipple secrete a natural cleanser and emollient to help keep nipples clean and soft. For this reason:

a. No soap should be used on nipples - just clean wash cloths and plain water at daily bath to prevent "washing off" this protection provided by nature.

POST PARTUM MATERNAL TEACHING GUIDE (Continued)

b. Nipples should be "air dried" after nursing for 10-15 minutes or longer if they are painful.

c. Alternate "starting sides" so that both breasts receive equal stimulation. Baby sucks most vigorously when he is hungriest.

d. Consult pediatrician about length of nursing time. Most agree that the first few feedings should be of short duration (3-5 minutes) and gradually increased, by 1-2 minutes per day, up to 10-15 minutes per breast.

e. Remind patient to break vacuum around her nipple by inserting her finger between baby's mouth and her breast or by pulling down on his chin before removing baby from nipple.

f. If nipples become very tender, instruct patient to use a lamp with a 40 to 60 watt bulb at a distance of 18-20 inches from her nipples for 10-15 minutes after nursing.

g. Fissured, cracked and/or bleeding nipples are portals through which infection may be introduced into the breast.

Be alert for signs of mastitis or breast infection; local redness, swelling, pain, tenderness, general malaise and fever.

Most mothers find it more comfortable to nurse for shorter periods of time at more frequent intervals when they have cracked or bleeding nipples.

POST PARTUM MATERNAL TEACHING GUIDE

"Rotating nursing positions" should be used to change the areas of stress on the nipples, e.g., cradle hold, football hold, lying on side with baby facing patient on either head to head or feet to head position.

The greatest stress on the nipple is in a line with baby's nose and chin. The patient should start nursing on the least tender tipple first, then after initial vigorous sucking subsides, switch to the tender nipple and empty that breast.

If both nipples are cracked, a shield may be used (with permission of pediatrician) until vigorous sucking subsides and then remove the shield and nipple the baby.

If nipples are too painful or cracked, "rest" a day or two and manually express breast milk.

h. Flat or retractile nipples should be stimulated by stroking the erectile tissue along the side of the nipple, not the tip. A cold cloth or ice chips will usually make the nipple more prominent.

i. An inverted nipple looks like a slit or fold and is diagnosed by gently pinching the nipple at the base, using the thumb and forefinger. If the nipple shrinks back, it is "inverted". Hopefully, inverted nipples have been noted during the prenatal period and nipple exercises started.

ENCOURAGEMENT is the key word -- many women with inverted nipples have successfully breast fed, but it does take effort and patience.

POST PARTUM MATERNAL TEACHING GUIDE (Continued)

The Hoffman Technique is the exercise of choice: place thumbs opposite each other on either side of the nipple. Gently draw the thumbs away from the nipple. Then place the thumbs above and below the nipple and repeat. Do this two or three time a day for a few minutes.

"Milk Cups" are also used to "draw out" inverted nipples. They should be worn for short periods and gradually worked up to eight hours a day. If the cups are needed after delivery, remember to air nipples frequently as they do stay moist from leaking milk. Milk Cups are not recommended for the normal nipple as they can distort nipples if worn over a period of time.

It is also helpful to remind patients with inverted nipples that even though the baby nursing, exercises, etc., will break the adhesions for now, they will usually recur after weaning the baby. In this way we can stress the importance of beginning exercises during the last trimester of future pregnancies.

2. Engorgement

   a. Engorgement is a local congestion and distention attributed to an increase in the venous and lymphatic circulation (primary) and the filling of the lobules of the breasts with milk (secondary). The skin covering the breasts becomes tight, shiny, warm to touch and may have a darker or bluish coloration, but rarely does it become reddened. Engorgement is a transitory condition that is usually present for 24-48 hours.

POST PARTUM MATERNAL TEACHING GUIDE (Continued)

b. Engorgement may be relieved by warm compresses or warm shower 15-20 minutes before nursing.

c. Breast massage may also be used to relieve engorgement or to aid in milk flow or "let down" before nursing or manual expression of breast milk. Stroke the breast gently but firmly with the palms of both hands. Massage the entire circumference of the breast from different starting points towards the nipple area. If lumps are noted in the breast axillary area, they should be first massaged in a circular motion and then massaged toward the nipple as above. These are clogged milk ducts. Lumps that do not "massage away" should be checked by a doctor.

d. If the breasts become so engorged that the nipple appears to retract, manually express enough milk to soften the areola. Place the index finger on the lower edge of the areola and the thumb on the upper edge. Press slightly in toward ribs and squeeze thumb and finger gently together. Do not allow fingers to slide or pull on the nipple. Rotate fingers from time to time to stimulate sinus ducts all the way around the breast.

3. Breast Pumps

Medela Manual Breasts have a thorough instruction booklet for mothers who choose to take one home. Make sure the nipple is centered in the shield to prevent soreness from rubbing the side of the pump.

Be comfortably seated and relax!

POST PARTUM MATERNAL TEACHING GUIDE (Continued)

Place breastshield firmly over the breast and hold in place, using your index and middle fingers. Use the other fingers to support the breast.

The use of the breast pump should be comfortable and painless. Always full the piston the full length of the cylinder on every stroke until the negative pressure is automatically released.

For optimal efficiency, stroke approximately 40 time per minute. Be sure to screw the cylinder into the breastshield tightly. However, should the negative pressure feel too strong, you can reduce it by tightening the cylinder into the breastshield less firmly.

TROUBLESHOOTING:

What to do if you do not feel a negative pressure on the breast:

- Check that the rubber seal is not slipped onto the piston the wrong way and that it has snapped into place. If damaged, replace with enclosed spare seal.
- Check that the cylinder is tightly screwed into the breastshield.
- Check that the valve snapped into place.
- Check that the breastshield forms a complete seal around the breast.
- Initiate each stroke more quickly.

If breast mild is being saved for a baby in Intensive or Extended Care Nursery, both pump and collecting bottles must be sanitized by covering with water in a pan and boiling for five minutes before each use.

POST PARTUM MATERNAL TEACHING GUIDE (Continued)

For general home use, follow cleaning instruction on page 6 of Medela Booklet.

If baby is not premature, some pediatricians feel sanitizing in a dishwasher (with water temperature above 140o) is sufficient. If this method is used, nipples and small parts of the pump should be placed on top shelf of dishwasher with a glass over them to prevent them from falling down onto heating element. Be sure your doctor approves your bottle and sterilization methods.

Plastic baggy type bags are not recommended for milk collection as they tend to split when frozen and it is impossible to keep the exposed top sterile.

Breast milk may be kept in a refrigerator if used within 12 hours; otherwise, it may be kept in a ZERO degree freezer for six months. Most home freezers are not that cold so it is a good idea to use milk within a month.

4. Community Resources

   a. Nursing Mothers Counsel, Inc. and La Leche League
      We recognize the newsletters and referral lists from both organizations, so be sure patient has a number to call for reassurance.

   b. If mothers ask how they can donate breast mild, refer them to "Mothers Milk Unit" at 998-4550.

POST PARTUM MATERNAL TEACHING GUIDE (Continued)

III. EPISIOTOMY, HEMORRHOIDS AND SURGICAL INCISION

A. Episiotomy

Remind the patient that her stitches are absorbable and do not have to be removed. She may note some fragments on her perineal pad as the perineum heals. This is normal. If perineum is painful, continue to use sitz, sprays, etc., as previously mentioned.

In the absence of infection, the episiotomy or lacerations of the perineal region heal rapidly (within 3 to 6 weeks) with little inflammatory reaction.

Some patients are concerned that the amount of stretching the vagina endures during the delivery of the episiotomy itself will interfere with sexual functioning after involution is completed. They should be reassured that this is not true.

Kegal exercises help promote muscle tone in the perineal area. Kegals also help reduce edema and improve circulation in the immediate postpartum period. Kegals are performed by contracting and relaxing the perineal muscles, as if trying the start and stop urination. Remind the patient the report to her physician signs of redness, swelling, increased pain, sensation of heat, purulent drainage, burning on urination or temperature above 100.4 degrees.

b. Hemorrhoids

Hemorrhoids result from the entrapment and stasis of blood in the rectal veins. They are usually caused or aggravated if already present, by pressure of the baby on the perineal floor and by the straining of labor. Usually they are most painful during the first 2-3 days.

POST PARTUM MATERNAL TEACHING GUIDE (Continued)

Further irritation and pressure on the hemorrhoids should be prevented. The perineal pad should be attached loosely to relieve irritation of the rectum. The Sim's position while in bed is sometimes helpful in relieving pressure and congestion in the rectal veins.

Hemorrhoids that were not present prior to pregnancy will probably disappear during the latter part of the puerperium. Those that were present are likely to return to their pre-pregnancy condition.

Remind patients to keep bowel movements soft but not liquid; diarrhea is just as irritating to hemorrhoids as constipation.

C. Surgical Clips or Removable Sutures

Surgical clips or removable sutures are usually removed prior to dismissal from the hospital. If not, remind patients to call the physician's office for an appointment to have it done.

If a plastic cover was used while in the hospital for showering, the patient should continue to do so at home for another week.

Air drying is good for incisions, but a light dressing may be used if clothes tend to chafe it. If incision is very damp after shower, it may be dried for a few minutes with the LOW setting of a hand blow dryer.

Most Cesarean patients find it more comfortable to wear panties to hold their perineal pad in place rather than sanitary belts.

Cesarean patients should lift nothing heavier than their babies for the first 3-4 weeks. Remind them to sit down and have their older children sit with them or on their laps rather than trying to pick them up or carry them.

POST PARTUM MATERNAL TEACHING GUIDE (Continued)

IV. INVOLUTIONAL AND LOCHIAL CHANGES

A. Involution is the process by which the reproductive organs return to normal size and function. Immediately after delivery the uterus is about grapefruit size and weighs about two pounds. The uterus descends into the pelvic cavity at approximately one centimeter a day until by the 10th-12th day, it can no longer be palpitated in the abdomen. (At the end of the puerperium the uterus weighs about forty to sixty grams.)

Involution tends to occur more rapidly in primiparas and breast feeding patients due to increased muscle tone in primiparas and release of oxytocin during breast feeding.

B. Lochia is usually dark red for 3 or 4 days (rubra) and is mainly from the placental site. It becomes brownish pink until 10 days to two weeks postpartum (serosa). The blood vessels of the placental site become thrombosed in the process of healing and the oozing diminishes.

Between the 10th and 14th days post partum, the lochia becomes thinner, greatly reduced and yellowish or whitish in color (alba). This is due to the increase in leukocytes and may last up to six weeks.

Remind mother that frank, fresh blood is never normal; lochia has a distinctive odor but should not have a foul odor; any tissue passed should be reported; and lochia should not be absent during the first three weeks. Non-lactating patients ovulate within 3-6 weeks and menstruate within 5-8 weeks.

POST PARTUM MATERNAL TEACHING GUIDE (Continued)

Lactating patients have a varying return of menstrual cycle and may be delayed until weaning. Because of this variation, breast feeding is not a reliable form of birth control. The first menses will probably be heavier than usual and may contain clots.

C. Involutional Changes

1. "The mask of pregnancy" (chloasma) is a brown, blotching hyperpigmentation of the skin over the malar prominences and the forehead, especially in the dark complexioned women beginning in the second trimester and increasing gradually until delivery. Chloasma usually disappears after delivery.
2. The linea nigra is a pigmented line extending from the symphysis to the top of the fundus in the midline. It fades after delivery, but may never completely disappear.
3. Striae fades after deliver, but remains a silvery white and never completely disappears.
4. Peripheral vasodilation with the erythema and spiders of the hands and face fade fairly quickly. (Not to be confused with the petechiae found on mothers and babies after a "hard" labor and birth.)
5. Sweat glands increase activity. Patient may be very diaphoretic to rid body of excess water retained during pregnancy.
6. Patients lose 10-12 pounds immediately after delivery. They will probably lose about five more pounds during the following week.

POST PARTUM MATERNAL TEACHING GUIDE (Continued)

V. BOWEL AND BLADDER FUNCTION

A. Gastrointestinal organs have been displaced and progesterone levels increased during pregnancy, causing the motility of the GI tract to become sluggish. Abdominal wall muscles are relaxed and the delivery may have caused pressure to the pelvic floor, decreasing tone of the rectal sphincter.

Hopefully, the patient will have her first stool before going home, so she will be over her fear of pain. With proper diet containing roughage, fruits and adequate liquids, she should have problem with constipation.

If needed, a mild laxative or stool softener such as Milk of Magnesia, Metamucil or Colace may be taken as directed (if the physician has not given her a specific prescription).

Gas pains are also common and are usually relieved by ambulation, sitting in a warm sitz bath or lying on the abdomen.

B. Bladder function returns to normal and reduction of ureteral dilation gradually occurs during the month after delivery. Temporary loss of bladder tone and sensation due to the trauma and swelling of the perineum after delivery is not uncommon. Do not allow the bladder to overdistend. Encourage patient to try to void every 4-6 hours even if no "urge" is present.

Kegal exercises are also helpful to strengthen sphincter control. Marked diuresis usually occurs between the second and fifth post partum day as extracellular fluid, no longer necessary, is excreted.

Adequate fluid intake should be stressed. Any chills, fever, frequent or painful urination, suprapubic or flank pain should be reported to physician

POST PARTUM MATERNAL TEACHING GUIDE (Continued)

VI. ACTIVITY, BODY MECHANICS AND EXERCISES

A. The new mother is tired after labor and birth. She is usually very excited, "on a high", and often unable to relax enough to get the sleep she needs. If she does not get this immediate sleep, she may develop "sleep hunger" causing her to feel fatigued, anxious and irritable.

Mom and Dad should be made aware of her continued need for rest at home. She should try to nap during the day and retire at an early hour. If no help is available at home, she should postpone chores that are non-essential. A relaxed mother and content baby are more important that a spotless house. Mother should tell well meaning friends that she will call them when she is ready for social activity, visits and telephone calls.

Mother should make every attempt to ward off unsolicited advice she is sure to receive "...that sounds like a good idea, but my doctor says..." is tactful and usually works. Fatigue is common and the physical and emotional demands at this time are sometimes overwhelming. Mothers should be reminded that their bodies require up to six weeks to reach its non-pregnant state and they should not try to "rush" it.

B. Good body mechanics should be part of everyday living, not just a during the post partum period. Pregnancy has put an undue strain on the back, however, and now is the time to avoid unnecessary back discomfort in the future. Carry packages and the baby high close to the chest. Never twist the body to lift an object or the baby up or down; face them squarely.

POST PARTUM MATERNAL TEACHING GUIDE

In general, it is more restful to the back when seated to have the knees higher than the hips. Remind parents the classic pose of a mother with a child sitting on a saddle made of her out-thrust hip is not good and will cause back strain.

C. Strenuous exercises should be avoided until after the post partum checkup in four to six weeks and only done then with physician's approval. Some exercises can be done right away or as soon as comfortable to do them:

1. Kegals - strengthen the pubococcygeus muscle.
2. Breathing deeply, expand abdomen, slowly exhale then forcibly draw in abdominal muscles. Relax.
3. Chin lifts may be done by lying flat on back and raising head and flexing chin forward on chest without moving any other part of the body.
4. Lie flat on back with arms outstretched from the sides, then raise arms above head until hands touch; then bring arms back to sides.
5. Lie with knees and hips flexed, tilt pelvis inward and tightly contract buttocks as head is lifted.
6. By the sixth day, lie on back and slowly flex knee and thigh towards abdomen; lower foot towards buttock, then straighten lower leg.

VII. DIET

A diet similar to that followed during pregnancy should be adequate after delivery. The lactating mother's diet should contain approx. 2600 to 2800 calories per day and the non-lactating mother's about 2000 calories. In either case, a diet high in protein, vitamins and minerals is essential for tissue repair and mother's wellbeing.

POST PARTUM MATERNAL TEACHING GUIDE (Continued)

The average daily output of breast milk is 850ml, requiring an oral intake of at least three quarts of liquid. The maternal and child branch of the California Department of Health also recommends five cups of milk or the equivalent be included in the daily diet.

Most physicians recommend prenatal vitamins be continued by the lactating mother.

Coffee, tea and cola all contain caffeine and are not advised in excessive amount. Babies are usually able to tolerate mile produced from their mother's normal diet, but occasionally foods need to be eliminated if they cause problems. Examples would be excessive chocolate causing diarrhea or skin rash in baby; excessive citrus juices causing diaper rash, or very spicy or flatulence producing foods (cabbage, broccoli, beans, etc.) causing "colicky" symptoms.

A nutritional guide should be given to all mothers.

VIII. STRESSES

In general, the emotional state of the post partum mother during the early post delivery period tends to be somewhat labile and is affected by the mother's physical state and wellbeing. She is required to make adjustments to the rapid changes that have occurred and that continue to occur in her body. She is in a transitory period and is faced with stress and strain as she adapts to the new responsibilities of her maternal role. For months she has had an image of a beautiful, slim person sitting in a spotless home, holding a perfect,smiling baby right off the cover of a magazine. It may be quite traumatic when she oftentimes is handed a lumpy-headed, swollen-faced, red, screaming infant bearing no resemblance to her menta picture. Or when she notices her nice "flat" tummy isn't; and her husband or a visitor says, "You still look pregnant.." ; or when she

POST PARTUM MATERNAL TEACHING GUIDE (Continued)

thinks of going home to face the "not so spotless" home and mounds of dirty diapers. We need to be there to assure her that her baby is beautiful and that in a few days all the "lumps, bumps, etc." will disappear; that her tummy will not always precede her into the room and that a little dust is not so bad if she has no one to help her at home.

Stress the importance of uninterrupted sleep immediately after delivery. Mothers are very dependent during this "taking-in phase". She needs food, rest and to review and talk about her birthing experience so she can grasp the reality of her motherhood. The "taking-hold phase" usually starts around the third day. The mother becomes more independent and becomes the initiator and producer of self care and infant care activities. This is the ideal time for teaching; unfortunately, it is also the time most mothers go home. We can, however, tell her what to expect in the coming weeks and where to find help if she needs it. Her confidence is very delicate at this time and she needs constant reassurance that she is performing well. She has high ideals about how she should perform as a mother and feels inadequate and frustrated when she has not performed at the level she expects. "Post partum blues" may be decreasing due to better obstetrical care, better preparation for parenthood, and the trend to allow verbalization of feelings. Mild depression, anxiety and periods of weepiness and irritability are symptoms. The mother and father need to know her feelings are not unusual and that her crying is acceptable. Continued depression is not normal, and if it occurs, the physician should be notified.

POST PARTUM MATERNAL TEACHING GUIDE (Continued)

The father's ability to accept responsibility of the career of parenthood is influenced by the relationship he has established with his own parents, the nature and strength of the bonds between himself and his mate, and his ability to accept the need for an intimate, reciprocal relationship between mother and infant. Patresence, the period of transition to fatherhood, involves the adjustment to new responsibilities and changes in his life. He may be concerned about his adequacy as a parent, his increased financial responsibility and his curtailed social life and sexual relations. If the new father is aware of the changes he can expect in his mate, his newborn, his family and himself, he may be better able to support the new mother during the transition period. New patterns of organization will have to be established to incorporate changes in personal and family life.

POST PARTUM MATERNAL TEACHING GUIDE (Continued)

Sibling rivalry may require parental time and attention to handle successfully. Even if children have participated in planning for the new baby, they may be unable to accept the diminished parental attention, and their behavior may reflect their feelings of frustration. Jealous reactions are to be expected once the initial excitement of having a new baby is over, since the baby absorbs the time and attention of the significant persons in the other children's lives. Regression to an infantile level of behavior is frequently seen in the other children. Some will revert to bedwetting, whining, or refusing to feed themselves. Much patience is required of parents to weather this phase. A special time may be set aside for additional attention to older children, perhaps while the baby is sleeping. Most young children like to be involved in caring for the baby, or if too young, substitute a doll to mimic what mother is doing. Relatives should be reminded to shower attention on the older children as well as the new baby. Sibling love grows as does other love, by being with another person and sharing experiences.

IX. FAMILY PLANNING

Most physicians will specify when patients may resume sexual relations. The usual time is from 4-6 weeks after a normal delivery, if lochia is scanty and episiotomy is not painful. Parents should be reminded that it is possible to be fertile before the first menstrual period, so if pregnancy is not desired, contraception should be used. Parents should have some idea of a contraceptive method they would be comfortable with before the first post partum check-up, so they can discuss it with their doctor. They should be reminded that the "pill" cannot be taken as long as mother is breast feeding.

POST PARTUM MATERNAL TEACHING GUIDE (Continued)

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POST PARTUM INFANT TEACHING GUIDE

I. APPEARANCE

A. **Moulding:** The infant's head is large in proportion to the rest of his body. The fontanels are open to allow moulding or overlapping of skull bones to accommodate themselves to the birth canal. This may cause the baby's head to look mis-shapened at birth, but parents should be reassured that it will be well rounded within a few days. The anterior fontanel is diamond shaped, about 2-3cm wide and will close between 12 and 18 months. The posterior fontanel is triangular, about 0-1cm wide and usually closes by the end of the second month. The brain is protected by a tough membrane so parents should not be afraid to gently massage and shampoo scalp. Bulging of fontanels may occur when baby is crying or straining to pass stool, but if depression is noted at any other time, the pediatrician should be notified.

Caput succedaneum: Edema of the superficial tissues that overlie the bone of the part of the head that is presenting during delivery. The cervix causes pressure on these tissues which results in venous congestion, edema and extravasation of blood. The caput presents no problem to infant and parents should be reassured that it will usually absorb within a few days.

Cephalhematoma: This is caused by pressure of infant's head against the bony prominence of mother's pelvis during labor. Capillaries rupture under the periosteum resulting in a collection of blood between the cranial bones and the periosteum. It requires no treatment and may take between 6-8 weeks to completely absorb.

NOTE: Caput which is soft tissue crosses the suture line while cephalhematoma is confined to areas between the suture line.

POST PARTUM INFANT TEACHING GUIDE (Continued)

B. **Milia:** Distended sebaceous cysts often seen over chin, nose and cheeks. They should not be squeezed, require no treatment and will disappear as baby matures.

C. **Edema and/or ecchymosis:** May be noted due to delivery process. Pressure on presenting parts from cervix or bony prominences are the most common cause. Forceps may also leave bruises at application site. Two small puncture wounds on scalp may be from electrodes attached during labor for fetal monitoring. Bruises and/or petechiae on the face are usually the result of prolonged pressure during passage through birth canal or when the umbilical cord has been tightly wound around the neck before birth. Baby's eyes may be edematous from birth process or from the installation of eye prophylaxis.

D. **Lanugo:** A fine downy hair which may be present on back and shoulders, especially on pre-term infants. If it is present on the term infant, it usually disappears in 2-3 weeks.

E. **Skin color:** Full term newborns are usually beefy red for a few hours. This is due to both a high concentration of red blood cells and the thin layer of subcutaneous fat that causes the blood vessels to be closer to the surface of the skin. It is not unusual for a new born to have localized cyanosis caused by either immature peripheral circulation in the lips, hands and feet (acrocyanosis) or by stasis, which tends to produce cyanosis in the part presenting at delivery. This may persist for a week to ten days, especially when baby is cold. Generalized cyanosis, however, is not normal and is a condition to be reported. Paleness or pallor usually is a sign of anemia, blood loss or shock. A grayish color is usually associated with infection. (See handout sheet for jaundice.)

POST PARTUM INFANT TEACHING GUIDE (Continued)

F. Newborn rashes: A number of rashes or splotches are of no concern in the newborn, but can be a source of anxiety to parents.

1. "Flea bite" dermatitis (Erythema toxicum) are lesions in different stages, erythematous macule or papules or small vesicles which may appear suddenly anywhere on the body. The cause is unknown, and it requires no treatment and has no clinical significance.
2. "Stork bites" (Telangiectatic nevi): a pink splotch which blanches easily on pressure usually found on the occiput, the eyelids, the clavicles or nape of the neck. These disappear completely before the end of the first year.
3. "Strawberry mark" (Nevus vasculosus): capillary hemangioma consists of dilated newly formed capillaries occupying the entire dermal and subdermal layers and is associated with connective tissue hypertrophy. 75% occur in the head region. (They resemble the outside slice of a strawberry.) Strawberry hemangiomas may continue to enlarge for six months to a year; then they begin to regress. The process of involution may take as long as ten years. One half to three quarters disappear by age seven with virtually no physical evidence that they ever existed.
4. "Mongolian spots": blue-black spots or areas of pigmentation over the back or buttocks especially in dark skinned races. They fade and disappear by the time the baby is a year old.

POST PARTUM INFANT TEACHING GUIDE (Continued)

5. Diaper rash: Expose the area to air. A&D Ointment may be applied to rash. Plastic pants should be avoided if possible if baby has a diaper rash. Be sure that diapers are being rinsed well after laundering.
6. Epstein pearls are small blebs found along gum margins and at junction of hard palate. They are normal and common in newborns.
7. "Nursing rash" is sometimes notices around chin and mouth on breast fed babies. Keep the area clean and dry.
8. "Nursing blister" is also common in breast fed babies.

II. SENSES

A. Eyes: Newborn sclera may be bluish. The iris is slow to develop pigment, appearing bluish gray; final color is evident at about three months. Tear ducts may not secrete tears until 2-4 weeks. Corneal reflex is present, blink reflex to light stimuli. Infant tracks moving objects to midline, can discriminate patterns, and focus on an object at a distance of about eight inches. Not able to see in color for 4-5 months but can distinguish bright colors from dark or light ones.

B. The infant is sensitive to location of sound and can distinguish volume and pitch of sound. He tends to prefer high-toned voices.

C. Infants like being snuggled and cuddled. They seem to enjoy being stroked and can often be calmed by placing a hand on their legs or back. An infant can feel cold and will pull a limb exposed to cold air close to him in an effort to warm it.

POST PARTUM INFANT TEACHING GUIDE (Continued)

D. A sense of smell is present at birth and tends to increase over the next few days. Infants seem to be able to smell breast milk and some studies indicate they develop the ability to recognize their mother's "smell".

E. In early fetal life, taste buds are distributed throughout the mouth and throat, but prior to term, they begin to disappear from all areas but the tongue. Tests have shown infants can discriminate between water, acid, glucose, various concentrations of salt solution and milk.

III. VITAL SIGNS

A. Rectal temperature: Lubricated thermometer is inserted into the anus about one inch and read after three minutes. Infant must be supported and thermometer held the entire time. Infant may either be placed on back with legs up, laid across your lap on his tummy or turned on side and immobilized with left hand over hips. (This position is less likely to cause baby to defecate during procedure.) Normal temp is maintained at 97.6o to 99.0°F. Temperature should be taken before mother calls pediatrician if she feels her baby is ill.

B. Axillary temperature may also be taken and is sometimes preferred because there is no danger of injuring delicate rectal mucosa. The main drawback is that it does take 10 minutes to get a true reading.

POST PARTUM INFANT TEACHING GUIDE (Continued)

C. Respirations: Parents often feel their baby is "breathing too fast". Newborn respiratory rate is between 30-60 per minute with an average of 40. The increased rate in infant's in comparison to older children is due to the infant's metabolic need to move more air per minute in proportion to his body weight because of his proportionally larger skin surface. Respirations are diaphragmatic and abdominal, therefore movement of the chest and abdomen should be synchronized. Any lag on inspiration or alternating seesaw movements of chest and abdomen are signs of respiratory distress.

D. Heart rate: The maximal impulse of the heart should be felt just lateral to the midclavicular line in the third or fourth interspace. The rate may be from 90-180 beats per minute with an average of 120-160.

IV. BATHING

Purpose: Inspection of baby.
Prevention of infection.
Enjoyable interaction with baby.

Safety Factors: Never leave infant unattended.
Gather all necessary articles beforehand.
Keep diaper pins closed when not in use.
Check water temperature (between 98-100^{o}F)

A. A sponge bath should be given until the umbilical cord stump falls off in about 10 days to 2 weeks. Expose only the area of the body being washed, as babies are easily chilled. The eyes should be cleaned first, using a clean wash cloth and plain water. Using a separate corner of the cloth for each eye, wipe

POST PARTUM INFANT TEACHING GUIDE (Continued)

from the nose outward. Do not wash across the bridge of the nose, preventing infection, if present, from being transferred. Wash the rest of the face next, again without soap. Next, holding the baby securely in a football hold, shampoo scalp, massaging scalp gently with finger tips. Rinse well; pat dry. Soap trunk, arms, genital area last. Rinse well and pat dry. Pay special attention to folds and creases, such as neck, under arms, inguinal area and between fingers and toes to make sure they are clean and dry. The umbilical stump should be swabbed with alcohol daily to promote drying.

B. Points of stress:

1. Infants often scratch themselves. Their nails are very thin and often protrude beyond tips of fingers at birth. They should be cut, best done when he is sleeping; using a pair of blunt tipped nail scissors. Cut them straight across and not too close. This process will have to be repeated frequently until the baby has better control of hand movement. Hands may be kept covered at night to prevent scratching, but babies need the opportunity to "touch", look at their hands and such their fingers.
2. Baby creams, lotions, oils and powders are perfumed and should not be used on newborns as they may cause skin irritations. Mild soap without deodorant or perfume, such as Ivory, should be used. Vaseline may be used on baby's bottom to prevent stools from "sticking" to skin, but is ineffective for diaper rash. A&D Ointment may be recommended for diaper rash. Skin is fragile and easily debrides so it is an inadequate barrier to infection. Never

POST PARTUM INFANT TEACHING GUIDE (Continued)

rub skin briskly to remove stool, etc. Soak with warm water. Remember, your pediatrician should approve your choice of soaps, ointments, etc.

3. A vaseline dressing usually covers the penis during the first 24 hours after circumcision. There is no need to rewrap the gauze if no bleeding is present. After discharge to home, keep the end of the penis coated with vaseline for 2-3 days to prevent rubbing and/or sticking to diaper. Soap will be irritating to the circumcision for several days. The areas is best rinsed with clear water until it heals. Normally the circumcision will be healed earlier than the umbilicus and thus prior to the baby's first tub bath. The foreskin in uncircumcised infants should not be retracted. If infant is being circumcised with the bell, mother will be given an instruction sheet to take home. The tissue will become necrotic and fall off within 5-8 days. Stress that she should call the doctor if it is not off within 8 days, or if any unusual swelling is noted or the bell slips into the shaft of the penis.

4. Breast engorgement may be seen in both sexes. During pregnancy, maternal hormones cross the placental barrier and enter fetal circulation. When these hormones are withdrawn at birth, the breasts enlarge and may even secrete milk, referred to as "witches milk". This engorgement is normal and breasts should not be handled except in bathing. No attempt should ever be made to express this fluid as that could cause mastitis.

POST PARTUM INFANT TEACHING GUIDE (Continued)

5. Diapers should be kept below umbilical stump to allow air to circulate and aid in drying. Diapers should be folded to fit baby with excess in back for girls and front for boys. Diaper pins should face outward, away from the genitals. Infants enjoy being wrapped snugly in a blanket to give them a feeling of security. Overdressing in warm temperatures can cause as much discomfort as underdressing in cold temperatures. When dressing baby, avoid pulling shirts roughly over face and catching fingers in shirt sleeves. The inside of sleepers should be checked frequently for loose threads which could "cut" baby's fragile skin.
6. Holding positions were discussed in breast feeding section.

VI. INFANT NUTRITION

A. Schedules are for trains. Babies should be fed when they are hungry. Most formula fed infants will eat every 2-5 hours, and breast fed infants about every 2-4 hours. Frequently, by the end of the first month, a baby will be ready to give up his middle-of-the-night feeding, although he probably won't sleep much more than six hours at a stretch. To encourage this long sleep period at night, mom may want to make sure he eats as late as possible before she goes to bed. It is also a good idea to keep the lighting dim and not make it "play time" when he does awaken at night, so that he can get the idea he should be cleaned, cuddled, fed and go back to sleep.

POST PARTUM INFANT TEACHING GUIDE (Continued)

B. The pediatrician will specify what type formula he prefers the infant to be fed. He should also approve the methods of sterilization used. Some doctors feel the "single bottle" method of formula preparation is adequate. This method consists of washing bottles and nipples in hot, soapy water and rinsing well or running through dishwasher sanitation cycle. Then make each bottle as needed, using powdered or concentrated liquid formula and adding tap water as directed. (If any question about the safety of water supply, it should be boiled 5 minutes prior to use.) If this method is used, it should be given to baby immediately and any unused portion discarded. In the "Terminal sterilization" method, a day's supply of formula is prepared in bottles; they are placed in a large pan in 3-4 inches of water and boiled 25 minutes. The pan is cooled until it can be touched, and then the bottles ar refrigerated until feeding time. Refrigerated bottles may be warmed before feeding, but this is not really necessary unless the baby does not care for the cold formula. Nipples should release about one drop per second - if holes are too small, enlarge with hot needle. If pediatrician has instructed mother to give baby Karo or glucose water at home, she should be instructed to mix 1 teaspoon light Karo syrup in 4 ounces boiled water. (If baby is constipated, doctor will usually have her use dark Karo syrup instead of the light.)

C. In their Recommendations for Infant Feeding Practices, the Child Health and Disability Prevention Branch of Maternal and Child Health Branch of California Department of Health Services states: "The best food for the normal newborn is breast milk. Where circumstances exist when breast milk is not used, commercial and

POST PARTUM INFANT TEACHING GUIDE (Continued)

evaporated milk formulas, with specific supplementation, are acceptable and adequate alternatives. The vast majority of women are physically capable of nursing their babies. Nature has seen to it that the production of mother's milk is closely related to the needs of the newborn. For the first few days of life a newborn sleeps much of the time and is content with the colostrum present in the mother's breasts. The true milk "comes in" about the third post partum day. Infants have normal appetite and growth spurts around 5-6 weeks and again around three months. Nursing every 2-3 hours during the day for a few days will increase the milk supply to the amount baby needs and he will again go longer between feedings. Mothers are often concerned that they cannot "see" how much milk their baby is receiving. Reassure her that if her baby seem satisfied, is gaining weight and has six or more wet diapers per day, baby is adequately fed. Nursing should continue even if mom has a menstrual period. Baby may be fussy for a day or two, but the quality of milk is unchanged. Remember,m as previously stressed, adequate rest, diet, oral fluid and support from those around her are necessary for successful nursing.

D. Formula fed babies should be burped at midpoint and end of feeding. Breast fed babies do not swallow as much air and need only to be burped at end of feeding. Burping may be accomplished by placing baby over shoulder and patting gently; supporting the chin with baby in a sitting position and patting back; or placing baby across your lap on his stomach and patting his back.

POST PARTUM INFANT TEACHING GUIDE (Continued)

E. Stools: First stool is passed within 24 hours (meconium). It is black or dark greenish, sticky, odorless and sterile for 24 hours. The transitional stools are passed form 3-5 days and are loose, greenish yellow and contain mucus. Stools after the fifth day are golden yellow, have less odor and are unformed for breast fed babies; and paler yellow, with more odor and form for formula fed babies. Some infants may have a stool at each feeding and some only one large soft stool every 4-5 days.

VII. SAFETY FACTORS

A. Keep obviously infected people away from baby.

B. Do not leave baby unattended on flat surfaces; even small babies can "scoot". Straps on changing tables will not always hold an infant and should not be trusted to keep baby from falling.

C. Watch young siblings who may accidentally or purposely tip over infant seats or lower safety rails.

D. Cribs should not have slats more than 2-3/4 inches apart since infants may stick their heads through wider slats and strangle.

E. A crib mattress should be the same size as the crib to avoid space around the mattress through which a child might catch an arm or leg.

F. Infants should be placed on side with blanket prop to prevent aspiration if he vomits. Do not place baby on his back after feeding him. Babies should not have pillows.

G. Check clothing frequently for strings that could wrap around baby's fingers or toes and cut them or impair circulation.

H. Keep emergency phone numbers, including poison control number, by the telephone.

POST PARTUM INFANT TEACHING GUIDE (Continued)

I. An infant car seat bearing the label certifying that it meets Federal Motor Vehicle Safety Standard #213 is a necessity. Infants are top heavy (usually until age 5) and tend to pitch forward, head first. Even in a minor collision, a small child can be thrown against the car's interior and seriously injured. An infant weighing ten pounds and held in the lap of a parent who is wearing a seat belt can exert a 300 pound force against the parent's grip in a 30 mph collision.

Original Patient Teaching Guide
Developed September, 1980 by
Linda Lamson, R.N., B.S.
Post Partum

APPENDIX D

INFORMED CONSENT

CONSENT TO BE A RESEARCH SUBJECT

EVALUATION OF POSTPARTUM NURSING INTERVENTIONS

Principal Investigator: Judith A. Bamber, R.N.
Graduate Student, Department of Nursing
San Jose State University and
Obstetrics and Gynecology Nurse Educator
Good Samaritan Hospital of the Santa Clara Valley
2425 Samaritan Drive
San Jose, California 95124

Introduction. This form is known as an "informed consent form." You should read it carefully and ask questions before you decide whether or not to consent to participate in the study. You may take as much time as you like to make up your mind. Prior to your consenting to participate, Judith Bamber will discuss the information contained in this form with you. If there are medical or scientific terms used in the discussion or this form which you do not fully understand, please ask the person obtaining your consent to explain them to you.

Purpose. This is a study of the effectiveness of certain nursing actions by postpartum hospital nurses. You will be asked to provide some confidential demographic information and then to participate in three telephone interviews after your discharge from the hospital. The interviews will last about 15 to 30 minutes, and will be conducted on the fourth, seventh and fourteenth day after you deliver your baby. There will be about 30 women participating in this study.

Confidentiality. The results of this study may be published, but the findings will be reported as group data. Any information from this study that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. All data collection forms will remain locked at the home of the investigator.

Procedure. The procedure for this study consists of the following steps:

a) Informed consent obtained while participant is in the hospital

b) Demographic information completed at time of giving consent

c) Investigator calls participant on the fourth, seventh and fourteenth days after delivery
d) Investigator interviews participant about her experiences during the postpartum period. During the interview, the investigator will not be giving advice or teaching to the participant.

Risks. There may be a certain amount of emotional discomfort associated with the discussions of postpartum issues. In addition, there could be inconvenience or time consumption associated with the phone calls.

Benefits. Although this study is not expected to benefit you, you may find some benefit in being able to present your concerns and interests to the investigator.

Costs. The participant will not incur any costs during this study. Phone costs will be absorbed by the investigator. Neither the Good Samaritan Hospital of Santa Clara Valley nor its agents or employees will compensate you for your participation in the study.

Rights. Participation in this study is voluntary, and you are free to withdraw your prior consent and to discontinue participation in the study at any time without prejudice to your relations to Good Samaritan Hospital, San Jose State University, or your individual health care provider. If you have any questions about the study, you should contact Judith Bamber at 408-265-7004. Complaints about the procedures may be presented to Bobbye Gorenberg, D.N.Sc. (Graduate Advisor for the Department of Nursing at San Jose State University) at 408-924-3134. For questions or complaints about research subject's rights, or in the event of a research related injury, contact Serena Stanford, Ph.D. (Associate Academic Vice-President for Graduate Studies) at 408-924-2480. You may also address questions or complaints to the Good Samaritan Hospital Institutional Review Committee, which is concerned with protection of volunteers in research projects. The committee can be reached by telephone through the Medical Staff Office at (408) 559-2386, from 8:30 A.M. - 4:30 P.M. weekdays, or write the committee in care of the Medical Staff Office, 2425 Samaritan Drive, San Jose, CA 95124.

YOU ARE MAKING A DECISION WHETHER OR NOT TO PARTICIPATE IN AN RESEARCH PROCEDURE. YOUR SIGNATURE ON THIS INFORMED CONSENT FORM BELOW INDICATES THAT YOU HAVE READ AND UNDERSTOOD THE INFORMATION PROVIDED IN THIS FORM, THAT YOU HAVE BEEN VERBALLY INFORMED ABOUT THE PROCEDURE, THAT YOU HAVE HAD A CHANCE TO ASK QUESTIONS, THAT YOU HAVE DECIDED TO PARTICIPATE, AND THAT YOU CONSENT TO THE PROCEDURES OR TREATMENT DESCRIBED ABOVE.

_____ _____

Date and Time Participant

_____ _____

Date and Time Witness

The undersigned investigator hereby certifies that she has discussed the research project with the participant and has explained all the information contained in the consent form to the participant, including any adverse reactions that reasonably may be expected to occur. The undersigned further certifies that the participant was encouraged to ask questions and that all questions were answered and that the subject has received a copy of this form for her file.

_____ _____

Date and Time Name and Title

EXPERIMENTAL SUBJECT'S BILL OF RIGHTS

You have been asked to participate as a subject in a research project. Before you decide whether you want to participate, you have a right to:

1. Be informed of the nature and purpose of the experiment;

2. Be given an explanation of the procedures to be followed in the medical experiment, and any drug or device to be utilized;

3. Be given a description of any attendant discomforts and risks reasonably to be expected from your participation in the experiment;

4. Be given an explanation of any benefits reasonably to be expected from your participation in the experiment;

5. Be given a disclosure of any appropriate alternative procedures, drugs, or devices that might be advantageous to you, and their relative risks and benefits;

6. Be informed of the avenues of medical treatment, if any, available to you after the experimental procedure if complications should arise;

7. Be given an opportunity to ask any questions concerning the medical experiment or the procedures involved;

8. Be instructed that consent to participate in the experimental procedure may be withdrawn at any time and that you may discontinue participation in the medical experiment without prejudice;

9. Be given a copy of this form and the signed and dated written consent form; and

10. Be given the opportunity to decide to consent or not to consent to the medical experiment without the intervention of any element of force, fraud, deceit, duress, coercion, or undue influence of your decision.

I HAVE CAREFULLY READ THE INFORMATION ABOVE IN THE "EXPERIMENTAL SUBJECT'S BILL OF RIGHTS" AND I UNDERSTAND FULLY MY RIGHTS AS A POTENTIAL SUBJECT IN A MEDICAL EXPERIMENT INVOLVING PEOPLE AS SUBJECTS.

_____ _____

Date and Time Participant