Change in Primiparous Mothers' Concerns from the Second or Third Postpartum Day to One Month Postpartum

by

Lisa Domke

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Nursing

School of Nursing

University of Manitoba

ISBN Ø-315-33919-5

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Abstract

This comparative survey examined the concerns of mothers on the second or third postpartum day and again at one month postpartum. The purpose was to identify maternal concerns and to determine changes in the focus, frequency and intensity of concerns from the second or third postpartum day to one month postpartum. A convenience sample of 33 primiparous mothers was selected from three urban hospitals. Each woman was married, between the ages of 18 and 35, and had had a normal vaginal delivery and a healthy infant.

The maternal concern questionnaire was administered to the mothers while in hospital and again one month postpartum at home. This questionnaire included five categories of concern related to self, baby, husband, family and community. Demographic information was collected by a questionnaire administered in the hospital. Additional information was collected by a semi-structured interview at home.

Prior to data analyses, the five categories of concern were further divided into nine subcategories. The resultant nine subcategories of concerns were physiological changes, physical discomfort, and emotional self of the mother; physical and behavioral aspects of the baby; husband; family; relationships and institutions.

Parametric and non-parametric statistics were used in the data analyses. The level of significance was set originally at .05 and then recalculated to the .0056 level.

Analysis of the data revealed that the subcategory related to physical discomfort of the mother demonstrated a statistically significant decrease ($p \leq .0056$) in concern at one month postpartum. Further testing is needed on the subcategories of physical and behavioral aspects of the baby. Analysis indicated a significant decrease in concern at the .05 level but not at the .0056 level. Additional findings from the nine subcategories indicated that the greatest concern at the second or third postpartum day was about the physical aspects of the baby and the greatest concern at one month postpartum was about the husband.

ACKNOWLEDGEMENT

It is with my sincere appreciation and deepest respect that I acknowledge my thesis committee, Professor Karen Chalmers (advisor), Dr. Connie Becker, and Dr. Lois Brockman for their invaluable assistance and direction through all phases of the study.

Credit is also extended to my husband, Dr. Curtis Thiessen, for his support and to my parents, Dr. Oscar and Mrs. Lois Domke, for their encouragement.

Finally, I would like to express my gratitude to the new mothers who so willingly gave of their time and thoughts. To them, I express my best wishes in caring for their babies.

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INTRODUCTION

The event of childbirth is one in which nurses have traditionally offered care and support to both mother and child. Today, nurses from the hospital and the community take very seriously the responsibility to assist the postpartum mother to cope with her concerns. It is important to identify concerns of new mothers so that nurses will deal with them in an understanding and effective way. Improvement in nursing care has the potential to enhance the health of the childbearing family. The purpose of this study is to examine the concerns of primiparous mothers at the second or third postpartum day in hospital and again at one month postpartum, with a view to understanding if and how these concerns change over that period. The results of this study should be useful in planning nursing practice, in the provision of nursing care to the postpartum mother and in the future development of community health programs.

STATEMENT OF THE PROBLEM

It was evident from clinical practice that first time mothers did have concerns during the postpartum period. These concerns may influence a woman's adaptation to motherhood. This area will be explored under the following headings:

1. the importance of the immediate postpartum period;
2. the importance of the concerns of the postpartum mother;
3. the importance of reducing anxiety; and
4. the need for accurate identification of concerns.

The Importance of the Immediate Postpartum Period

The literature indicates that although the transition to parenthood takes a lifetime, the first few weeks after childbirth are particularly intense (Moss, 1981). It has also been shown that the birth of a child is a life event which is known to make major demands and provoke a certain amount of stress (Holmes & Rahe, 1967). The transition to parenthood is accompanied by emotional upheaval and increased pressures for readjustment (Hrobsky, 1977).

The emotional adjustment of women following childbirth

has been investigated by many researchers. Gordon, Kapostines and Gordon (1965) have pointed to the problem of postpartum depression in women following the birth of a child. Paschall and Newton (1976) found that crying, irritability and feeling blue amongst women following childbirth was common but did not necessarily indicate poor health.

It is during the early weeks of the postpartum period that the mother and her family make adjustments to one another. The future progress of the physical and mental well-being of the newborn will be affected by the response of the individual and/or family (McKenzie, Canaday & Carroll, 1982). In Klaus and Kennel's (1970) study, results indicate that the type of relationship developed with the infant during the first weeks is believed to contribute to the infant's later development. They concluded that instances of battering, behavioral problems and failure to thrive originated in the first few weeks following childbirth.

During the puerperium, all mothers have needs related to four tasks which must be accomplished. These tasks are: physical restoration, learning to care for and meet the needs of a dependent infant, establishment of a relationship with the infant and alteration of lifestyle and relationships to accommodate a new family member (Gruis, 1977). These tasks indicate the physiological and

psychosocial postpartum adjustments which carry on from birth of the child to when the mother returns home with her newborn. The many physiological and psychosocial adjustments which the postpartum mother encounters may generate concerns.

The Importance of the Concerns of the Postpartum Mother

A mother's concern is an indication of a need (Bull, 1981). Hrobsky (1977) writes that a mother may be unable to focus on the infant's needs until her own needs are met. Thus, the support the mother provides to the newborn may result in an increasing burden if the mother's needs are not met. As a result, the health of the mother and her family may be threatened.

Moreover, the transition from the hospital to the home may be a difficult adjustment for the postpartum mother. The postpartum mother must move from a passive-dependent role during hospitalization and, very quickly, she must resume her responsibilities at home while caring for herself and her new infant. The mother may encounter difficulties managing, especially if there is a lack of support in the home. In addition, the contact with the health care system decreases following hospital discharge and the mother, who may have many concerns and lacks the health care system support, is left to manage in her own home setting. Health care professionals can ease the difficulties which may emerge following the birth of the baby and when the mother

returns home with her newborn.

The Importance of Reducing Anxiety

A study of the concerns of postpartum mothers may provide valuable information for the health professional. According to Adams (1963), Brown (1967) and Fillmore and Taylor (1976), concern causes anxiety. This may be a significant factor in the examination of the characteristics of mothers who abuse their children. Egeland, Breitenbucher and Rosenberg's (1980) study involved the administration of a modified version of the Life Events Inventory to 267 primiparous women at one year postpartum who were identified as being at risk for abusing their children. This study showed that the majority of subjects did not abuse their children. However, it was found that subjects with high life stress scores who mistreated their children, had higher scores on anxiety and aggression and lower scores on succorance compared with those who did not mistreat their children. In addition, the high stress subjects who mistreated their children, had poorer patterns of interaction with their infants and less understanding and awareness of the difficulties and demands involved in being a parent. Hence, an increase in concern may cause an increase in anxiety and increase the risk of child abuse. Conversely, a decrease in concern could be viewed as a desirable outcome because anxiety would be reduced thus decreasing the likelihood of child abuse.

The Need for Accurate Identification of Concerns

There is no evidence to support the fact that concerns of the mothers have been accurately identified at the second or third postpartum day within the hospital. As well, there is no evidence to indicate that changes in concerns may occur when the mother is at home at one month postpartum. A study of the change in concerns of postpartum mothers from the second or third postpartum day to one month's postpartum is of benefit because of the lack of research in this area.

BACKGROUND TO THE STUDY

One impetus for this research was the recent changes in the delivery of maternal and child health services in Winnipeg, Manitoba. In an attempt to meet the needs of the childbearing families, two significant changes have occurred within the hospital setting: (1) the development of a standardized maternal postpartum education program, and (2) the establishment of a community health nurse hospital based co-ordinator.

The first change which was implemented within the hospital setting was the development of a standardized maternal postpartum education program. The goal of this program is to facilitate the teaching of identified learning needs of the postpartum mother while she is still in hospital and to provide ongoing education in the community as required.

The underlying assumption of this program is that the postpartum mothers will self-identify their learning needs by means of a questionnaire. Also, it is assumed that these needs, which are communicated to the hospital nurses, will be acted upon in a positive way.

The second change has been the establishment of a community health nursing hospital-based co-ordinator. The

role of the hospital co-ordinator is to assess the potential postpartum/newborn risk situation by established physical and psychosocial guidelines to determine if and when a home visit is necessary by a community health field nurse following the discharge of mother and baby. Based on the hospital co-ordinator's assessment, recommendations are made for an immediate home visit, a home visit within two weeks, a telephone call or no visit. It is assumed that the limitation of visits to specific families will result in a concentration of time available for families who are identified as having particular health needs. The community health field nurse can spend her time more profitably with these families. It is noteworthy that the decision made by the hospital co-ordinator does not prevent the mother from receiving a home visit if she so desires, nor does it prevent the community health field nurse from visiting a family regardless of the recommendations of the hospital co-ordinator.

The underlying assumption for the second program is that an assessment made by a nurse in hospital can correctly identify the client who is thought to need a home visit and that this assessment can be done within the hospital setting. Also, it is believed that those families who require home visits will receive a visit from the community health field nurse which will have a focused purpose.

From these two programs, two assumptions can be made

relative to the concerns of postpartum mothers. One assumption is that the expressed identified learning needs are presumed to be the actual concerns of the postpartum mothers. Another assumption is that the hospital setting is the most appropriate place to identify the learning needs and/or concerns of the postpartum mothers, and that the decision for a home visit can be made within the hospital.

Therefore, a study which examines the change in concerns of postpartum mothers from the second or third postpartum day to one month postpartum may assist in program planning. A study in this area may, at least, provide knowledge of the expressed concerns of postpartum mothers while in hospital and at one month postpartum. The recognition of a change in concerns for these two time periods may assist nurses to provide the most appropriate time for nursing intervention. A study to examine the concerns and the changes or persistence of maternal concerns would be useful in evaluating nursing interventions in providing care during a critical time.

LITERATURE REVIEW

The literature review is organized into the following headings:

1. Concerns of Mothers During the Postpartum Period,
2. Comparison of Concern Studies, and
3. Conclusion.

The first section will review the research done on maternal concerns. It will describe studies of maternal concern, report the significant findings and discuss the limitations of each study. The second section compares the maternal concern studies. The final section reiterates the information gathered from the literature review in order to emphasize the need for further research.

1. Concerns of Mothers During the Postpartum Period

Robertson (1961) studied maternal concerns using a mailed questionnaire. The questionnaire listed various sources of potential concern. The mothers were asked to examine 22 categories of concern which were based on the physical assessment of the infant. Mothers were to rate the categories of concern as: no worry, some worry and

considerable worry, and to describe the nature of the existing disease or abnormality as well as the physician's recommended therapy. The names of 2,000 mothers who had delivered during a specified time interval were randomly selected from a commercial master list, which included 85% to 90% of the nation's births. Two questionnaires were mailed to the mothers. The first requested that upon receiving the questionnaire that she complete and return the questionnaire. A second questionnaire was sent one week later requesting her to complete the questionnaire if she had not already done so. In the investigation, two independent surveys were conducted utilizing the questionnaire. The response to the first survey (March 1957) of 2,000 mailed questionnaires resulted in 1,132 or 60.5% which were completed and used for analysis. The response to the second survey (November 1958) of 2,500 mailed questionnaires yielded 1,134 or 47.5% which were completed, returned and analyzed.

The findings from both questionnaires were found to resemble each other very closely. The most prevalent concerns were gastrointestinal dysfunctions, skin disorders and sleep disturbances. An increase in maternal parity was associated with a reduction in the incidence of concerns.

One limitation of the study was the use of the mailed questionnaire. A low response rate from a mailed questionnaire does not provide an accurate account of

concerns expressed by all mothers in the study. Another limitation was that the study is medically based with the focus on the physical assessment of the infant only. Also the study was limited because the mother may have other concerns which she was not given the opportunity to identify.

Adams (1963) examined early concerns of primiparous mothers with regard to infant care activities. Concerns were defined as areas of special interest or worry to mothers and were indicated by questions pertaining to particular areas of care. Forty primiparas were interviewed at three time periods. The first interview took place in hospital on the second day after delivery. The second interview took place in the respondent's home approximately one week after the mother had assumed care of the infant. The third interview was held in the home after the mother had been caring for the infant for approximately one month. All three interview schedules were designed by the investigator and pre-tested with six patients, who were not included in the final results. The final interview guides consisted of partly structured questions and some open-ended questions. Included in the non-random sample were 20 mothers of infants who were premature by birth weight and 20 mothers of infants who were normal birth weight.

The two sets of mothers reported similarities in numbers and kinds of concerns. The three areas of concern

in rank order were feeding, crying, and bathing. The husbands were found to be the most helpful resource person at one week and at one month. A slight difference between the two groups of mothers was that mothers of prematures were found to ask slightly more questions at two days, but thereafter mothers of infants of normal weights expressed more concerns.

Caution should be exercised when interpreting the results due to the limited sample size and the non-random selection which affects the generalizability to the larger population. Another limitation of the study was the inclusion in the sample of four mothers who were separated from their infants because of the infants' lengthened hospital stay due to low birth weights. The separation of mother and infant may be very stressful for the mothers and as such, mothers may have experienced different concerns and thus biased the results.

Brown (1967) studied the effects of public health nursing visits on the concerns of the primigravida mother. A concern was defined as any aspect of infant care that worries a new mother. Forty primiparas were divided into two groups. Group A were mothers who had public health nursing visits. Group B were mothers who did not have public health nursing visits. A questionnaire was administered at the third or fourth postpartum day and again after the mother had been home for one month. The level and

intensity of the mother's concerns were categorized under six broad areas; bathing, crying, feeding, elimination, routine care, and sleeping. The mothers were also asked to rank the six areas of infant care in order of their importance to them. Also, at the four week time period they were asked to indicate the three most helpful persons to them during the past four weeks, as well as the number of physician contacts they had made.

Results indicated that there was a reduction in the number and intensity of the primigravida mother's concerns about infant-feeding when the mothers were visited by a public health nurse. However, mothers who did not have nursing visits had a greater reduction in the intensity of their concerns about crying of the infant. Thus, due to this contradiction between nursing visits and non-nursing visits and reduction in the intensity of concerns, a conclusion cannot be drawn that public health nursing visits will reduce the number and intensity of concerns. In addition, the mothers with public health nursing visits contacted their physicians more often than mothers without nursing visits. Mothers in the entire sample ranked their husbands first and their mothers second in helpfulness. Those mothers with public health nursing services ranked the nurse third, while the non-public health nursing visit group ranked other family members as third.

One limitation of this study was the small sample

size. Secondly, there was no mention of reliability and validity of the instrument used to collect the data. Thirdly, some of the non-service group of mothers also had "extended visits" with their infants in the hospital plus additional help in the home, which may have influenced their interpretation and intensity of concern.

Light and Fenster (1974) studied the maternal concerns of 202 randomly selected maternity patients during their hospital confinement following childbirth. Concern was defined as an uneasiness of mind which resulted in anxiety. Data were gathered using a questionnaire to which subjects could respond yes (did worry) or no (did not worry) to the 10 categories of pre-set concerns chosen for investigation. These were: baby, childbirth, subsequent pregnancies, self, finances, medical care, family, doctor, medication and birth defects.

The results indicated that over half of the subjects expressed concern in the categories of baby, childbirth, subsequent pregnancies, and self. There were nine items of concern that were found to be significantly higher for the primiparas than for multiparas. The nine items were: caring for your baby's physical needs; the responsibility you must accept; the pain in childbirth; your baby being overdue; birth defects due to smoking and/or drinking; birth defects your baby might inherit; managing the added expenses of having a child; being able to follow the diet prescribed;

and any medication you took and its effect on the baby.

A limitation of the study was that the reliability and validity of the instrument were not reported. In addition, the study would have benefited by including a measurement of the degree of intensity of concerns expressed by the mothers.

Fillmore and Taylor (1976) studied infant care concerns of 52 primiparous mothers. The study was based on the "anxiety" model of concerns which was derived from Adam's (1963) and Brown's (1967) study. It is a model that assumes that concerns cause anxiety and play a negative role in the mother/child relationship and therefore, anxiety should be reduced. Respondents were requested to express their degree of concern in six infant care areas: feeding, crying, bathing, elimination, routine care, and sleeping.

Results of the study indicated that when ranking the concerns in order of greatest concern there was a variation when the statistics were analyzed. The mean score suggested that crying is of greatest concern followed by elimination and routine care. Yet the average rankings implied that feeding was of greatest concern followed by crying then elimination.

One limitation was that the anxiety model of concern provides a narrow focus of the concept of concern. It suggests that concern should be viewed as consisting of two

components--worry and interest. Many physical and psychological alterations occur immediately after childbirth; these alterations may precipitate some anxiety in the mother. However, some of the changes may not necessarily worry the mother but may simply be of interest to her. Thus, concerns may be viewed as having a negative and positive role in the mother/infant relationship. Other limitations of this study were the small sample size and no mention of the reliability or validity of the instrument used.

Sumner and Fritsch (1977) explored the postnatal needs of parents through the abstraction and coding of questions telephoned to the health care provider during the six week postpartum period. During October 1974 to November 1974, 270 calls were received and coded by the nurses.

Results indicated that the highest number of calls occurred during the first three weeks of the infant's life, and were from mothers who were breastfeeding; and were from primiparous mothers. Findings suggest that parents of a first-born or of male infants have a much greater number of questions. The greatest number of questions were in the following categories: feeding, colic, skin rashes, sleep/cry, and postpartum adjustments.

A limitation of the research was that the mothers may not have expressed all their needs but only those needs for which they felt a nurse should be contacted.

Gruis (1977) examined the postpartum concerns of 40 mothers (17 primiparas and 23 multiparas) at one month. A questionnaire listing potential areas of concern in relation to self, infant and family was sent to mothers who had normal uncomplicated births. The mothers were asked to identify which areas were of significant concern to them during the past month, to rank the concerns as major or minor and to note the resources they had used to meet these concerns.

Results indicated the most frequent concern of primiparas and multiparas was the return of their figures to normal. Also, the majority of mothers reported concerns about fatigue, emotional tension, feelings of isolation and being tied down, and feelings of inadequate time for personal needs and interests. Infant care was not recognized as a major concern. In a comparison of the foremost concerns of the primipara to those of the multipara, other than those specified, the primipara focused primarily on the behavior and feeding of the newborn, while the multiparous concerns focused on the strain that a new child places on the mother. The major sources of help to these mothers were their husbands. None of the mothers used a nurse for a resource.

There were several limitations to the study: (1) a small sample size, (2) no mention of the total number of questionnaires mailed in order to receive a response from 40

mothers, and (3) no discussion of the reliability and validity of the instrument which was developed.

Hicks and Harrison (1978) studied the expressed concerns of mothers four to six weeks postpartum and the sources of help the women used to meet these concerns. The study was limited to married women with vaginal deliveries of apparently normal infants, with the birth occurring between September to December 1978. Concern was defined in this study as feeling worried, uneasy, anxious, afraid, being pre-occupied by something, having questions or wanting to know about something. A questionnaire, developed by Gruis (1977), was sent to 250 mothers. The response rate was 215 (86%) with 158 (73%) suitable for analysis.

Results indicated that 70% of those 158 women were concerned with diet, exercise and return of figure to normal. Fifty to 69% of the respondents were concerned about infant feeding and behavior. Women with two or more children had significantly fewer concerns. Women who felt the postpartum period was stressful used friends as a resource. The husband was identified as the resource person most used. The nurse was ranked fifth.

One drawback of this study was the low response rate of the mailed questionnaire. The results may not provide an accurate picture of the concerns of all mothers eligible for the study. Also, the reliability and validity of the questionnaire were not discussed.

Bull (1981) conducted a study on the concerns of 30 first-time low-risk mothers on the third day postpartum and the changes in concerns after one week at home. Concern was defined as questions, worries, or areas of marked preoccupation or interest related to the puerperium. Mothers completed a reliable and valid checklist questionnaire rating the intensity and frequency of the concerns in relation to self, baby, husband, family and community.

After one week at home, the results suggest a moderate to intense concern in the categories related to self and baby and little concern in the categories of family, husband and community. Concerns related to emotional self increased significantly after one week at home.

A limitation of the study was the small sample size.

In 1981, Moss studied the major concerns of 56 multiparas on the third postpartum day. Concern was defined as an interest and a worry. A reliable and valid card-sorting tool of 61 index cards based on concerns relating to baby, mother and family relationships was administered to the mothers.

Results showed that multiparas were less concerned about themselves and their infants then they were about family relationships. The greatest number of concerns were found to be in women: (1) under 20 years of age, and (2)

those mothers who delivered male infants.

A limitation of the study was the small sample size.

2. Comparison of Concern Studies

The usual focus of the research was primiparous mothers (Adams, 1963; Brown, 1967; Fillmore & Taylor, 1976: Bull, 1981). There was one study which included only multiparous mothers (Moss, 1981). Four studies examined the concerns expressed by both primiparous and multiparous mothers (Robertson, 1961; Light & Fenster, 1974; Gruis, 1977; Hicks & Harrison, 1978).

There were variations in the definition of the concept of concern in these studies. Adams (1963), Brown (1967), and Fillmore and Taylor (1976) viewed concern as a negative concept in which the concern needed to be reduced or eliminated in order to reduce anxiety. In other studies, the concept of concern was viewed as negative (anxiety provoking) as well as positive (an indication of interest) (Light & Fenster, 1974; Gruis, 1977; Sumner & Fritsch, 1977; Hicks & Harrison, 1978; Bull, 1981; Moss, 1981).

There was variation in the time factor in the studies. Light and Fenster (1974), Fillmore and Taylor (1976) and Moss (1981) studied concerns during postpartum hospitalization. Other studies covered the four to six week

period (Adams, 1963; Brown, 1967; Gruis, 1977; Sumner & Fritsch, 1977; Hicks & Harrison, 1978). Bull (1981) examined the change of concerns from the third day to the first week. Robertson (1961) suggests the postpartum period was used as the time frame, although it was not clearly stated in the study. There was difficulty in comparing these studies as the concerns of mothers could vary over the six week postpartum period.

There also was a variation in the design of the studies and as such it is difficult to compare the study results. Robertson (1961), Light and Fenster (1974), Fillmore and Taylor (1976), Sumner and Fritsch (1977), Gruis (1977), Hicks and Harrison (1978), and Moss (1981) studied concerns at one point in time during the postpartum period. Adams (1963), Brown (1967), and Bull (1981) examined concerns at several points in time during the postpartum period. A longitudinal design, although more costly and time-consuming, may provide different data than a cross-sectional design.

The methodology of the studies varied also. Interviews, questionnaires and card-sorting techniques were reported to have been used in the studies. Due to the variety of methods used to collect data in the studies, it is difficult to compare the results of the studies as mothers may express different concerns when answering a checklist questionnaire or responding to an open-ended

question. A prepared checklist of concerns may provide "cues" to responses and miss other more important concerns which may be present.

Studies by Robertson (1961), Light and Fenster (1974) and Hicks and Harrison (1978) reported a sample size of 100 or more mothers. The other studies used smaller sample sizes. Light and Fenster (1974) and Hicks and Harrison (1978) chose their sample randomly; the remaining studies reported a convenience sample. The sample size and method of selection affects the interpretation of the results and the generalizability to the larger population.

Adams (1963), Brown (1967), Gruis (1977), and Hicks and Harrison (1978) asked questions in their studies related to the resources utilized during the postpartum period. From these studies, the husband was identified as the major source of help and the nurse ranked lower in all cases. However, it was assumed from these studies that the resources which were utilized were "helpful" when dealing with the concerns. The respondents gave no indication whether or not this was true.

The questions and responses varied throughout the studies. Robertson's (1961) study focused on a medical perspective with concerns based on the physical assessment of the baby. Adams (1963), Brown (1967), Fillmore and Taylor (1976) asked questions which were directed toward infant care. Sumner and Fritsch (1977) had some questions

directed towards the concerns relating to the mother herself. Light and Fenster (1974), Gruis (1977), Hicks and Harrison (1978), and Moss (1981) asked questions which covered the three areas relating to self, infant, and family. Bull (1981) examined the change of concerns relating to five broader areas: self, infant, husband, family and community.

3. Conclusion

A review of the maternal concern studies indicates variation in the definition of concern, time factor, methodology, design, and sample. Yet, progress has been made in the development of a valid and reliable maternal concern instrument for primiparous (Bull, 1981) and multiparous (Moss, 1981) mothers. However, there has been no research done, using a valid and reliable instrument, on the change in concerns of primiparous mothers from the second or third day postpartum to one month postpartum. Such a study will contribute to the body of knowledge on maternal concerns during the postpartum period. A study in this area would assist in planning nursing care and the planning of programs.

CONCEPTUAL FRAMEWORK

Transition/Adaptation to Motherhood

For a first time mother, childbirth presents many new experiences. It can be inferred from the parenthood literature that the transition to motherhood is a period of change which can be very stressful. Motherhood can be conceptualized using these theoretical approaches:

1. Developmental Theory,
2. Role Theory, and
3. Crisis Theory.

1. Motherhood as a Developmental Phase

Benedek (1975) writes of parenthood as a distinct developmental phase. Those who successfully resolve the developmental challenges which occur with parenthood are able to achieve a new level of intrapsychic integration and, thereby, a new phase of maturation.

Duvall (1977) discusses childbearing as a period involving a turning point resulting in psychological and physical changes that are immutable. This division of the human life cycle represents specific needs with certain

developmental tasks. Developmental tasks are defined as "tasks that arise in the life of an individual, successful achievement of which leads to happiness and to success with later tasks, while failure leads to unhappiness in the individual, disapproval by society and difficulty in later tasks" (Havighurst, 1953, p. 2). Developmental tasks arise at critical periods in an individual's growth when he/she and others expect specific performance of him/her. These tasks involve physical, psychological and socio-cultural adjustments.

The developmental approach to motherhood "deals dynamically with the challenges of human development, keeping responsibility in the hands of the developing person and still allows room for the helping roles that family members and community workers may play" (Duvall, 1977, p. ii).

2. Motherhood as a Role Change

"The incorporation of a new role involves the learning of behaviors required for acting the role and reordering of life's space to include a new social position" (Hobbs & Cole, 1976, p. 723). "If the family is conceived as a small social system of interrelated roles and statuses, then it follows that the addition or removal of a family member necessitates changes and reorganization which may produce

stress" (Hobbs & Cole, 1976, p. 723). When a child is born into a family, each member of the family must learn new roles as they learn to relate and adapt to the new member. The woman who gives birth must learn new tasks inherent in a mothering role as she assumes the position or status of mother in the family.

Mercer's (1981) study used role theory as a theoretical framework for studying factors which impact on the mothering role. Role theory provided an organizational context for planning a longitudinal study on three groups of primiparous women in their teens, twenties, and thirties. The purpose of the study was to determine those factors which have the greatest impact in the first year of motherhood. Some factors identified were: age, perceptions of the birth experience, early maternal/infant separation, social stress, support systems, self-concept, maternal illness, child-rearing attitudes, infant temperament and infant illness.

Rubin (1967) described maternal role attainment as occurring in stages. The five progressive stages were identified as mimicry, role play, fantasy, introjection-projection-rejection, and grief. Mimicry and role play involve learning about expectations and performance in a role. Fantasy and introjection-projection-rejection involves a beginning internalization of the role. The woman imagines herself in the role and searches for models to fit

her fantasy of herself in the role. In the operation of grief work, there is a relinquishing of roles that are incompatible with the mothering role. The mothering role is internalized as part of the mother's identity when there is a sense of comfort in the role.

The maternal role attainment process develops simultaneously with the mother's binding-in (attaching to her infant) and each process is affected by and affects others significant to the woman (Rubin, 1977). The taking-in process or mimicry and role play; the taking-on process of fantasy and introjection-projection-rejection; and the letting-go process or grief work may occur during or after pregnancy but must be experienced in order to adapt to the mothering role.

Thornton and Nardi (1975) described role acquisition as a process where individuals move from accepting the roles to actively engaging in the roles. The four stages which are identified are: anticipatory, formal, informal and personal. The anticipatory stage involves the individual learning generalized and stereotyped expectations of the role. The formal stage of role acquisition occurs as the individual begins viewing the role as the actual social position rather than as an outsider. The informal stage involves the role taker shaping the role to fit himself/herself in view of past and future goals. The fourth, or personal stage, involves a mutual transformation

of self and role which occurs so that harmony and role are achieved. The anticipatory stage of the maternal role begins during the woman's pregnancy, and the formal, informal and personal occur in the postpartum period.

The ease of transition to a role has been found to be affected by many variables such as level of commitment, competency, strain, conflict, power inherent in the role enactment (Nye and Gegas, 1976), length of time in the role, value of the role, anticipatory socialization, and resources available (Burr, 1972). Burr (1979) reported relationships between these variables and success in role acquisition or performance.

The mothering role may be considered to have been attained when the mother feels internal harmony with the role and its expectations. The response to the role may be seen in her competency in caring for her infant and in the acceptance of the responsibilities posed by the role.

3. Motherhood as a Crisis

Bibring (1966), Caplan (1961) and Duvall (1971) suggest that the birth of the first child is a crisis as it requires adjustment. In addition, it is a crisis because it is the couple's first experience with parenthood. Crisis can be described as a period of disequilibrium in which inner tension and anxiety increases and disorganization of

function frequently occurs. (Aguilera & Messick, 1974) Crisis may be either maturational or situational crises. A maturational crisis may be defined as occurring "during a period of social, physical and psychologic change throughout the life span" (Aguilera & Messick, 1974, p. 106). A situational crisis is "evoked by external events or circumstances that occur accidentally or unexpectedly and are a threat to an individual's sense of biologic, psychologic and social integrity" (Aguilera & Messick, 1974, p. 106).

"A crisis can occur with any change in which the demands upon a system are greater than the available resources for coping and when the system feels overwhelmed and unable to use the usual coping strategies" (Hall & Weaver, 1977, p. 59). Thus, the transition to motherhood can produce both a maturational and situational crisis.

During a crisis an individual has an increased desire to be helped (Caplan, 1952). Nurses may assist the individual or family to develop new ways to solve a situation in a positive healthy direction.

Numerous studies have focused on the crisis approach to the transition to parenthood. Various studies (Lemasters, 1957; Dyer, 1963; Hobbs, 1965; Hobbs and Cole, 1976; Russell, 1974) investigated the degree of crisis as this transition occurs. From the studies, it appears that there are varying degrees of perceived crisis ranging from

"slight" to "extensive". The discrepancy in results of these studies could be attributed to differences in the definition of crisis, variations in methodology and to changing trends.

In summary, motherhood has been conceptualized as a developmental phase, a role change, and a maturational or situational crisis. This theoretical orientation helps to explain the experience a woman encounters as she adapts to motherhood. It is apparent from the literature that the mother must make adaptations in her lifestyle in order to accommodate the new baby. A mother may have many concerns which may influence her adaptation to motherhood. Therefore, an inquiry into the change of concerns of the mother during the postpartum period is warranted.

Objective

The aim of the study is to address the research question, "To what extent do the focus, intensity and frequency of concerns of primiparous mothers change from the second or third postpartum day to one month postpartum?"

Operational Definitions

Primiparous Mothers - Women who have given birth to their first child and who have never had a previous pregnancy.

Concern - Questions, worries or areas of marked preoccupation related to the puerperium; concerns are classified in relation to self, baby, husband, family and community.

Focus - Center of activity, attraction or attention; represented by a cumulation of concerns related to a given category, eg.,

(a) self (Questions 1 - 18);
(b) baby (Questions 19 - 29);
(c) husband (Questions 30 - 35);
(d) family (Questions 36 - 39);
(e) community (Questions 40 - 50) (Bull, 1981, p. 391).

Intense/Intensity - The rating or value a mother assigns to a concern, measured on a scale from one (no concern) to four (much concern) (Bull, 1981, p. 392).

Frequency - The number of concerns (Bull, 1981, p. 392).

Assumption

Primiparous mothers do have identifiable concerns related to the events of the postpartum and will express their concerns.

Limitations

One limitation of this study is that the sample is not representative of the population due to the non-probability convenience sampling method used. The small sample size and sampling method creates a difficulty with the interpretion of the results and the generalizability of the findings to the larger population.

Another limitation of this study is one that can occur when any instrument is readministered. Two factors may influence the subject's scores when administering an instrument on two separate occasions.

Since human concerns may change from one time to another, it can be assumed that a difference in test results may be found when the instrument is used over time. The change in the physiological status of the mother from the

second or third postpartum day to one month postpartum; the maturational development of the mother and the infant; and the learning which is acquired from the time the mother is in hospital to when the mother is at home one month postpartum are confounding variables which may affect the measurement of concerns at two points in time. This is the measurement in the change in concerns from one time period to the next which is of interest to this research.

However, the other factor which may contribute to the change in scores is the measurement error which can occur when any instrument is repeated at two time periods. Responses may be influenced by the different settings (the home and the hospital); the physical and the emotional status of the mother (eg. fatigue, mood, behavior); and the mother's memory of her previous responses. Measurement error may be present and affect the scores obtained at each point in time.

METHODOLOGY

Introduction

The comparative survey method was used in this study to examine the change in maternal concerns of primiparous mothers. A maternal concern instrument (Bull, 1981) was used to collect the data. Subjects for this investigation had the questionnaire administered the second or third postpartum day and again at one month postpartum.

Sample

A convenience sample of a minimum of 30 primiparous mothers was drawn while the mothers were still in hospital following delivery. The goal was to obtain an equal number of mothers from each of the three participating hospitals. Selection of subjects was made according to the following criteria:

1. delivered a full term, single, normal baby,
2. medically uncomplicated pregnancy and vaginal delivery,
3. 18 to 35 years of age,
4. marital status identified as married or common-law,
5. Caucasian,
6. an uncomplicated postpartum hospitalization,

7. able to speak and write English,
8. living in Winnipeg,
9. had a telephone, and
10. agree to voluntarily participate in the study and gave informed written consent.

Procedure

Access to the mothers at three urban hospitals in Winnipeg was obtained from the appropriate administrative personnel. A synopsis of the purpose of the study, instruments to be used for data collection, evidence of Ethical Review Committee's approval and an indication of what was required from the hospital were submitted (Appendix A). Also, the Provincial Health Department and City Community Health Nursing Department were notified of the study to be undertaken.

It was arranged with the hospital that the researcher would review the Kardex each day to identify potential subjects who met the criteria for the study. Potential subjects were contacted on the second or third postpartum day in the hospital by the researcher. The list of names of those subjects who agreed to participate was kept confidential. The list was destroyed upon completion of the survey.

The investigator approached the potential subjects and introduced herself. All mothers were approached in the following way: "Hello, my name is Lisa Domke. I am a Master

of Nursing graduate student from the University of Manitoba. I am conducting research on the concerns of first time mothers on the second or third day after delivery and again at one month after delivery. The second part will take place in the mother's home." The investigator explained the purpose and relevance of the study and described what was expected if the mother decided to participate. The investigator was available to answer questions regarding the study at this time. The subjects were requested to read the letter of introduction for the study (Appendix B). If the subject agreed to participate, she was requested to sign the consent form (Appendix C). The investigator did assure the participants of confidentiality.

The mothers who agreed to participate in the study were asked to complete demographic data sections (Appendix E) and the first maternal concern questionnaire (Appendix D) at a time convenient to them following the explanation of the study and the signing of the consent form. The completed questionnaire was then sealed in an envelope until the data collection was completed.

The researcher telephoned the mother in approximately three weeks and arranged a convenient time for the one month postpartum home visit. The mothers were administered the same maternal concern questionnaire during this visit. In addition, a semi-structured interview (Appendix F) was conducted by the researcher during the home visit. Notes

were taken by the researcher during the semi-structured interview.

The questionnaires were number coded to facilitate a match between the home visit questionnaire and the questionnaires completed in the hospital. If, at the home visit, it was identified that the mother required further nursing follow up the researcher planned to refer her to the appropriate community health nursing department.

The researcher was the only person to have access to the raw data. The raw data were shredded upon completion of the study.

Time Periods

The two time periods selected for this study were: (1) while the mother was in hospital at two or three days following delivery, and (2) when the mother was at home one month postpartum. The rationale for the selection of the first time period, day two or three postpartum, was that the identification of the mother's concerns could be obtained before the mothers left the hospital. Also, this first time period was the same time period used in Bull's (1981) study. The rationale for the selection of the second time period, one month postpartum, was based on Gruis' (1977) research which Bull (1981) used to develop the maternal concern questionnaire. In addition, Rubin (1961) indicated that following the birth of a child, the sphere of psychic

and physical energy slowly progresses over days and extends from herself to others in the immediate environment, and then outward to encompass persons and events beyond what is immediately present. Therefore, Bull's (1981) instrument which focuses on the concerns of self, baby, husband, and in addition includes family and community could be used to examine the concerns at one month postpartum.

Instrumentation

1. Maternal Concern Questionnaire

The maternal concern questionnaire (Appendix D) was designed by Bull (1981) and written consent was obtained to use this scale. Concern is defined as questions, worries, or areas of marked preoccupation or interest related to the puerperium; concerns are classified in relation to self, baby, husband, family and community (Bull, 1981, p. 391). Mothers were asked to respond to 50 items within these categories by using a four point rating scale:

(1) no concern (have not thought about it or have thought about it and am not worried, no questions),

(2) little concern (have thought about it and am not worried, some concern or question),

(3) moderate concern (have thought about it, am somewhat concerned), and

(4) much concern (have thought a lot about it, am very concerned).

Bull (1981) reports that the reliability of the instrument was assessed using Cronbach's alpha and internal

consistency was demonstrated. The study was replicated by a graduate student in Boston in 1983. When the study was repeated, the two questions in the community category with yes/no responses were not included in the reliability calculations. Thus, the improved alpha for community in the Boston sample could be due to the elimination of the yes/no response questions from the analysis. The Cronbach's alpha calculated for the instrument is as follows:

Table 1

Cronbach's Alpha for Two Studies

Category	Alpha (1981)	Alpha (1983)
Self-physiological	.86	.84
-physical discomfort	.76	.74
-emotional self	.82	.86
Baby - physical	.88	.92
- behavior	.77	.84
Husband	.90	.84
Family	.69	.82
Community - people relationships	.76	.84
- institutions	.34	.59
Total Questions	.90	.97

Item clarity, face validity, and content validity of the instrument were established by assessment of the items by a panel composed of 14 mothers, who had experienced at least one birth and possessed characteristics similar to the sample, and three graduate students in nursing, two of whom had experience in caring for postpartum mothers. The panel was requested to comment on the following: item clarity,

face validity and content validity. If 15 of the 17 members on the panel agreed, items were retained on the questionnaire. When an additional item was suggested to be included and received agreement from 15 of the 17 panel members the item was added to the questionnaire.

Following the above revisions, the tool was reviewed by a second panel composed of five mothers and three nurses who care for postpartum mothers. It was determined, on the basis of the panelists' agreement, that no further changes were necessary prior to actual data collection.

In addition, an item analysis was done to determine the relationship of each item to the conceptual category in which it was placed. The item analysis indicated a moderately high association (.70-.92) between the conceptual categories and the items in each category.

Despite these strengths of the instrument, it does have some limitations. One limitation of the instrument for use in this study is that the instrument has been designed for use at one week postpartum and has not been explicitly designed for use at one month postpartum. A second limitation of the instrument is evident when examining the definition of concern by Bull (1981) and the instructions for subjects in the questionnaire. According to the definition of concern, varying levels of concern could be seen along a continuum from questions to worries to marked preoccupation. This part of the definition complies with

the instruction on the scale (Bull, 1981). However, the defintion of concerns formulated by Bull (1981) also included interest, a term which does not appear again when describing the four levels of concerns on the scale. Thus, Bull's (1981) operational definition of concern varies from the description of concerns used in the questionnaire.

2. Demographic Information and Other Data

Information related to demographic factors, such as sex of infant, age of mothers, maternity leave, returning to employment, educational level, family living arrangements, method of infant feeding, and perception of capability in caring for infant and her family, was collected while the mother was in hospital. Additional information on prenatal class attendance, number of days in hospital, number of public health nursing visits, contact with public health nurse, contact with physican and perception of the postpartum experience was collected by interview when the mother was at home.

The demographic information was included in the questionnaire to facilitate description of the sample, and to assist in interpreting the data. Semi-structured questions were included during the home interview to determine how the mothers were managing their concerns, the strategies used, as well as to determine the major source of help for dealing with their concerns.

Ethical Considerations

The individual's participation in the study was with voluntary informed consent. The confirmation of consent was obtained in writing following an explanation of the purpose and value of the study; the time involved in the study; the assurance of confidentiality; the right to withdraw from the study at any time without harassment or coercion; and the availability of the results to the participants, if so requested. Prior to the subject signing the consent form, the researcher responded to any questions or uncertainties. In addition, the researcher informed the participants that should the study be published at a later date, the data would be presented in a manner in which no individual responses would be recognized.

Data Analysis

According to Bull's (1981) study, prior to the analysis of the data, the items within three of the five categories, i.e., self, baby and community, were grouped into specific subcategories for further investigation. This was done to provide equal weighting for each of the five conceptual categories. The five conceptual categories of self, baby, husband, family and community included the following nine areas for analysis purposes:

A. Self
   1. physiological changes (items 1-5)
   2. physical discomfort (items 6-11)
   3. emotional self (items 12-18)

B.	Baby	
	1. physical aspects	(items 19, 21-23, 26, 29)
	2. behavioral aspects	(items 20, 24, 25, 27, 28)
C.	Husband	(items 30-35)
D.	Family	(items 36-39)
E.	Community	
	1. people relations	(items 40-43)
	2. institutions	(items 44-48)

Since each of the subcategories varied in the number of items (four to seven items), each of the nine groups was weighted equally and given a percentage score for the purpose of comparing the results in each category.

The Shapiro-Wilk statistic (Shapiro & Wilk, 1965) was used to test for the presence or absence of normality in the differences between the hospital and home concerns scores for each of the nine categories: physiological changes, physical discomfort, emotional self of the mother, physical aspects of the baby, behavioral aspects of the baby, husband, family, people relations and institutions. Using the Shapiro-Wilk test aids in detecting gross peculiarities in the sample such as outliers or non-sampling errors.

If the Shapiro-Wilk statistic indicated normality, a parametric procedure, the paired comparison t-test was used for the comparison of the average concern score at the two time periods. If the Shapiro-Wilk statistic pointed to a lack of normality, a non-parametric procedure, the Wilcoxon sign rank test was used for the comparison of the average concern scores at the two time periods.

The number of concerns in each category was determined by the frequency. Frequency is, by definition, considered a binominal random variable and the appropriate test was used under the true parametric procedure.

For the correlational part of the analysis, Pearson's r was used for pairs of normal random variables. Kendall's tau or Spearman's rank correlation, non-parametric procedures, were used for the variables which demonstrated departure from normality. The level of significance was set at .05 for the correlational analysis.

The experimentwise error rate was first set at .05 for the differences in concern for each of the nine subcategories. Due to the fact that there were nine subcategories, a comparisonwise error rate was calculated by dividing the number of tests, nine, done to obtain the critical point for each test, and was set at .0056. Each scale was again reviewed for significance.

RESULTS

The presentation of results will be organized under the following headings:

A. Sample Characteristics

B. Sources of Support During the First Month Postpartum

C. Method of Feeding

D. Perception of Capability at Second or Third Postpartum Day

E. Perception of Postpartum Experience at One Month Postpartum

F. Maternal Concerns

1. Concerns Related to Self
2. Concerns Related to Baby
3. Concerns Related to Husband
4. Concerns Related to Family
5. Concerns Related to Community

G. Additional Maternal Concerns

H. Major Maternal Concerns at the Second or Third Postpartum Day and at One Month Postpartum

1. Nine Categories
2. Individual Items

I. Management of Concerns

J. Additional Findings

A. Sample Characteristics

A total of 38 mothers, an approximate equal number from each hospital, were approached by the researcher and asked to participate in this study. Five mothers refused. The reason given for refusal by four mothers was that they were already participating in various other research studies at the hospital; and the fifth mother refused because she felt too overwhelmed following the labor and delivery experience. Thirty-three mothers agreed to participate and completed the first questionnaire. Thirty-two mothers (97% response rate) completed the second questionnaire at their own home one month postpartum. The one mother who did not complete the second questionnaire could not be located at home. This mother was included in the findings of this study, but since data were not collected during the second time period on this mother, those data were recognized as a missing value in the results.

Since the methodology did state that the mothers were to be visited at a time convenient to them, not all the mothers were visited by the researcher at exactly one month postpartum. Of the 32 mothers visited by the researcher at their home, the majority of the mothers (28 or 87.5%) were visited within two days of one month postpartum, three mothers (9.38%) were visited within four days of one month postpartum, and one mother (3.13%) was visited within seven days of one month postpartum.

Characteristics of the sample of mothers are displayed in Table 2. Every mother in the sample was married. All mothers except one had completed high school and approximately 65% of the mothers had completed education beyond Grade 12. The age range was 19 to 34 years of age. The majority of the births (21 or 63.7%) occurred to mothers between 24 and 28 years of age. Fifteen mothers (45.46%) delivered males and 18 mothers (54.55%) delivered female infants. There were only three mothers (9.1%) who had someone living with them other than their spouse. These persons were a stepson, the spouse's parents, and other relatives.

Among the sample of mothers, 22 or 67% were employed; 20 mothers or 61% were on maternity leave; 18 mothers or 55% were planning to return to their job, and 6 mothers or 18% reported they were unsure if they would work. Three mothers, 9.38%, did comment that they were unemployed as they had been discharged from their positions and been replaced.

Data collected at one month postpartum about the characteristics of the sample indicated the majority of the 32 mothers (29 or 90.6%) attended prenatal classes. Most of the 32 mothers had been discharged from hospital either day three or day four postpartum.

Table 2

Characteristics of Sample

	Frequency	Percent
Age		
19 - 23	6	18.2
24 - 28	21	63.7
29 - 34	6	18.1
Educational Level		
less than grade 12	1	3.1
grade 12	11	33.3
certificate/diploma	5	15.2
some university/college	6	18.2
university degree	8	24.2
graduate degree	2	6.0
Employment		
yes	22	66.7
no	11	33.3
Maternity Leave		
yes	20	60.6
no	13	39.4
Planning to Return to Job		
yes	18	54.5
no	5	15.2
unsure	6	18.2
not applicable	4	12.1
Other Persons Living with Mother		
yes	3	9.1
no	30	90.9
Prenatal Classes*		
yes	29	90.6
no	3	9.4

Characteristics of Sample (continued)

	Frequency	Percent
Number of Hospital Days*		
2	1	3.1
3	11	34.4
4	16	50.0
5	4	12.5

* one value missing (n = 32)

The 1981 census classification for Winnipeg was used to categorize the sample of mothers' occupations. When comparing the Winnipeg female occupational groups to the sample of mothers, the Winnipeg female occupations represent all female occupational groups and not just the childbearing female occupational groups. The study sample of mothers who were classified by the major occupational groups showed considerable variation from those of the general population (Table 3). The sample showed an overrepresentation in the managerial, teaching, sales and health related occupations, and slight underrepresentation in clerical services. Five mothers reported a "not applicable" occupation which was identified as "student" for three mothers and "housewife" for two mothers.

Table 3

Comparison of Female Occupational Groups

Between Sample and 1981 Census of Winnipeg

	Sample		Winnipeg
Occupations	Frequency	Percent	Percent
Clerical	11	33.33	37.83
Teaching	6	18.18	5.38
Not Applicable	5	15.16	.94
Health	4	12.12	9.33
Sales	4	12.12	9.49
Managerial	2	6.06	5.28
Service	1	3.03	15.32
Technological	0	0	5.16
Primary	0	0	.50
Processing	0	0	1.14
Machinery	0	0	6.52
Other	0	0	3.11
TOTAL	33	100.00	100.00

B. Sources of Support During the First Month Postpartum

Additional information on the sources of support during the first month postpartum was collected (Table 4). From those mothers (91%) who had attended prenatal classes, 3 or 10.4% felt the prenatal classes did prepare them for their first month at home; 13 or 44.8% felt the prenatal classes helped them a little bit; and 13 or 44.8% felt the prenatal classes did not prepare them at all.

All of the mothers had been offered a public health nursing visit, and 31 or 97% accepted. There was one mother who refused as she felt she had good rapport with her physician. Three mothers received a second public health nursing visit.

Nine mothers or 28% of the mothers had called the public health nurse with questions. The reasons for calling were cited as: routine check-up of baby; problems with baby's bowel movements; physical care of the baby such as bathing; infected episiotomy; baby's rash; concern regarding umbilical cord; and questions about breast-feeding. One mother had contacted the public health nurse more than once. All questions were perceived by the mothers as being answered adequately by the public health nurse.

Thirty mothers or 94% of the mothers had seen or been in contact with the physician since their delivery. Some of the reasons cited for contact with the physician were:

routine check-up; baby's jaundice; baby's colic; baby's rash; questions about feeding; communicable diseases; infected episiotomy; abnormal vaginal discharge and mastitis. The majority of the mothers (56.3%) had contacted the physician for a routine check-up for themselves and their baby. Four mothers had more than one contact with the physician by the one month postpartum home visit by the researcher.

Twenty-four or 75% of the mothers had help at home when they returned home from hospital. There was an equal representation of those who received help from their husbands (10 or 31%) and from their mothers (10 or 31%); help from others was received by 4 or 12% of the women. Some mothers commented on the extent of help they had received; the extent varied from a few days to the entire month.

Table 4

Sources of Support During the First Month Postpartum*

	Frequency	Percent
Prenatal Classes Preparing for First Month Postpartum		
Yes	3	10.4
No	13	44.8
Somewhat	13	44.8
Public Health Nurse Visiting		
yes	31	96.8
no	1	3.2
Number of Public Health Visits		
0	1	3.2
1	28	87.5
2	3	9.3
Called the Public Health Nurse		
yes	9	28.2
no	23	71.8
Called the physician		
yes	30	93.8
no	2	6.2
Someone to Help at Home		
yes	24	75.0
no	8	25.0
Persons at Home to Help		
husband	10	31.3
mother	10	31.3
mother-in-law	2	6.2
combination	2	6.2
not applicable	8	25.0

* one value missing (n = 32)

C. Method of Feeding

The main method of infant feeding (Table 5) at the second or third postpartum day was breast-feeding for 30 or 91% of the mothers, while three mothers (9.1%) chose to bottle feed. The main method of feeding at one month postpartum was breast-feeding for 24 or 75% of the mothers, while eight mothers or 25% chose to bottle feed. Thus, there was a decrease in mothers who were breast-feeding at one month postpartum. Some mothers' comments for changing from breast to bottle feeding were: "felt too tied down"; "husband wanted to participate in the feeding experience"; "had to return to work very soon"; "breast problems, such as mastitis and/or sore or cracked nipples, developed".

Table 5

Method of Feeding Second or Third Day Postpartum and at One Month Postpartum

	Frequency	Percent
Method of Feeding at Second or Third Day		
breast-feeding	30	90.9
bottle feeding	3	9.1
Method of Feeding at One Month*		
breast-feeding	24	75.0
bottle feeding	8	25.0

* one value missing (n = 32)

D. Perception of Capability at Second or Third Postpartum Day

The question was asked on the second or third postpartum day while in hospital about the mother's perceived capability in caring for herself and her family (Table 6). The majority of the mothers, 19 or 58%, felt somewhat confident, 13 or 39% of the mothers felt very confident, while one mother had little confidence.

Table 6

Perception of Capability at Second or Third Postpartum Day

Perceived Capability	Frequency	Percent
Very confident	13	39.4
Somewhat confident	19	57.6
Little confidence	1	3.0
No confidence	0	0.0

E. Perception of Postpartum Experience at One Month Postpartum

When asked at one month postpartum, the majority of the mothers, 22 or 68.7%, describe the experience since birth (Table 7) as occasionally stressful. From the sample of 32 mothers, 28 mothers or 90%, reported that they did experience some degree of stress since the birth of the infant. Some mothers commented that if they had been asked to describe the experience of their first week at home they would have classified it as very stressful, but now that they were accustomed to the baby they would describe it as occasionally stressful.

Table 7

Perception of Postpartum Experience at One Month Postpartum

Experience Since Birth*	Frequency	Percent
Not stressful	3	9.4
Occasionally stressful	22	68.7
Frequently stressful	4	12.5
Very stressful	3	9.4

* one value missing (n = 32)

F. Maternal Concern

The Shapiro-Wilk statistic was used to test for the presence or absence of normality in the differences in concerns between second and third postpartum day and at one month postpartum. The Shapiro-Wilk statistic indicated a normal distribution for the subcategories of physiological changes, physical discomfort, emotional self, physical aspects of the baby, behavioral aspects of the baby, husband, family and institutions; and a non-normal distribution for the subcategory of people relations.

Table 8

Comparison of Scale Scores for Differences in Concerns at Second or Third Day Postpartum and at One Month Postpartum

	Shapiro-Wilk Statistic	Wilcoxon or t-test
Self - physiological changes	.687	.7519
Self - discomfort	.323	.0001*
Self - emotional self	.446	.3029
Baby - physical	.082	.0091
Baby - behavioral	.100	.0167
Husband	.340[1]	.0938[1]
Family	.074	.0888
Community - people relations	.017	.5247
Community - institutions	.074	.1615

* $p \leq .0056$.
[1] scores with one outlier omitted

1. Concerns Relating to Self

The concerns relating to the conceptual category of self were divided into three subcategories which include: physiological changes, physical discomfort, and emotional self.

There was no significant difference in concern scores between the second or third postpartum day and at one month postpartum for the physiological changes of the mother. The pictorial representation can be seen in Appendix G, Figure 1. From this pictorial representation, concern scores which were located above the line were concerns which were greater the second or third postpartum day than at one month postpartum, and conversely, concern scores which were located below the line were concerns which were less the second or third postpartum day than at one month postpartum.

For those concerns relating to the physical discomfort subcategory, there was a significant difference in the concerns scores between the second or third postpartum day and at one month postpartum (t test = .0001, $p<.0056$). When viewing the pictorial representation, Appendix G, Figure 2, it was evident that the concern scores were greater the second or third postpartum day and had considerably lessened at one month postpartum. The data for the individual items (Appendix H, p. 113-114) illustrate that there was a

greater frequency of "moderate" and "much" concern for the physical discomfort of the mother at the second or third postpartum day whereas there was a decrease in concern as illustrated by a greater frequency of "no" and "little" concern at one month postpartum.

For those concerns relating to the subcategory of emotional self, there was no significant difference in concern scores between the second or third postpartum day and at one month postpartum. This was illustrated by the pictorial representation (Appendix G, Figure 3).

2. Concerns Relating to Baby

The concerns relating to the conceptual category of baby were divided into two subcategories which include the physical and the behavioral aspects of the baby.

For those concerns relating to the subcategory of the physical aspects of the baby, there was no significant difference when the comparisonwise level .0056 was used, but this was a conservative usage of this Bonferroni-type approach. Since the observed level of significant (t test = .0091) was very close to the comparisonwise rate set at .0056, clearly there was some discrepancy in concern scores between the second or third postpartum day and at one month postpartum relating to the physical aspects of the baby, whether it was or was not statistically significant. Appendix G, Figure 1, illustrates the pictorial

representation for the concerns relating to physical aspects of the baby.

For those concerns relating to the subcategory of the behavioral aspects of the baby, there was no significant difference in concern scores between the second or third postpartum day and at one month postpartum. This was illustrated by the pictorial representation (Appendix G, Figure 5).

3. Concerns Relating to Husband

For those concerns relating to the subcategory of husband, the data indicate that there was in fact an outlier or error. If this outlier was deleted, there was no significant difference in the concern scores between the second or third postpartum day and at one month postpartum. This was illustrated by the pictorial representation (Appendix G, Figure 6).

4. Concerns Relating to Family

For those concerns relating to the subcategory of family, there was no significant difference in the concern scores between the second or third postpartum day and at one month postpartum. This was illustrated by the pictorial representation (Appendix G, Figure 7).

5. Concerns Relating to Community

The concerns relating to the conceptual category of

community were divided into two subcategories: people relations and institutions.

For concerns relating to the subcategory of people relations, there was no significant difference in concern scores between the second or third postpartum day and at one month postpartum. This was illustrated by the pictorial representation (Appendix G, Figure 8).

For those concerns relating to the subcategory of institutions, there was no significant difference in concern scores between the second or third postpartum day and at one month postpartum. This was illustrated by the pictorial representation (Appendix G, Figure 9).

G. Additional Maternal Concerns

Three mothers responded to the question on the maternal concern instrument, "Do you have other concerns that are not listed?" The responses to this question included:

"demands of pet" and "reaction of pets to baby"

"lack of sleep"

"discrepancy of information given by professionals"

"concept of demand feeding - how often should I feed the baby?"

"crying patterns - how long should the baby cry?"

Analysis of the responses to the semi-structured interview conducted in the home revealed that most mothers identified concerns which were similar to those on the maternal concern questionnaire. Two mothers had concerns which were not specified on the questionnaire. These two mothers were concerned about the physical and emotional strain on their husband since the arrival of the baby.

H. Major Maternal Concerns at the Second or Third Postpartum Day and at One Month Postpartum

1. Nine Categories

The nine categories of maternal concerns can be ranked from highest to lowest concern at the second or third day postpartum and at one month postpartum. Table 9 contains the average percentile score for each of the nine categories. The four categories which were the areas of greatest concern at the second or third postpartum day were: physical aspects of baby, physical discomfort, behavioral aspects of baby and physiological changes of mothers. The four categories which were the areas of greatest concern at one month postpartum were: husband, physiological changes, physical aspects of baby and the behavioral aspects of baby. The most noticeable shift from high to low concern at the second or third postpartum day to one month postpartum was physical discomfort. Generally, there was a decrease in

concerns at one month postpartum for the nine subcategories.

Table 9

Nine Categories: Average Percentile Score of Concerns Second or Third Day Postpartum and One Month Postpartum

	Second or Third Postpartum Day	One Month Postpartum
Self - Physiological Changes	44.4	42.3
Self - Discomfort	48.8	24.1
Self - Emotional Self	31.2	33.8
Baby - Physical	52.2	41.5
Baby - Behavioral	48.7	39.2
Husband	40.8[1]	44.1[1]
Family	23.4	18.8
Community - People Relations	18.4	19.3
Community - Institutions	22.4	20.8

[1] Scores with outlier omitted

2. Individual Items

A review of the data on the frequency and intensity of the concerns for individual items (Appendix G) revealed there were some items for which approximately 50% of the sample scored "moderate" to "much" concern both the second or third postpartum day and again at one month postpartum.

The individual items within the categories which were of "moderate" to "much" concern for half of the mothers the second or third postpartum day were: physiological changes, i.e. food you eat, exercise habits, return of figure to normal; physical discomfort, i.e. care of breasts; emotional self, i.e. being a good mother; physical aspects of baby, i.e. infant feeding, physical care of baby, feeling comfortable handling baby, recognizing signs of illness; and behavioral aspects of baby, i.e. normal growth and development, safety. The individual items within the categories which were of "moderate" to "much" concern for half of the mothers at one month postpartum were: physiological changes, i.e. food you eat, exercise habits, return of figure to normal; emotional self, i.e. being a good mother; physical aspects of baby, i.e. infant feeding, recognizing signs of illness; and behavioral aspects of baby, i.e. safety. Thus, the individual items which considerably lessened from the second or third postpartum day to one month postpartum were: physical discomfort, i.e care of breasts; physical aspects of baby, i.e. physical care of baby, feeling comfortable handling baby; and behavioral aspects of baby, i.e. normal growth and development.

The data provides information as to the major concerns at the second or third postpartum day and at one month postpartum. It indicates those areas which were of "moderate" to "much" concern at the second or third

postpartum day but were not of concern in one month's time. It also indicates those areas of "moderate" to "much" concern which persisted from the second or third postpartum day to one month postpartum.

I. Management of Concerns

Responses to the open-ended questions provided information on the greatest area of concern and the strategies and support used to manage concerns at one month postpartum. From the verbal statements, the greatest areas of concern at one month postpartum according to the five conceptual categories were the baby (65%), self (12.5%), husband (12.5%) and family (9.38%); the community was never mentioned as an area of great concern for the mother. All the mothers identified a specific concern which had occurred within the last two weeks. The majority of those concerns were related to the health status of the baby and mother, and formal assistance was often sought to deal with these concerns. The majority of mothers were found to have been in contact with the physician and the public health nurse. Informal assistance from husband was often recognized by the sample as the major source of help with concerns (31.25%) of the sample. Friends with children (25%) and the woman's mother (21.88%) were other sources of help. Additional sources of help which were mentioned less frequently were:

public health nurse (6.25%), doctor (6.25%), sisters (3.13%), sister-in-laws (3.13%) and books and pamphlets (3.13%).

All these first-time mothers offered suggestions to aid other new mothers. Their comments revealed that most mothers experienced varying degrees of stress following the birth of the baby. Statements such as they should "relax", "don't panic", "don't worry", "having a baby is an emotional and physical strain", are examples of their suggestions. Other statements which encouraged actions to alleviate concerns were to "have someone to help you initially when you come home", "perservere with breast-feeding as it will become established", "pamper yourself by buying some new clothes or getting dressed up", "regulate demands of household duties", and "it's all right to cry because after you have a baby you go through postpartum depression or 'baby blues'". Some contradictory comments were offered, e.g., "it's all right to pick up baby when it cries", and "it's all right to not pick up baby when it cries". One mother offered reassurance to mothers by saying "every baby is different and eventually you will learn what your baby's cry means".

J. Additional Findings

For the correlational analysis, those data such as the

mother's age and number of hospital days were tested for any association with maternal concerns. There was no statistically significant association between concerns and mother's age and between concerns and number of hospital days.

In summary, analysis of the data revealed that the subcategory related to physical discomfort of the mother demonstrated a significant decrease in concern at one month postpartum. Additional findings from the nine subcategories indicated that the greatest concern at the second or third postpartum day was about the physical aspects of the baby and the greatest concern at one month postpartum was about the husband. A review of the frequency and intensity data for 50% of the mothers who scored "moderate" and "much" concern for the individual items within the nine subcategories indicated there were some concerns which changed and some concerns which persisted from the second or third postpartum day to one month postpartum.

DISCUSSION

The concerns of mothers were viewed within a conceptual framework of transition/adaptation to motherhood. Motherhood was conceptualized using three theories--developmental theory, role theory and crisis theory. These three theories will be utilized to interpret the results of this research.

First, motherhood was conceptualized as a developmental phase. The longitudinal studies (Duvall, 1977) on the normal developmental stages of families and, in particular, the developmental stage of the childbearing family, were helpful in interpreting the results from this present research. Duvall (1977) discussed a number of specific developmental tasks of the childbearing family including those which were evident in this current study. These were: the role learning of individual family members, e.g., wife/mother and husband/father; the relating to relatives and others as identified by the mothers' support systems such as husbands, mothers, mother-in-laws, and friends; and the maintenance of motivation and morale as evidenced by the mothers' suggestions offered to other first time mothers. The developmental tasks must be successfully accomplished so that the individual and/or family can continue to grow. Results from this present research suggest that the mothers appeared to be meeting their appropriate developmental tasks as defined by Duvall (1977).

Second, motherhood was conceptualized as a role change. According to Mercer's (1981) research, there are many factors which may influence the assumption of the mothering role. These factors were: age, perceptions of the birthing experience, early maternal/infant separation, social stress, support systems, self-concept, maternal illness, child rearing attitudes, infant temperament, and infant illness. In this current study, the sample of mothers consisted of healthy, low-risk women who were of normal childbearing age; had normal vaginal deliveries; had delivered a normal infant; and had accessed and utilized support systems. Therefore, according to Mercer's (1981) study, these mothers should be adapting to motherhood. The study results support this theory.

Another role theory was described by Thornton and Nardi (1975). They described role acquisition as a process of moving from accepting the role to actively engaging in the role. In this present research, mothers expressed varying degrees of confidence in caring for themselves, newborns and their families. At one month, the mothers were more familiar and accustomed to their babies, to the tasks of caring for the infant and to the skills involved in mothering. Therefore, by one month postpartum, the mothers in the sample appeared to be successfully adapting to motherhood as evidenced by their feelings of increased competency with caring for the infant.

The third theory used to conceptualize the transition to motherhood was crisis theory. According to Aguilera and Messick (1974), crises can be classified as maturational and situational. Despite the presence of expressed concerns during the first month postpartum, the women in this sample did not appear to be experiencing the inner tension and increased disorganized functioning characteristic of a crisis (Aquilera & Messick, 1974). Instead, they appeared to be carrying out the tasks appropriate to this stage in their lives. It can be argued that not all the women who become mothers for the first time experience the transition to parenthood as a crisis event. For this sample, the transition appeared to be experienced as a normal life event, necessitating adjustment but not of crisis proportions.

Several factors can be identified which may be contributing to the mothers' positive adjustment. The mothers surveyed had planned for the arrival of the new baby. Most had attended prenatal classes. Most reported that they were confident in their ability to care for their babies and their families after the birth. Also, most women utilized informal and formal assistance for themselves and their newborns during the postpartum period. This may have further decreased their stress while providing care to themselves and their families.

Had the sample of mothers experienced other internal

and external stressors, these stressors may have impeded their ability to adapt to motherhood. None of the subjects in the study were experiencing stress arising from sudden or unexpected events such as the birth of a premature, low birth weight, or ill newborn. None were adolescent or elderly primiparas, or experiencing other major problems. The presence of other problems may have affected the mothers and they may have experienced difficulty adapting to motherhood.

Crisis theory, then, did not appear to be a framework which added to the understanding of the adjustment to motherhood for the sample. The results of this study would support the view of adaptation to motherhood as a normal developmental event involving a change in role. There are some other substantive and methodolgical issues which need to be considered in interpreting the results of the study.

Substantive Considerations

Further examination of the results of this present study revealed that some of the findings supported previous research while others differed from earlier research on maternal concerns.

Concerns Related to Self

Concerns related to self were subdivided into three subcategories: physiological changes, discomfort, and emotional self.

The results from this research and Bull's (1981) study revealed no significant difference in the subcategory of the physiological changes of the mother. A significant decrease in the subcategory of physical discomfort was found in both studies.

However, Bull's (1981) study found a significant increase in scores in the subcategory of emotional self. This present study revealed no significant differences in this subcategory. An explanation for the variation in results between Bull's (1981) study and this research may be that the second administration of the questionnaire was at one week as opposed to one month postpartum for this study. Thus, the mothers had a longer period to recuperate and adjust. Some of the mothers did comment in the interview that they did have "baby blues" but were feeling much better by the time of the one month postpartum interview.

The concerns which related to discomfort significantly decreased from the second or third postpartum day to one month postpartum. When it is considered that the mother's body has been readjusting and restoring to the non-pregnant state for the past month, it is logical to assume that there

would be a decrease in physical discomfort. As the mother's general physical condition improves, so would the reduction and/or elimination of concerns related to discomfort. Freedom from physical discomfort can allow the mothers to take on the tasks of child care and facilitate the assumption of the mothering role.

Concerns Related to Baby

Early work from Adams (1963), Brown (1967) and Fillmore and Taylor (1976) indicated that infant care concerns were of major importance. Later studies by Gruis (1977) and Hicks and Harrison (1978) found that there were no major concerns about infant care at one month postpartum. These studies vary in their definition of concern, and methodology. Therefore, further study of concerns related to baby is needed.

Concerns about baby may be influenced by a multitude of factors, including previous experience in caring for infants, information from prenatal classes, the care and teaching in the hospital after delivery and knowledgeable support people when the mother and baby are at home. However, these factors were not systematically evaluated in this study.

Prenatal classes, for example, in Winnipeg are conducted by the hospitals, community health clinics and private individuals. Although the content of the classes

may vary considerably, most of the emphasis is on nutrition, fetal development, and the labor and delivery process with less emphasis on the postpartum period. Although most of the women (90.6%) attended prenatal classes, very few (10.3%) indicated that the prenatal classes prepared them for the first month postpartum when at home. The variation in content and the woman's readiness to learn in the prenatal period may have influenced the concerns perceived in the postpartum period. However, these variables were not evaluated in this research.

Another factor which may have influenced the concerns about the baby is the Combined Care Program which had been recently instituted in the hospitals at the time of data collection. This program involves one nurse providing care to both baby and mother. The provision of care for the mother and baby by the same nurse may affect the woman's expressed concerns and the type and amount of health teaching required. Some of the mothers included in the sample were in this Combined Care Program, but data on this variable were not systematically gathered or evaluated.

Bull's (1981) study showed a significant change ($p \leq .05$) in the concerns about the physical aspects of the baby, but no significant change in the concerns about the behavioral aspects of the baby. In contrast, the findings from this research suggest that maternal concerns for both the physical and behavioral aspects of the baby did not

change significantly between the two time periods. Statistically there was no change for the physical and behavioral aspects of the baby. Yet, from the semi-structured interview at one month postpartum, concerns about the baby were paramount according to most mothers, but the intensity of the concerns (Table 9) related to the physical and behavioral aspects of the baby was not as great as it was in the second or third postpartum day. Mothers expressed increased confidence in undertaking tasks, such as bathing and diapering, and a better understanding of their baby's behavior patterns at one month. Due to their increased perceived competence, the mothers appeared to be successfully adapting to the mothering role.

Concerns Related to Husband

There was no statistically significant change in concerns relating to the husband from hospital to home. These findings concur with Bull's (1981) study.

In this study, many of the mothers identified their husbands as a support person on their return home from the hospital. Also, the majority of the mothers indicated that their husbands were the major source of help for their concerns during postpartum period. Thus, the mothers recognized their husbands as an important resource for assisting in coping with their concerns rather than a cause of their concerns.

However, despite the perception of the husband as a source of support, the husband was recognized as the area of highest concern compared to the other categories at one month postpartum. A possible explanation is the fact that the mother has a general concern for her husband at both times. This may remain a high area of concern until the family learns its new roles and parenting techniques have been established. Also, problems in the measurement of this category, as discussed below, may be contributing to the high scores.

Concerns Related to Family

There was no statistically significant difference in the changes of concerns related to family; this concurs with Bull's (1981) study.

The large number of couples who attended prenatal classes; the probability of a unified family because the husband was recognized as a major support; and the majority of mothers who had established careers and were planning to return to work could suggest there was preparation and planning for the arrival of the baby. Thus, there may be little concern relating to family.

Another factor which may have influenced concerns relating to the family is that one of the hospitals used in the study had an established Early Postpartum Discharge Program. This program allows low-risk mothers to be

voluntarily discharged from hospital within 72 hours of a vaginal delivery. A follow-up public health nursing visit is made within 24 hours. One of the goals of the Early Postpartum Discharge Program is to facilitate family/infant bonding within the familiarity of the home environment. Although a few mothers from this study were discharged within the time frame specified for early hospital discharge, data were not formally collected as to those mothers who actually participated in the Early Maternity Discharge Program. Conclusions cannot be made as to the impact of early discharge on maternal concerns.

Concerns Related to Community

The category of community was subdivided into the two areas: people relations and institutions. Neither area demonstrated a statistically significant change at one month postpartum. These results concur with Bull's (1981) study.

Rubin (1961) proposed that during the early postpartum period the mother primarily focuses on herself, slowly encompasses others, and then the surrounding environment. In this study, the mothers had focused on themselves, their baby, and their husband, but, it was plausible that at one month postpartum the mothers were not yet ready to focus on the community. Thus, the mothers did not report many concerns or a change in concerns with respect to the category of community. However, this could be a major area of concern in the future.

In summary, the mothers expressed many concerns at the second or third postpartum day and at one month postpartum. Despite the many concerns expressed by these mothers, the mothers from this study appeared to be adapting to motherhood.

Methodological Considerations

The method of gathering data about the mothers' concerns may influence the study results and the conclusions that can be made from this study.

Design

Collecting data at two points in time provides a means of studying the dynamics of a variable or phenomenon over a period of time. In Bull's (1981) research, the maternal concern instrument was administered to mothers the second or third postpartum day and at one week postpartum. In this study, the instrument was administered on the second or third postpartum day and at one month postpartum. An alternate study design wherein the mothers were questioned the second or third postpartum day, again at one week, and at four weeks postpartum might assist in a better understanding of the changes in concerns over time.

Instrument

Bull's (1981) maternal concern questionnaire may need further development and refinement. Prior to analyzing the data, Bull (1981) grouped specific items within five conceptual categories. These five conceptual categories were then divided into nine subcategories. Bull (1981) did not describe the process of sorting items according to the nine subcategories. In addition, Bull's (1981) instrument included the open-ended question, "Do you have other concerns not listed?" This written question elicited other maternal concerns not specified on the maternal concern questionnaire. Similarily, the use of the semi-structured interview in this present study yielded additional maternal concerns which had not been addressed on the maternal concern questionnaire. Therefore, these other concerns derived from the written open-ended question and from the semi-structured interview need to be considered for future development of the instrument.

Another limitation of the instrument is the inclusion of some items which did not clearly discriminate between subjects (e.g. recognition of signs of illness). This decreased the likelihood of finding a statistical difference between the second or third postpartum day and at one month postpartum. These items were not good discriminators when applied to this sample because the scores were too homogeneous.

Also, the items in the category of concerns related to the husband may have contributed to problems in the measurement of this category (i.e., finding time for recreation) or may not be a valid indicator of a concern in this category at the time of measurement (i.e., measuring concern related to sexual relationships during hospitalization). It can be argued that these items may not be appropriate for this category and may be found to be more appropriate in another category, e.g., self. These limitations in the design of the instrument may result in errors in measuring concerns.

Sample

The convenience sampling method utilized the most available persons as subjects. A disadvantage of using this sampling method was that some segments of the population may be underrepresented, thus biasing the results (Polit & Hungler, 1978, p. 458). This sampling method and the small sample size would not permit generalizations to the larger population. The use of stratified random sampling and an increase in the sample size would increase the probability of a more representative sample of the general population.

Procedure

One procedural consideration which may have influenced the results is the setting in which the data collection occurred. The setting has been found to "exert a powerful

influence on people's emotions and behaviors" (Polit & Hungler, 1978, p. 244). The subjects for this investigation were asked to complete the questionnaires in two entirely separate settings, the hospital and their own home. As well, the hospitals themselves were different because one was a high risk maternity care center. However, only low risk mothers were selected from this particular hospital. The mothers may have felt more in control and comfortable within their own home environment than in the hospital environment and responded differently to the same items based on these feelings. In fact, several mothers commented on how much shorter the maternal questionnaire seemed to be during the home visit than in the hospital.

The presence of the interviewer has been shown to influence the results (Polit & Hungler, 1978, p. 245). A prepared checklist of concerns administered by an interviewer may present additional problems because the participants may respond with answers which they think are socially acceptable. "Respondents and interviewers interact as human beings and this interaction can affect the subject's responses" (Polit & Hungler, 1978, p. 352). The constancy of the same researcher for all participants in both settings attempted to control for interviewer bias.

Implications for Nursing

The maternal concern questionnaire developed by Bull (1981) is a useful instrument for providing information on maternal concerns at the second or third postpartum day and again at one month postpartum. Priority maternal concerns can be identified at the two time intervals and allow nurses within the hospital and the community to plan for nursing services to postpartum women.

Mothers' concerns need to be incorporated into these hospital and community programs. A new program operating within the hospital setting at the time of this writing is the Maternal Postpartum Education Program. In this program, mothers identify their learning needs by means of a prepared checklist. An advantage of the program is that the hospital nurse can focus on specific questions the mother has, using standardized prepared answers. There is also a permanent record of teaching and learning as well as a record of areas that require further follow-up. This record is reviewed by the community health nurse hospital-based coordinator before the mother is discharged from the hospital and further community health nursing follow-up is decided. The information is then relayed to the community health field nurse for action. The format of the Maternal Postpartum Education Program will allow for statistical analysis to be made.

There are some limitations with this style of patient education. There is a risk with the Maternal Postpartum Education questionnaire that mothers may not identify their questions or needs on the checklist for fear of ridicule; that standardized content may not address needs specific to the mother's personal life circumstances; and that the mothers may not emotionally or physically be ready to learn. Nurses in the hospital and community must have special interest, training and sensitivity to mothers' unexpressed and expressed needs. The amount, quality, timing of information and the environment in which the information is conveyed are critical to learning. Certain mothers need to be re-educated about their original concerns, or have their learning reinforced and this may have to be done in the home.

Given the limitations of this research, the maternal concern questionnaire is a valid instrument which can be used for the study of mothers' concerns. This research has dealt with healthy, married primiparous mothers who have had normal vaginal deliveries. The instrument needs to be refined to include additional maternal concerns, such as the physical and emotional strain to the spouse, and discrepancy in health information provided. Maternal concerns, both in the hospital and again at home, included the physical aspects of caring for the baby and the mother's own physiological changes. Because similar areas of concern in the two time periods were expressed, this would suggest that

re-education or reinforcement of learning was necessary at one month postpartum.

Further study is necessary on maternal concerns using a wider spectrum of the population, and should include variables such as socioeconomic and cultural background, and physiological parameters such as premature birth and caesarian section. Identification of maternal concerns at one week and four weeks postpartum may be of benefit in planning for: (a) specialized prenatal classes and programs, (b) postpartum teaching programs in hospitals, (c) hospital discharge, (d) day care relief centers, (e) postpartum community programs, and (f) other community resources.

It would seem that even healthy mothers have many concerns and need support. It may be that in times of socioeconomic distress with restraints on the health care dollar, the mothers who are at high risk must be identified early so that nursing resources are used where they are needed most. Thus, further study is necessary.

Recommendations for Further Research

This study has delineated several areas where further information is needed. Recommendations for further study include:

1. further development and testing of Bull's (1981)

instrument,

2. research using a larger randomized sample,

3. an analysis between the maternal concerns and identified learning needs obtained from the maternal-child health education program,

4. a comparative study of maternal concerns between primiparous and multiparous mothers,

5. clarifying concerns that mothers experience over an extended period of time,

6. comparative investigation of the impact of programs such as the Combined Care Program and the Early Discharge Program on maternal concerns,

7. investigating the effect of culture on maternal concerns,

8. investigating the concerns of single and/or adolescent mothers, and high-risk mothers such as mothers of premature infants, and

9. further investigation of the strategies utilized by primiparous mothers to deal with particular problems during the postpartum period.

CONCLUSION

A thorough nursing assessment of mothers' concerns can guide the nurse toward the most appropriate nursing intervention. The nurse is in an opportune position to assist the family achieve an optimal level of health.

The mothers in this study did indicate their concerns during the postpartum period. They described the focus, intensity and frequency of their concerns on the second or third postpartum day and again at one month postpartum; the strategies they had used to manage their greatest concern; the sources of help and the outcome of their concerns.

The mothers in this study reported that caring for the baby can be stressful. The health of the mother may be affected because of the great responsibility for the care of the newborn while often being responsible for the demands of the household. This study has provided implications for health professionals. Further research will increase nursing knowledge about the concerns of primiparous mothers.

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Appendix A

Request to Institution

Address of Researcher

Address of Institution

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Dear

I am a graduate student in nursing at the University of Manitoba. For my master's thesis I am interested in studying the change of concerns of primiparous mothers while in hospital (day 2 or day 3 postpartum) and again at one month postpartum. A synopsis of the study is enclosed. This letter is to request your permission to contact mothers in hospital. A list of potential subjects who meet the criteria for this study would be appreciated when I am in the hospital.

This study has been reviewed by Thesis Committee of Professor Karen Chalmers (474-9315), Dr. Connie Becker and Dr. Brockman and approved by the Ethical Review Committee at the University of Manitoba.

If you have any questions or concerns regarding this study, please contact me. I can usually be reached at .

Thank you for your kind consideration and co-operation.

Sincerely,

Lisa Domke

Synopsis

Title: A study of the extent to which concerns of primiparous mothers change from the second or third postpartum day to one month postpartum.

Purpose: To examine change of concerns of primiparous mothers.

Goal: The information obtained from this study is to delineate the concerns of postpartum mothers in order to improve nursing care.

Procedure: The maternal concern questionnaire will be administered two or three days following birth to primiparous mothers in hospital. The maternal concern questionnaire requests mothers to rate the frequency and intensity of their concerns. The researcher will telephone the mother at approximately the third week postpartum and arrange for a time for the one month home visit. The researcher will administer the same maternal concern questionnaire and ask a few additional questions in the mother's home at one month postpartum. A semi-structured interview will also be conducted at the one month home visit.

Sample: 30 primiparous mothers who meet the following criteria:

1. full term, normal, single baby,
2. medically uncomplicated pregnancy and vaginal delivery,
3. 18 to 35 years of age,
4. marital status as identified as married or common-law,
5. Caucasian,
6. to be discharged home with their baby by the regular postpartum discharge day,
7. able to speak and write English,
8. living in Winnipeg,
9. have a telephone, and
10. agree to voluntarily participate and give informed written consent.

Appendix B

LETTER OF INTRODUCTION

You have been invited to participate in a study because you are a first time mother. This study is to examine concerns of first time mothers while they are in hospital and again one month later at home. The information obtained from this study will help health personnel anticipate the concerns of mothers in order to better meet the needs of parents following the birth of a child.

If you decide to participate in the study, you will be asked a few general questions and will be given a questionnaire which asks you to rate your degree of concern according to a specific list of items. The researcher will telephone in approximately three weeks to arrange a convenient time for the one month home visit. At this time, you will be given the same questionnaire to complete and asked a few additional questions.

The questionnaire is very easy to do and should take no longer than 15 minutes to complete. The interview should take approximately 20 minutes. There are no right or wrong answers.

The information you provide will be compiled with that of the other respondents. All data will remain confidential. Confidentiality will be guaranteed should the study be published sometime in the future.

The researcher will be the only person to have access to the questionnaires and interview data. Upon completion of the study, the questionnaires and interview data will be destroyed.

If you have any questions, please do not hesitate to ask. If questions should arise at a later date, the investigator Lisa Domke ( ), Master of Nursing Graduate Student, or her advisor Karen Chalmers, Assistant Professor, may be contacted at the University of Manitoba, School of Nursing (474-9315).

The care you and your baby receive will be the same whether or not you participate in this study.

You are under no obligation to participate in this study and are free to withdraw from the study at anytime.

Your consent to participate is demonstrated by your signature on the Consent Form.

Thank you for your co-operation.

Appendix C

CONSENT FORM

I hereby consent to participate in the study on the concerns of first time mothers while in hospital and at one month later at home. I agree to two interviews, the first interview in hospital and the second interview at home. I am aware that I can withdraw from this study at any time.

_____
Signature of Respondent

_____ _____
Date Signature of Investigator

Do you wish a summary of the results of the study? Yes or No

Appendix D

MATERNAL CONCERNS

The following are some concerns experienced by some mothers after the birth of a baby. A concern is anything that is a question, worry, or problem to you. Please read each item and decide how much the item concerns you. Then circle your response according to the following scale:

1. No concern. (Have not thought about it, or have thought about it and am not worried, no questions.)
2. Little concern. (Have thought about it and am not worried; some concern or question.)
3. Moderate concern. (Have thought about it; am somewhat concerned.)
4. Much concern. (Have thought a lot about it; am very concerned.)

Please answer the items as to how you feel now.

	No Concern	Little Concern	Moderate Concern	Much Concern
The first area of concerns relates to you.				
1. Food you eat	1	2	3	4
2. Exercise habits	1	2	3	4
3. Return of figure to normal	1	2	3	4
4. Return of menstrual period	1	2	3	4
5. Vaginal discharge (lochia)	1	2	3	4

		No Concern	Little Concern	Moderate Concern	Much Concern
6.	Discomfort from stitches (episiotomy)	1	2	3	4
7.	Constipation	1	2	3	4
8.	Hemorrhoids	1	2	3	4
9.	Breast soreness	1	2	3	4
10.	Care of breasts	1	2	3	4
11.	Fatigue (lack of sleep	1	2	3	4
12.	Emotional tension	1	2	3	4
13.	Inability to concentrate	1	2	3	4
14.	Your labor and delivery experience	1	2	3	4
15.	Feelings of being tied down	1	2	3	4
16.	"Baby blues" - feeling depressed	1	2	3	4
17.	Finding time for personal interests	1	2	3	4
18.	Being a good mother	1	2	3	4

The next area relates to baby.

19.	Infant's physical appearance	1	2	3	4
20.	Normal growth and development	1	2	3	4
21.	Infant feeding (i.e. amount, how often)	1	2	3	4
22.	Physical care (i.e. diapering, cord care, bathing baby, skin care, circumcision)	1	2	3	4

		No Concern	Little Concern	Moderate Concern	Much Concern
23.	Feeling comfortable handling baby	1	2	3	4
24.	Interpreting infant's behavior	1	2	3	4
25.	Sleeping through baby's cries	1	2	3	4
26.	Recognizing signs of illness	1	2	3	4
27.	Traveling with baby	1	2	3	4
28.	Safety (preventing accidents)	1	2	3	4
29.	How to dress baby (clothing that is too warm or too cold for environment)	1	2	3	4

The next area are your concerns relating to husband.

30.	Your relationship with baby's father	1	2	3	4
31.	Husband being a good father	1	2	3	4
32.	Finding time to be alone together	1	2	3	4
33.	Finding time for recreation	1	2	3	4
34.	Sexual relations	1	2	3	4
35.	Family planning (birth control)	1	2	3	4

The next area relates to the family unit.

36.	Managing the demands of the household	1	2	3	4
37.	Change in family's lifestyle	1	2	3	4

		No Concern	Little Concern	Moderate Concern	Much Concern
38.	Setting limits on visitors	1	2	3	4
39.	Finances	1	2	3	4

The last area relates to community.

40.	Change in relationships with single friends	1	2	3	4
41.	Change in relationships with relatives	1	2	3	4
42.	Change in relationships with married friends	1	2	3	4
43.	Advice from relatives or friends	1	2	3	4
44.	The availability of community resources (i.e. babysitters, clinics, parent classes)	1	2	3	4
45.	Did you work outside the home before the baby's birth?		yes	no	
46.	How would you rank your concern regarding work activity	1	2	3	4
47.	Did you participate in community organizations (i.e. church groups, bowling league, etc.) before the birth of the baby?		yes	no	
48.	How would you rank your concern regarding participation in organizations?	1	2	3	4
49.	Do you have other concerns that are not listed?				
50.	How old is your baby today?		_____		

Appendix E

[Administered in Hospital]

BACKGROUND INFORMATION

Date: _____

Is your baby a boy or girl? _____

What is your baby's date of birth? _____

What is your present age? _____

What was the last year of education that you completed? _____

Are you employed? _____

Are you on maternity leave? _____

What is your occupation? _____

Will you be returning to your job? _____

Do you have other person(s) members living with you? _____

What is (are) their relationship to you? _____

How capable do you feel in caring for yourself and family?

_____ very confident

_____ somewhat confident

_____ little confidence

_____ no confidence

What is your address and telephone number so that I may arrange for the second interview?

Address: _____

_____

Telephone Number: _____

Appendix F

[Administered at Home]

SEMI-STRUCTURED INTERVIEW QUESTIONS

Date: _____

1. Did you attend prenatal classes? Yes or No

   If yes, do you feel prenatal classes prepared you for your first month at home? Yes No Somewhat

2. How many days were you in the hospital with the baby? 1 2 3 4 5 6 or more

3. What is the main method of feeding your baby? breast or bottle

4. Has a public health nurse visited you? Yes or No

   If yes, how many home visits from the public health nurse have you had since the birth of the baby? 1 2 3 4 5 6 or more

5. Have you called the public health nurse with questions? Yes or No

   What was the reason for calling? _____

   If yes, were your questions answered adequately? Yes or No

6. Have you seen or contacted a physician? Yes or No

   If yes, what was the reason for calling? _____

7. Did you or do you have someone stay at home with you? Yes or No

   Who? Specify. husband, mother, other

8. How would you describe your experience since the birth of the baby?

   not stressful
   occasionally stressful
   frequently stressful
   very stressful

9. Additional Comments: _____

   _____

   _____

1. On the questionnaire which you have just completed, concerns have been classified into five main areas, i.e., self, baby, husband, family and community. Which area do you feel is your greatest concern?

2. What have you done about your concern within the last two weeks?

3. Who or what has been a major source of help with your concerns?

4. What has been the outcome of your concern?

5. What suggestions would you offer to first time mothers?

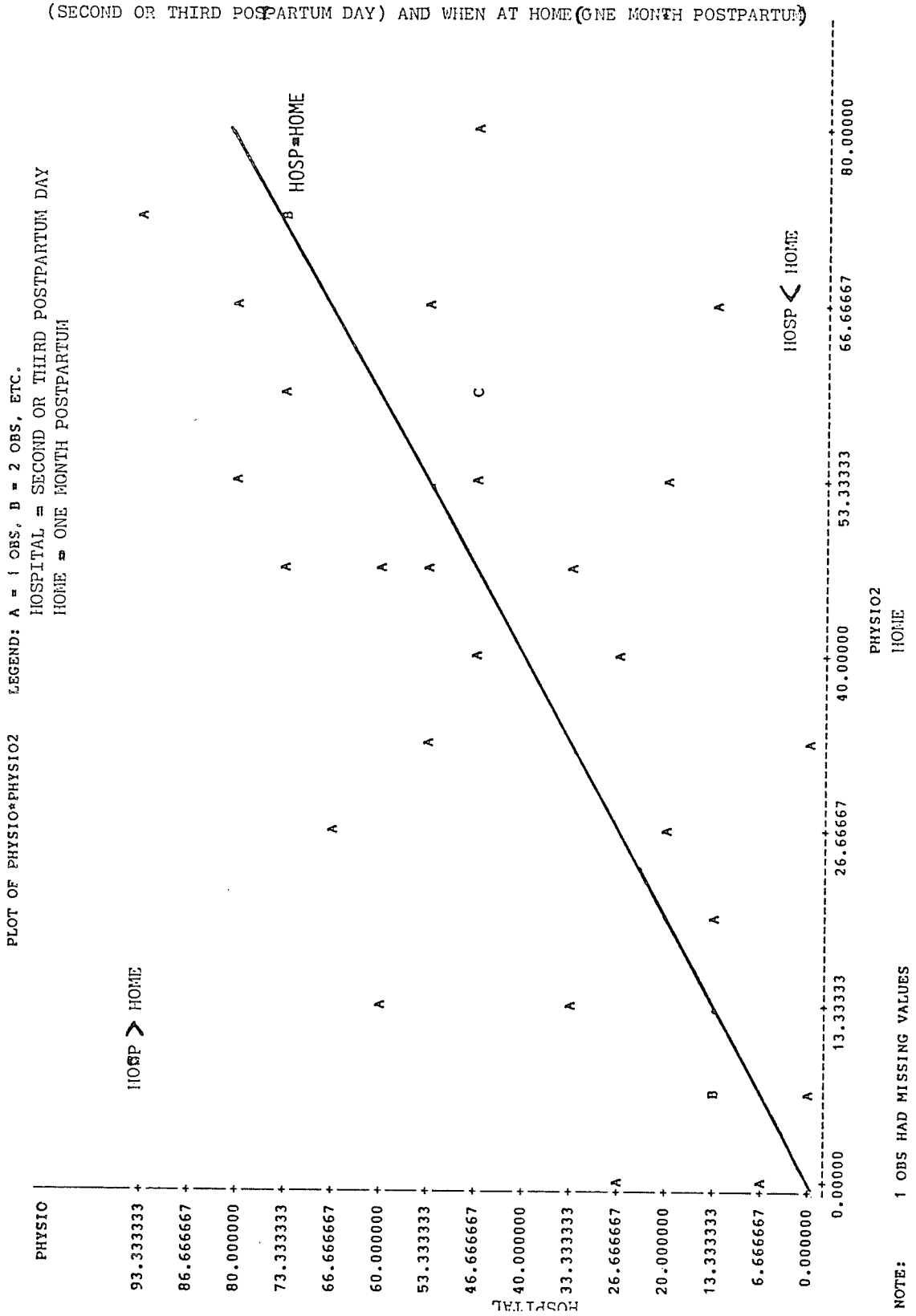
6. Additional Comments.

APPENDIX G

PICTORIAL REPRESENTATIONS OF MATERNAL CONCERNS

FIGURE I

MATERNAL CONCERNS RELATED TO PHYSIOLOGICAL CHANGES WHILE IN HOSPITAL (SECOND OR THIRD POSTPARTUM DAY) AND WHEN AT HOME (ONE MONTH POSTPARTUM)



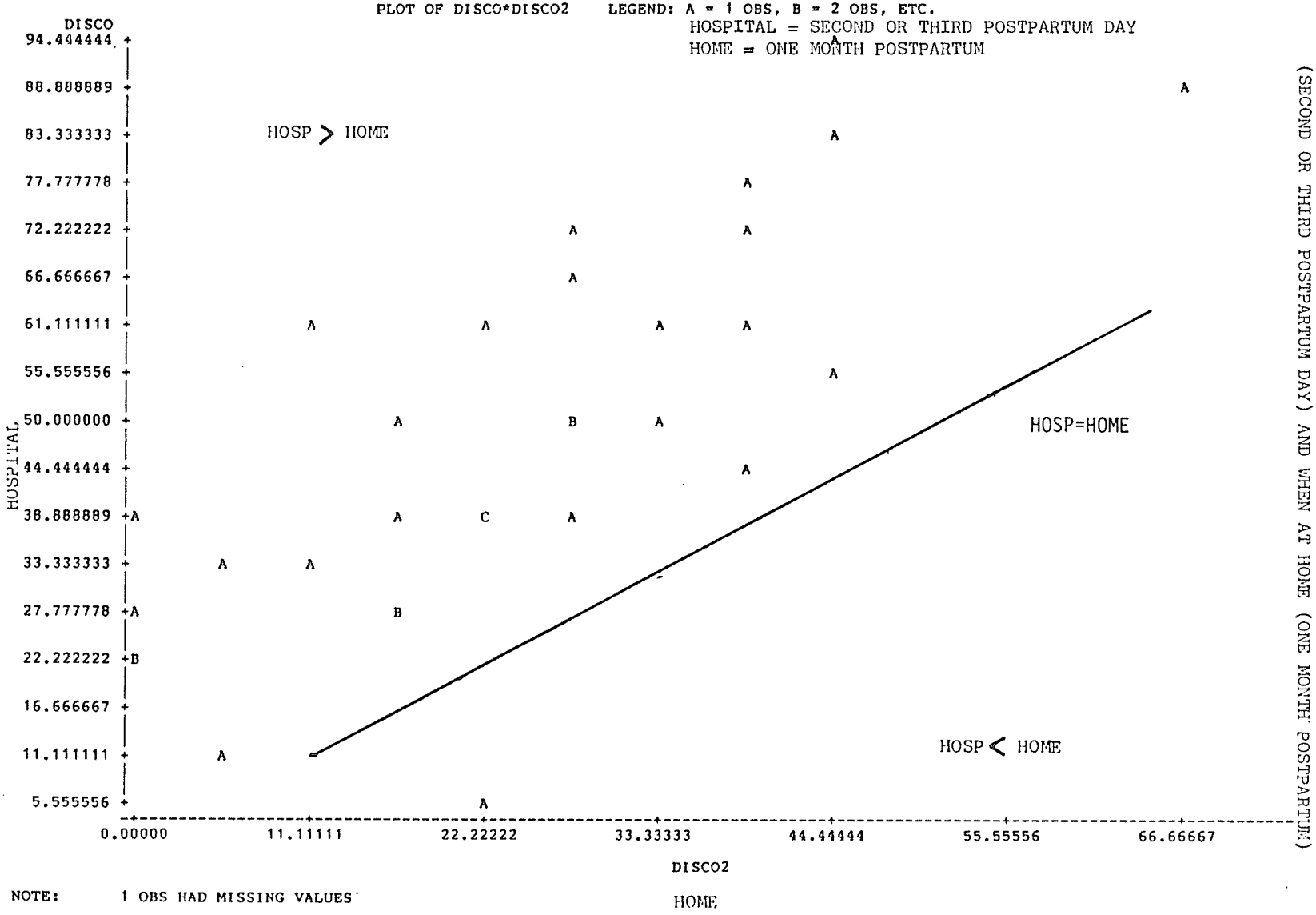


FIGURE 2

MATERNAL CONCERNS RELATED TO PHYSICAL DISCOMFORT WHILE IN HOSPITAL (SECOND OR THIRD POSTPARTUM DAY) AND WHEN AT HOME (ONE MONTH POSTPARTUM)

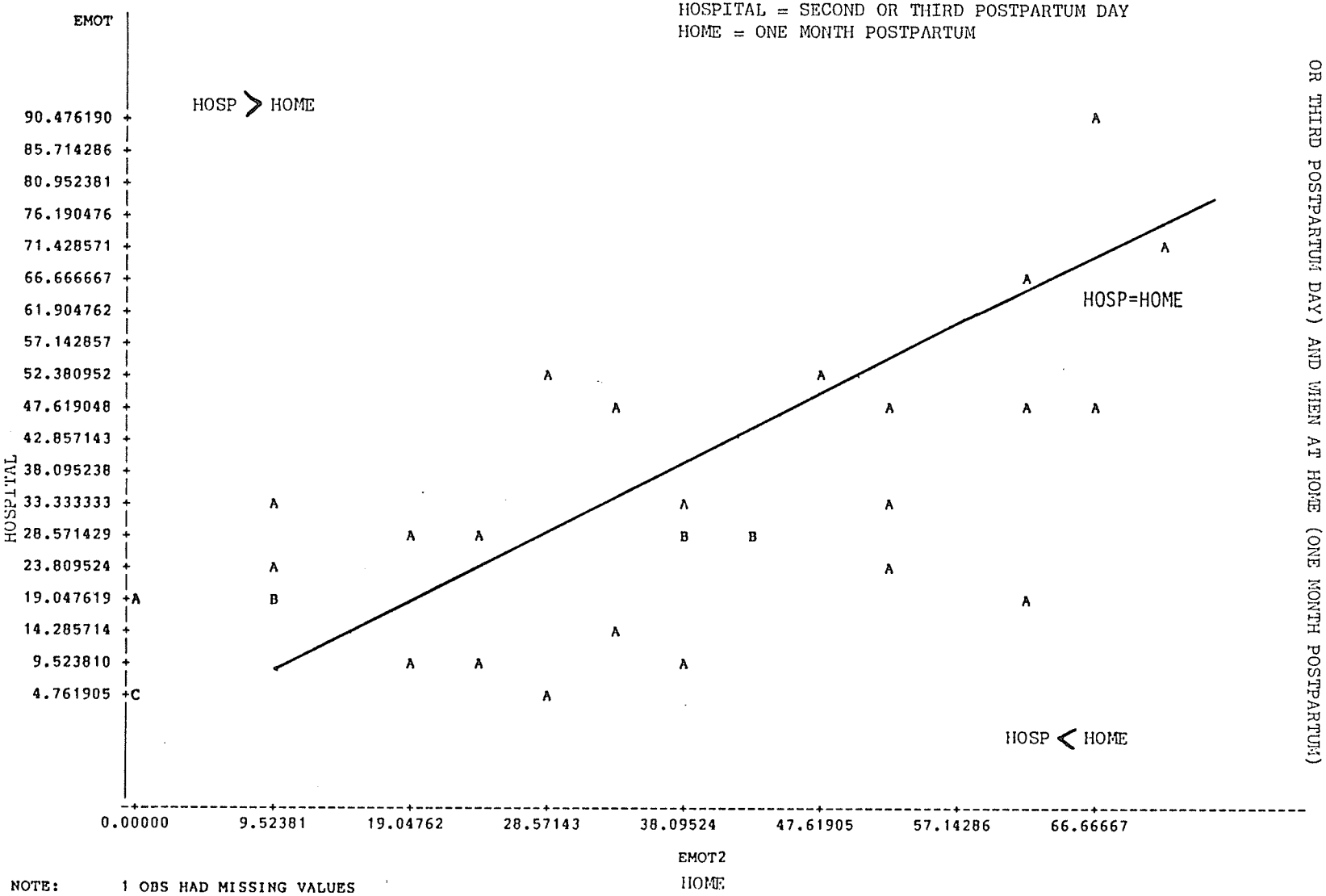


FIGURE 3

MATERNAL CONCERNS RELATED TO EMOTIONAL SELF WHILE IN HOSPITAL (SECOND OR THIRD POSTPARTUM DAY) AND WHEN AT HOME (ONE MONTH POSTPARTUM)

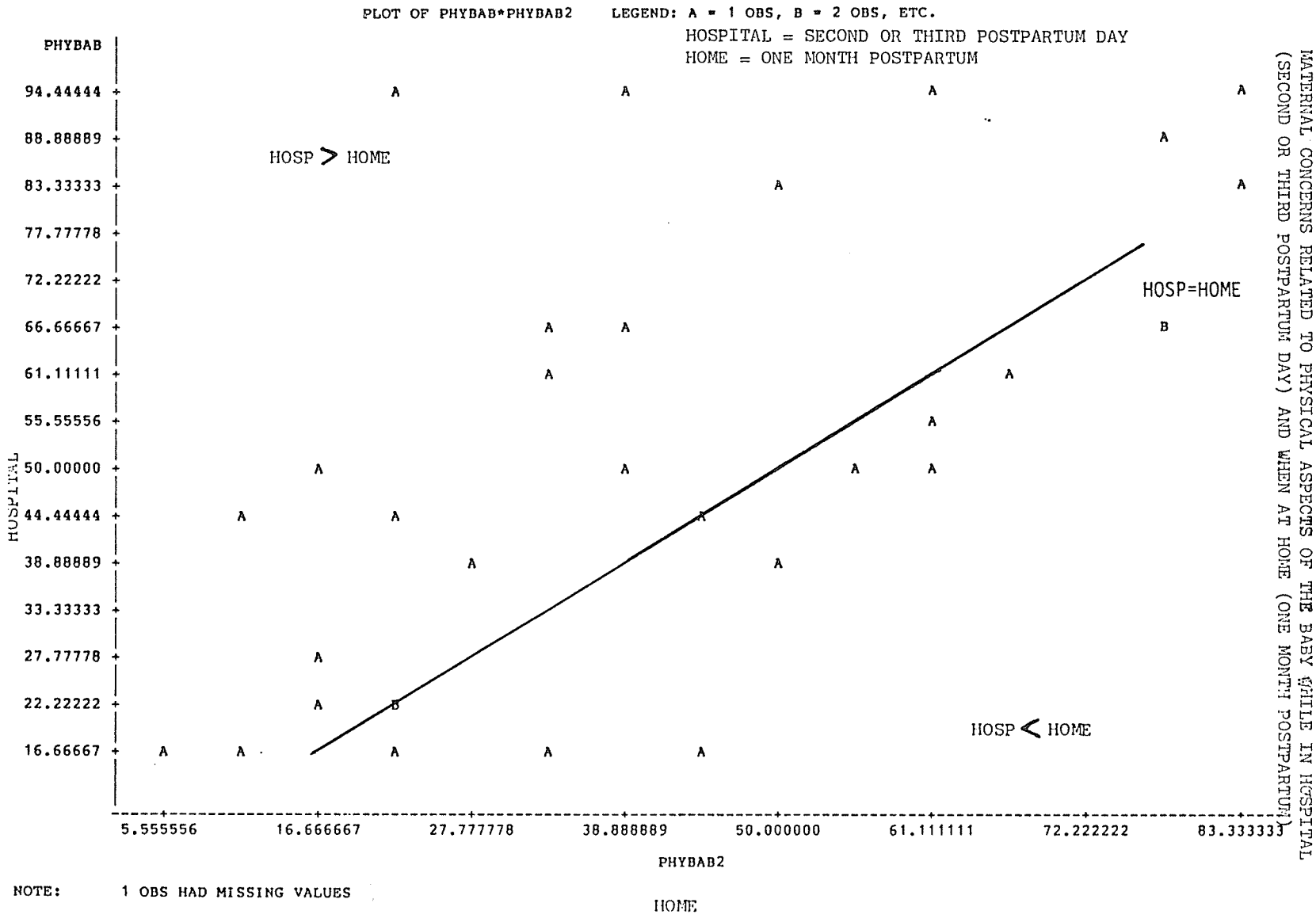


FIGURE 4

MATERNAL CONCERNS RELATED TO PHYSICAL ASPECTS OF THE BABY WHILE IN HOSPITAL (SECOND OR THIRD POSTPARTUM DAY) AND WHEN AT HOME (ONE MONTH POSTPARTUM)

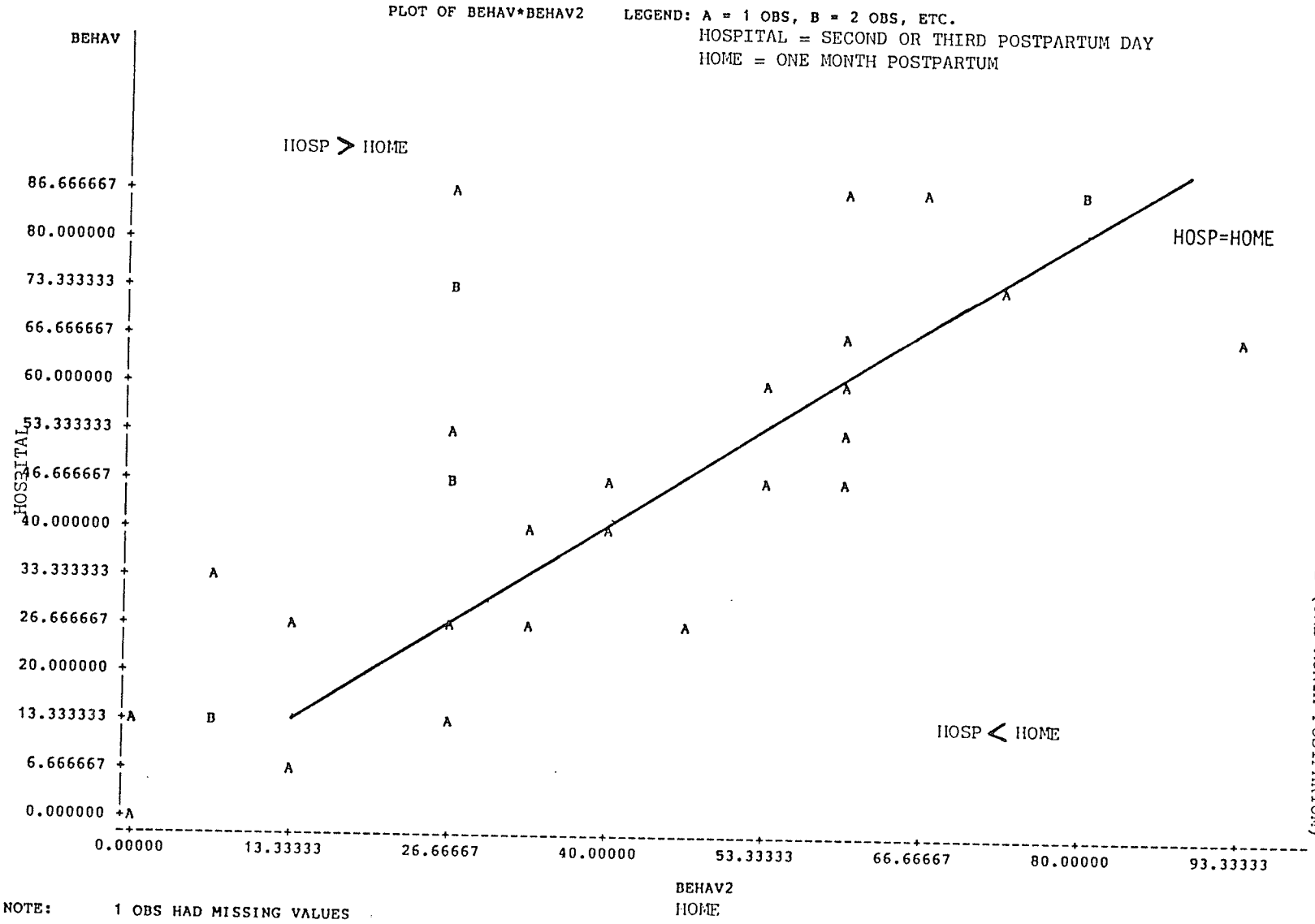


FIGURE 5

MATERNAL CONCERNS RELATED TO BEHAVIORAL ASPECTS OF THE BABY WHILE IN HOSPITAL (SECOND OR THIRD POSTPARTUM DAY) AND WHEN AT HOME (ONE MONTH POSTPARTUM)

FIGURE 6

MATERNAL CONCERNS RELATED TO HUSBAND WHILE IN HOSPITAL (SECOND OR THIRD POSTPARTUM DAY) AND WHEN AT HOME (ONE MONTH POSTPARTUM)

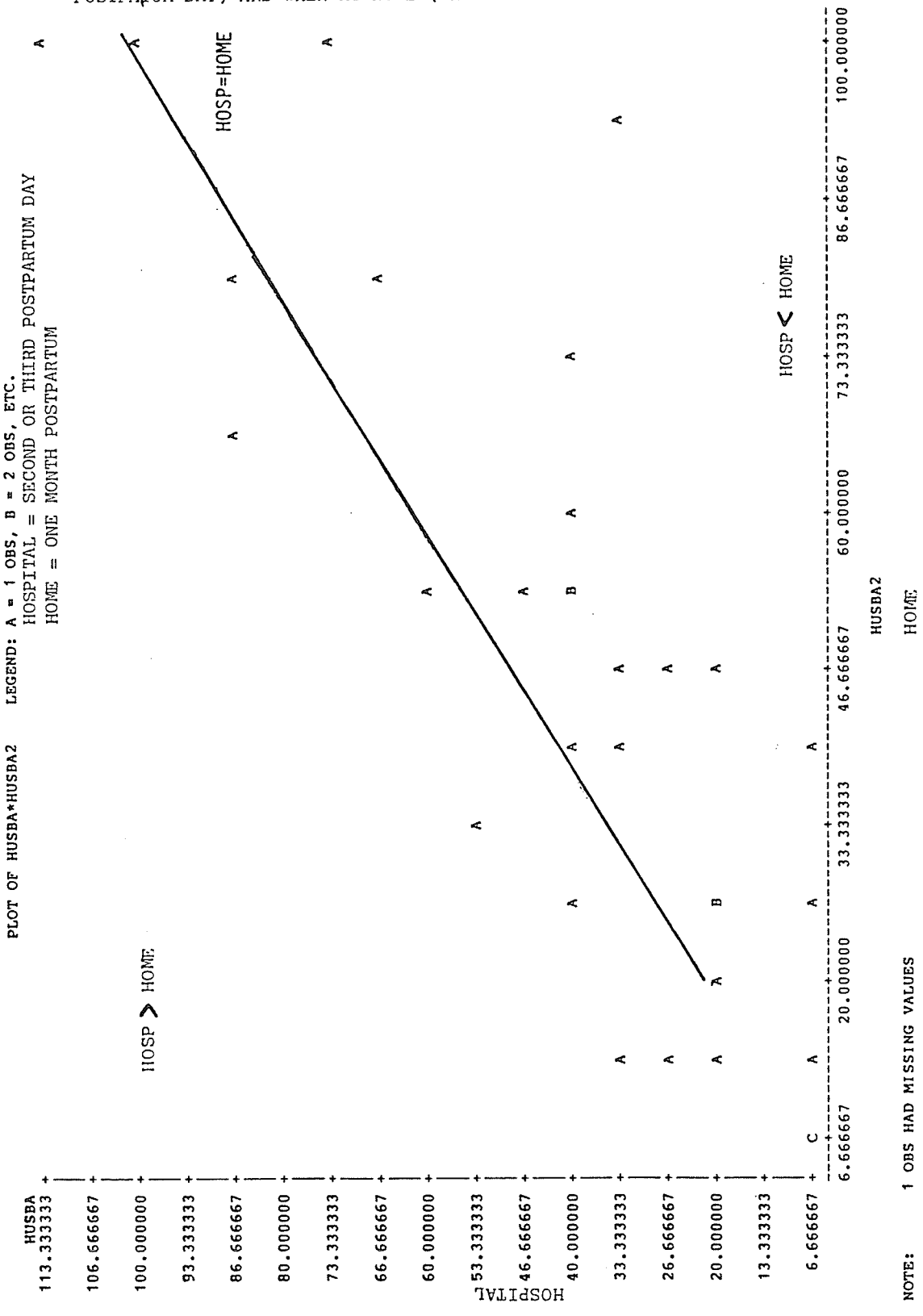


FIGURE 7

MATERNAL CONCERNS RELATED TO FAMILY WHILE IN HOSPITAL (SECOND OR THIRD POSTPARTUM DAY) AND WHEN AT HOME (ONE MONTH POSTPARTUM)

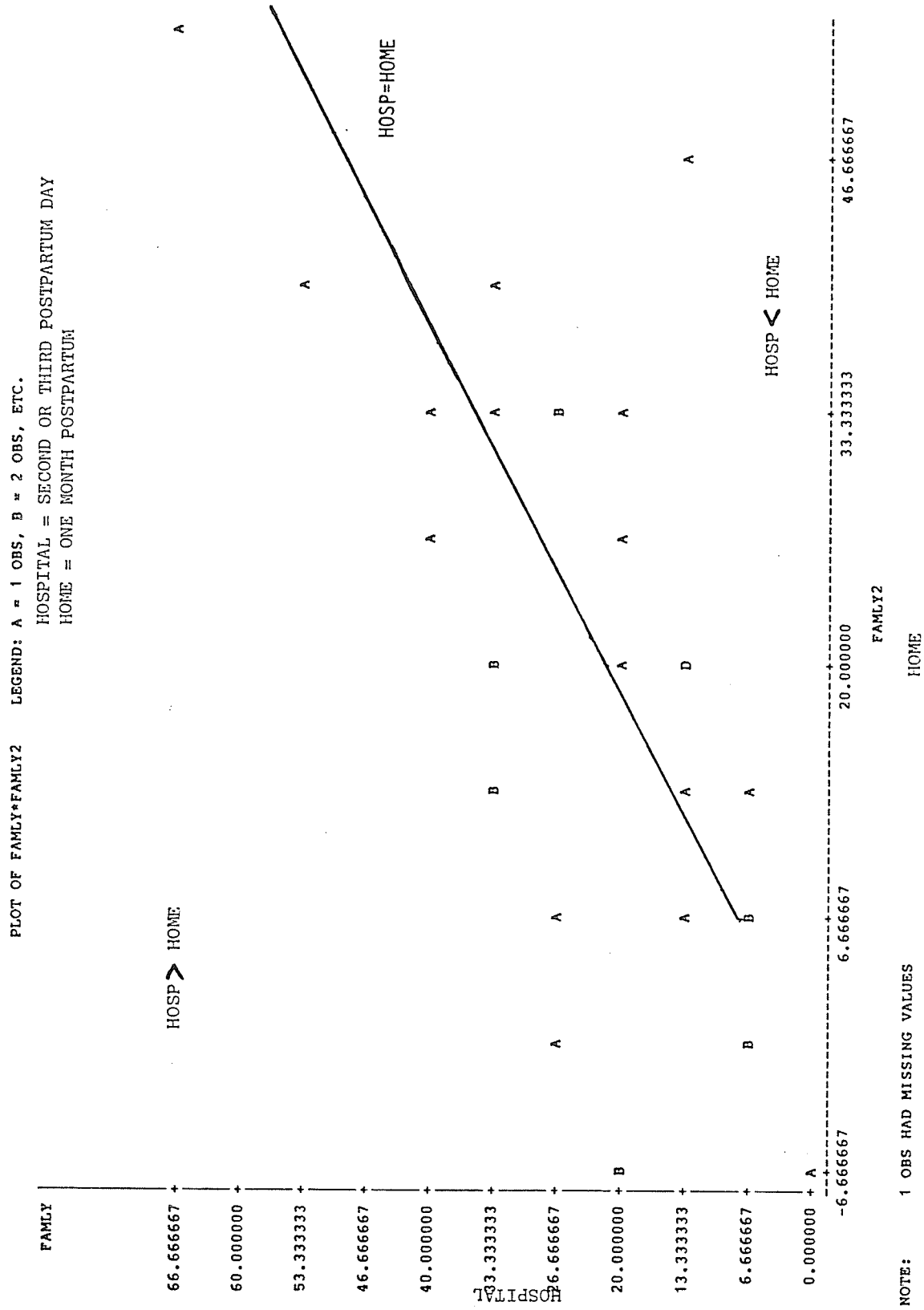
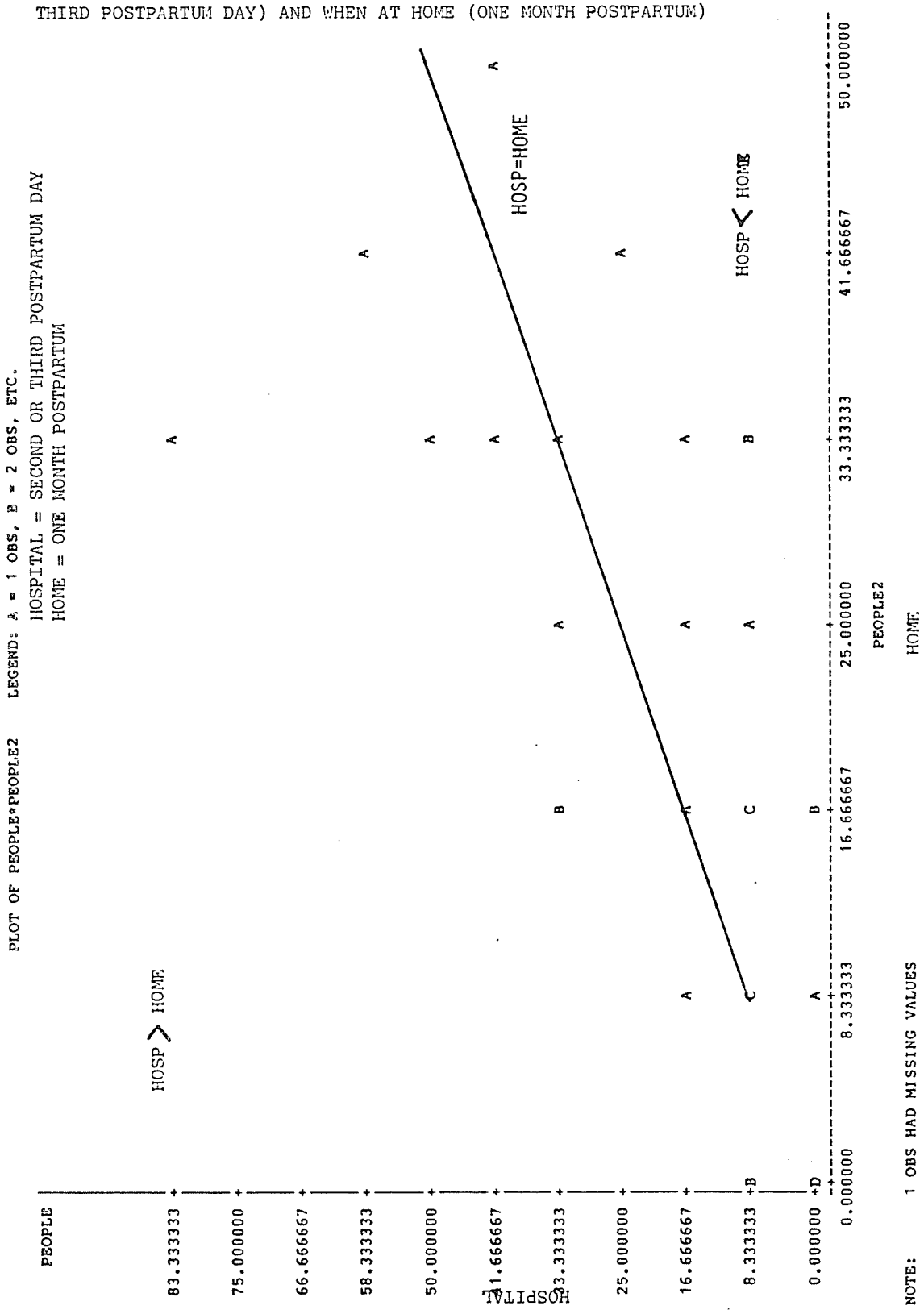


FIGURE 8

MATERNAL CONCERNS RELATED TO PEOPLE RELATIONS WHILE IN HOSPITAL (SECOND OR THIRD POSTPARTUM DAY) AND WHEN AT HOME (ONE MONTH POSTPARTUM)



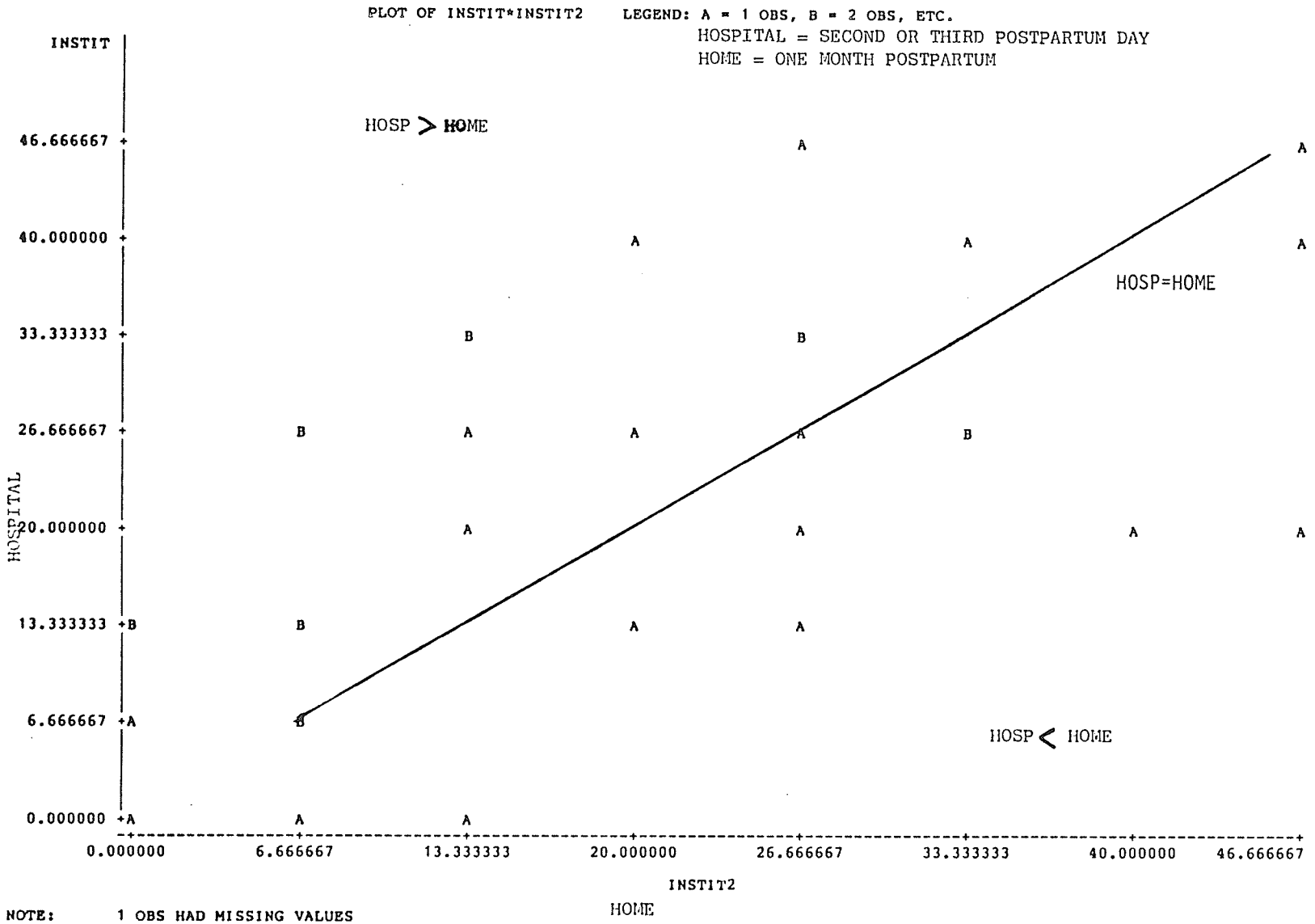


FIGURE 9

MATERNAL CONCERNS RELATED TO INSTITUTIONS WHILE IN HOSPITAL (SECOND OR THIRD POSTPARTUM DAY) AND WHEN AT HOME (ONE MONTH POSTPARTUM)

SELF:

SECOND OR THIRD POSTPARTUM DAY

FOOD YOU EAT

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	8	8	24.242	24.242
2	8	16	24.242	48.485
3	11	27	33.333	81.818
4	6	33	18.182	100.000

EXERCISE HABITS

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	5	5	15.152	15.152
2	9	14	27.273	42.424
3	11	25	33.333	75.758
4	8	33	24.242	100.000

RETURN OF FIGURE TO NORMAL

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	7	7	21.212	21.212
2	8	15	24.242	45.455
3	6	21	18.182	63.636
4	12	33	36.364	100.000

RETURN OF MENSTRUAL PERIOD

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	11	11	33.333	33.333
2	15	26	45.455	78.788
3	7	33	21.212	100.000

VAGINAL DISCHARGE (LOCHIA)

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	11	11	33.333	33.333
2	14	25	42.424	75.758
3	6	31	18.182	93.939
4	2	33	6.061	100.000

DISCOMFORT FROM STITCHES (EPISIOTOMY)

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	4	4	12.121	12.121
2	14	18	42.424	54.545
3	6	24	18.182	72.727
4	9	33	27.273	100.000

ONE MONTH POSTPARTUM

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	6	6	18.750	18.750
2	9	15	28.125	46.875
3	13	28	40.625	87.500
4	4	32	12.500	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	7	7	21.875	21.875
2	7	14	21.875	43.750
3	11	25	34.375	78.125
4	7	32	21.875	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	6	6	18.750	18.750
2	7	13	21.875	40.625
3	9	22	28.125	68.750
4	10	32	31.250	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	11	11	34.375	34.375
2	19	30	59.375	93.750
3	2	32	6.250	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	11	11	34.375	34.375
2	16	27	50.000	84.375
3	3	30	9.375	93.750
4	2	32	6.250	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	17	17	53.125	53.125
2	8	25	25.000	78.125
3	6	31	18.750	96.875
4	1	32	3.125	100.000

SECOND OR THIRD POSTPARTUM DAY

CONSTIPATION

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	5	5	15.152	15.152
2	12	17	36.364	51.515
3	12	29	36.364	87.879
4	4	33	12.121	100.000

HEMORRHOIDS

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	9	9	27.273	27.273
2	11	20	33.333	60.606
3	6	26	18.182	78.788
4	7	33	21.212	100.000

BREAST SORENESS

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	5	5	15.152	15.152
2	11	16	33.333	48.485
3	13	29	39.394	87.879
4	4	33	12.121	100.000

CARE OF BREASTS

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	7	7	21.212	21.212
2	7	14	21.212	42.424
3	13	27	39.394	81.818
4	6	33	18.182	100.000

FATIQUE (LACK OF SLEEP)

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	3	3	9.091	9.091
2	17	20	51.515	60.606
3	11	31	33.333	93.939
4	2	33	6.061	100.000

EMOTIONAL TENSION

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	7	7	21.212	21.212
2	15	22	45.455	66.667
3	9	31	27.273	93.939
4	2	33	6.061	100.000

ONE MONTH POSTPARTUM

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	17	17	53.125	53.125
2	8	25	25.000	78.125
3	5	30	15.625	93.750
4	2	32	6.250	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	18	18	56.250	56.250
2	12	30	37.500	93.750
3	1	31	3.125	96.875
4	1	32	3.125	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	20	20	62.500	62.500
2	10	30	31.250	93.750
3	1	31	3.125	96.875
4	1	32	3.125	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	16	16	50.000	50.000
2	9	25	28.125	78.125
3	7	32	21.875	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	9	9	28.125	28.125
2	12	21	37.500	65.625
3	8	29	25.000	90.625
4	3	32	9.375	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	9	9	28.125	28.125
2	13	22	40.625	68.750
3	10	32	31.250	100.000

SECOND OR THIRD POSTPARTUM DAY

INABILITY TO CONCENTRATE

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	19	19	57.576	57.576
2	11	30	33.333	90.909
3	3	33	9.091	100.000

YOUR LABOR AND DELIVERY EXPERIENCE

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	16	16	48.485	48.485
2	8	24	24.242	72.727
3	5	29	15.152	87.879
4	4	33	12.121	100.000

FEELINGS OF BEING TIED DOWN

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	20	20	60.606	60.606
2	8	28	24.242	84.848
3	4	32	12.121	96.970
4	1	33	3.030	100.000

BABY BLUES - FEELING DEPRESSED

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	17	17	51.515	51.515
2	10	27	30.303	81.818
3	3	30	9.091	90.909
4	3	33	9.091	100.000

FINDING TIME FOR PERSONAL INTERESTS

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	9	9	27.273	27.273
2	18	27	54.545	81.818
3	5	32	15.152	96.970
4	1	33	3.030	100.000

BEING A GOOD MOTHER

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	4	4	12.121	12.121
2	13	17	39.394	51.515
3	6	23	18.182	69.697
4	10	33	30.303	100.000

ONE MONTH POSTPARTUM

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	10	10	31.250	31.250
2	8	18	25.000	56.250
3	7	25	21.875	78.125
4	7	32	21.875	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	18	18	56.250	56.250
2	7	25	21.875	78.125
3	6	31	18.750	96.875
4	1	32	3.125	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	11	11	34.375	34.375
2	16	27	50.000	84.375
3	5	32	15.625	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	13	13	40.625	40.625
2	16	29	50.000	90.625
3	3	32	9.375	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	8	8	25.000	25.000
2	16	24	50.000	75.000
3	8	32	25.000	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	7	7	21.875	21.875
2	8	15	25.000	46.875
3	10	25	31.250	78.125
4	7	32	21.875	100.000

BABY:

SECOND OR THIRD POSTPARTUM DAY

INFANT"S PHYSICAL APPEARANCE

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	14	14	42.424	42.424
2	11	25	33.333	75.758
3	4	29	12.121	87.879
4	4	33	12.121	100.000

NORMAL GROWTH AND DEVELOPMENT

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	8	8	24.242	24.242
2	9	17	27.273	51.515
3	5	22	15.152	66.667
4	11	33	33.333	100.000

INFANT FEEDING (AMOUNT, HOW OFTEN)

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	3	3	9.091	9.091
2	8	11	24.242	33.333
3	9	20	27.273	60.606
4	13	33	39.394	100.000

PHYSICAL CARE

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	4	4	12.121	12.121
2	12	16	36.364	48.485
3	5	21	15.152	63.636
4	12	33	36.364	100.000

FEELING COMFORTABLE HANDLING BABY

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	8	8	24.242	24.242
2	9	17	27.273	51.515
3	12	29	36.364	87.879
4	4	33	12.121	100.000

INTERPRETING INFANT"S BEHAVIOR

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	2	2	6.061	6.061
2	16	18	48.485	54.545
3	10	28	30.303	84.848
4	5	33	15.152	100.000

ONE MONTH POSTPARTUM

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	13	13	40.625	40.625
2	9	22	28.125	68.750
3	7	29	21.875	90.625
4	3	32	9.375	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	10	10	31.250	31.250
2	8	18	25.000	56.250
3	7	25	21.875	78.125
4	7	32	21.875	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	2	2	6.250	6.250
2	13	15	40.625	46.875
3	14	29	43.750	90.625
4	3	32	9.375	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	10	10	31.250	31.250
2	12	22	37.500	68.750
3	7	29	21.875	90.625
4	3	32	9.375	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	15	15	46.875	46.875
2	12	27	37.500	84.375
3	5	32	15.625	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	8	8	25.000	25.000
2	10	18	31.250	56.250
3	12	30	37.500	93.750
4	2	32	6.250	100.000

HUSBAND:

SECOND OR THIRD POSTPARTUM DAY

SLEEPING THROUGH BABY"S CRIES

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	7	7	21.212	21.212
2	13	20	39.394	60.606
3	7	27	21.212	81.818
4	6	33	18.182	100.000

RECOGNIZING SIGNS OF ILLNESS

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	3	3	9.091	9.091
2	4	7	12.121	21.212
3	14	21	42.424	63.636
4	12	33	36.364	100.000

TRAVELLING WITH BABY

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	8	8	24.242	24.242
2	13	21	39.394	63.636
3	11	32	33.333	96.970
4	1	33	3.030	100.000

SAFETY (PREVENTING ACCIDENTS)

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	4	4	12.121	12.121
2	13	17	39.394	51.515
3	6	23	18.182	69.697
4	10	33	30.303	100.000

HOW TO DRESS BABY (CLOTHING)

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	4	4	12.121	12.121
2	17	21	51.515	63.636
3	10	31	30.303	93.939
4	2	33	6.061	100.000

RELATIONSHIP WITH BABY"S FATHER

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	19	19	57.576	57.576
2	8	27	24.242	81.818
3	4	31	12.121	93.939
4	2	33	6.061	100.000

ONE MONTH POSTPARTUM

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	16	16	50.000	50.000
2	8	24	25.000	75.000
3	6	30	18.750	93.750
4	2	32	6.250	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	3	3	9.375	9.375
2	5	8	15.625	25.000
3	17	25	53.125	78.125
4	7	32	21.875	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	13	13	40.625	40.625
2	9	22	28.125	68.750
3	9	31	28.125	96.875
4	1	32	3.125	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	5	5	15.625	15.625
2	12	17	37.500	53.125
3	8	25	25.000	78.125
4	7	32	21.875	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	6	6	18.750	18.750
2	17	23	53.125	71.875
3	4	27	12.500	84.375
4	5	32	15.625	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	11	11	34.375	34.375
2	12	23	37.500	71.875
3	6	29	18.750	90.625
4	3	32	9.375	100.000

FAMILY:

SECOND OR THIRD POSTPARTUM DAY

HUSBAND BEING A GOOD FATHER

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	23	23	69.697	69.697
2	7	30	21.212	90.909
3	2	32	6.061	96.970
4	1	33	3.030	100.000

FINDING TIME TO BE ALONE TOGETHER

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	11	11	33.333	33.333
2	14	25	42.424	75.758
3	6	31	18.182	93.939
4	2	33	6.061	100.000

FINDING TIME FOR RECREATION

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	10	10	30.303	30.303
2	16	26	48.485	78.788
3	6	32	18.182	96.970
4	1	33	3.030	100.000

SEXUAL RELATIONS

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	13	13	39.394	39.394
2	13	26	39.394	78.788
3	5	31	15.152	93.939
4	2	33	6.061	100.000

FAMILY PLANNING (BIRTH CONTROL)

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	12	12	36.364	36.364
2	7	19	21.212	57.576
3	9	28	27.273	84.848
4	5	33	15.152	100.000

MANAGING HOUSEHOLD DEMANDS

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	7	7	21.212	21.212
2	17	24	51.515	72.727
3	7	31	21.212	93.939
4	2	33	6.061	100.000

ONE MONTH POSTPARTUM

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	20	20	62.500	62.500
2	9	29	28.125	90.625
3	1	30	3.125	93.750
4	2	32	6.250	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	6	6	18.750	18.750
2	14	20	43.750	62.500
3	9	29	28.125	90.625
4	3	32	9.375	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	8	8	25.000	25.000
2	14	22	43.750	68.750
3	9	31	28.125	96.875
4	1	32	3.125	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	12	12	37.500	37.500
2	11	23	34.375	71.875
3	9	32	28.125	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	12	12	37.500	37.500
2	10	22	31.250	68.750
3	8	30	25.000	93.750
4	2	32	6.250	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	9	9	28.125	28.125
2	14	23	43.750	71.875
3	8	31	25.000	96.875
4	1	32	3.125	100.000

COMMUNITY:

SECOND OR THIRD POSTPARTUM DAY

CHANGE IN FAMILY"S LIFESTYLE

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	5	5	15.152	15.152
2	18	23	54.545	69.697
3	9	32	27.273	96.970
4	1	33	3.030	100.000

SETTING LIMITS ON VISITORS

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	6	6	18.182	18.182
2	19	25	57.576	75.758
3	7	32	21.212	96.970
4	1	33	3.030	100.000

FINANCES

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	10	10	30.303	30.303
2	12	22	36.364	66.667
3	8	30	24.242	90.909
4	3	33	9.091	100.000

RELATIONSHIP WITH SINGLE FRIENDS

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	17	17	51.515	51.515
2	11	28	33.333	84.848
3	5	33	15.152	100.000

RELATIONSHIP WITH RELATIVES

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	24	24	72.727	72.727
2	8	32	24.242	96.970
4	1	33	3.030	100.000

RELATIONSHIP WITH MARRIED FRIENDS

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	20	20	60.606	60.606
2	10	30	30.303	90.909
3	3	33	9.091	100.000

ONE MONTH POSTPARTUM

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	8	8	25.000	25.000
2	15	23	46.875	71.875
3	9	32	28.125	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	13	13	40.625	40.625
2	14	27	43.750	84.375
3	5	32	15.625	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	11	11	34.375	34.375
2	11	22	34.375	68.750
3	9	31	28.125	96.875
4	1	32	3.125	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	15	15	46.875	46.875
2	14	29	43.750	90.625
3	3	32	9.375	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	22	22	68.750	68.750
2	9	31	28.125	96.875
3	1	32	3.125	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	19	19	59.375	59.375
2	12	31	37.500	96.875
3	1	32	3.125	100.000

SECOND OR THIRD POSTPARTUM DAY

ADVICE FROM RELATIVES OR FRIENDS

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	13	13	39.394	39.394
2	16	29	48.485	87.879
3	3	32	9.091	96.970
4	1	33	3.030	100.000

AVAILABILITY OF COMMUNITY RESOURCES

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	14	14	42.424	42.424
2	9	23	27.273	69.697
3	8	31	24.242	93.939
4	2	33	6.061	100.000

WORK OUTSIDE HOME BEFORE BIRTH

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1 YES	30	30	90.909	90.909
2 NO	3	33	9.091	100.000

WORK ACTIVITY

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	8	8	24.242	24.242
2	12	20	36.364	60.606
3	10	30	30.303	90.909
4	3	33	9.091	100.000

PARTICIPATE IN COMMUNITY ORGANIZATIONS

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1 YES	11	11	33.333	33.333
2 NO	22	33	66.667	100.000

PARTCIPATION IN ORGANIZATIONS

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
1	21	21	63.636	63.636
2	10	31	30.303	93.939
3	2	33	6.061	100.000

ONE MONTH POSTPARTUM

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	9	9	28.125	28.125
2	17	26	53.125	81.250
3	6	32	18.750	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	13	13	40.625	40.625
2	11	24	34.375	75.000
3	7	31	21.875	96.875
4	1	32	3.125	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	29	29	90.625	90.625
2	3	32	9.375	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	9	9	28.125	28.125
2	18	27	56.250	84.375
3	3	30	9.375	93.750
4	2	32	6.250	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	12	12	37.500	37.500
2	20	32	62.500	100.000

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	1	.	.	.
1	16	16	50.000	50.000
2	14	30	43.750	93.750
3	1	31	3.125	96.875
4	1	32	3.125	100.000