

ABSTRACT

Caroline M. Burton. MATERNAL PERCEPTIONS OF PRESCHOOL CHILD BEHAVIORS BEFORE AND AFTER SEPARATION FOR CHILDBIRTH. (Under the direction of Emilie D. Henning) School of Nursing, April 1988.

Recent developments and changes in maternal roles and health care consumer roles have led to changes in the perinatal health care. One change is a shorter period of hospitalization for childbirth. The focus of this study was to examine the effect of short term hospitalization and separation for childbirth upon the behavior of the firstborn, as perceived by their mothers. It was hypothesized that there would be no difference in mothers' perceptions of their firstborns' behaviors as a result of separation for childbirth. A questionnaire, Maternal Perception of Preschool Child Behavior, was administered to mothers of firstborn preschool children (n=18) during hospitalization for the birth of the second child. The second part of the questionnaire was administered to the subjects (n=16) one week later. This questionnaire asked for mothers' perceptions of changes in their preschool child's behavior in the areas of eating, sleeping, toileting and general behavior following the hospitalization and separation.

Analysis revealed that there was a statistically significant difference in perceived behaviors in the area of eating, with a mean change of -1.81 [t(16)=-3.67,

$p=0.0021$. Therefore, the hypothesis was rejected at the .05 level of significance. The other behaviors of sleeping, toileting and general behavior did not have a statistically significant change in scores.

Further analysis revealed a significant correlation between the hours of separation and scores in the area of toileting ($r=0.5736$, $p=0.020$). There was also a correlation of preparation for the birth and separation with the scores of general behavior ($r=-.5832$, $p=0.018$).

Reliability analysis revealed an instrument with low reliability which may be increased through the deletion of certain items. Analysis were not performed based on improved alpha scores and reliability through item deletion.

The results of the study cannot be extrapolated to the general population because of the small sample size and because of the low reliability of the instrument. This researcher recommends further reliability testing of the instrument as well as testing of the firstborns' reactions to separation from their mothers.

Results of the study indicate that separation does have some effect on mothers' perceptions of their firstborns' behavior. It is unknown whether this effect is statistically significant due to the low reliability of the instrument. This study does, however, point to the continued need for nurses to be aware of possible changes in childrens' behavior and the need to prepare mothers and children for separation.

MATERNAL PERCEPTIONS
OF PRESCHOOL CHILD'S BEHAVIOR
BEFORE AND AFTER SEPARATION
FOR CHILDBIRTH

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CHAPTER ONE

INTRODUCTION

In the traditional family, prior to the forties, the mother was the primary caretaker and the father was the 'breadwinner', who was not involved in child care, except when punishment was needed and in times of crisis. The mother was virtually never separated from her children. Typically, she stayed at home, taking care of it and raising the children. However, with the advent of hospitalization for childbirth, the mother's separation from her other children may have lasted from seven to ten days, thus disrupting the maternal-child relationship.

The changes in sex roles in today's society have led to an increase of mothers who work outside the home, of the use of child day care and of paternal involvement in child care. (Beebe and Masterson, 1986). Statistics show that in the United States in 1986, over 50% of mothers with children under five years of age worked outside the home. Furthermore, over 50% of all children under the age of five years are enrolled in preprimary schools. (U. S. Bureau of the Census, 1987). Along with the sex role changes have come changes in business management of maternity leave. The majority of businesses today offer women a period of maternity leave after the birth of a

child, without penalty of job loss. In the past few years some businesses have been offering this option to new fathers as well.

The health care field has also changed its management of the childbearing family. The family now has a choice as to where the delivery of a child will occur; at home, in a free standing birthing center, in a hospital birthing room or in a traditional labor and delivery room. They also have a choice as to who attends the delivery, whether it is the parents alone, or grandparents, siblings or friends. If the delivery occurs in a hospital, the maternal-child separation period has decreased to an average of two to four days for an uncomplicated vaginal delivery. This separation is frequently interrupted by sibling visits to the hospital, as most hospitals now have liberal sibling visitation policies.

The arrival of a sibling is considered a stressful situation for firstborn children. It has been associated with behavioral changes, in the areas of toileting, eating, sleeping and general behavior (Dunn, Kendrick and MacNamee, 1981; Fields and Reite, 1984; Legg, Sherick and Wadland, 1974) and with changes in the interactions between mothers and their firstborn. (Dunn and Kendrick; 1980; Taylor and Kogan, 1973).

Along with the birth of a sibling, comes the stress on the firstborn child of being separated from his/her

mother. Several studies have dealt with the reactions of children to separation from their mothers (Heinicke and Westheimer, 1966; Ainsworth and Bell, 1970; Maccoby and Feldman, 1972). Few studies, however, have focused on the firstborns' reactions to maternal separation for childbirth (Robertson and Robertson, 1971; Trause, Voos, Rudd, Klaus, Kennell and Boslett, 1981; Field and Reite, 1984; Knicely, 1981). The reactions of the children in these studies typically progressed through the stages of separation as described by Bowlby (1973): protest, despair and detachment.

In recent years health care professionals have attempted to counteract the stress of maternal separation accompanying the birth of a sibling. An increasing awareness of this stress has brought about a shortening of maternal hospitalization, an increasing family and sibling involvement in the pregnancy and its outcome, as well as a liberalized sibling visitation to the hospital maternity unit.

The focus of this study is to examine the effects of short term hospitalization and separation for childbirth upon the behavior of the firstborn as perceived by their mothers.

STATEMENT OF THE PROBLEM

How does the shorter hospitalization for childbirth and concurrent separation affect mothers' perceptions of their firstborns' behavior?

HYPOTHESIS

H₁ There will be no difference in mothers' perceptions of their firstborns' behaviors as a result of separation for birth in the areas of:

- a) eating behaviors
- b) sleeping behaviors
- c) toileting behaviors
- d) general behaviors

OPERATIONAL DEFINITIONS

Firstborn Child - An individual between the ages of three years and six years, who was the only child in the family until the birth of a sibling.

Maternal Separation - A period of two to four days in which the mother was hospitalized for birth of a sibling.

Behavior - The manner in which the mother reports how the firstborn acts in the areas of eating, sleeping, toileting and general behavior. General behavior encompasses the areas of

aggression, thumb sucking,
clinginess.

Maternal Perception - a mother's cognitive interpretation
of objective and subjective
stimuli received from or
concerned with her child.

CHAPTER 2

THEORETICAL FRAMEWORK AND REVIEW OF LITERATURE

This study focused on the maternal separation and hospitalization for childbirth and its perceived effects on the firstborn. A theoretical framework was based on concepts from crisis theory and separation anxiety theory. Consequently, a review of literature included (1) childbirth as a crisis for the sibling, (2) the effects of separation anxiety and (3) the effects of separation for childbirth on the firstborn. Therefore, this chapter presents selected literature from each of these areas.

THEORETICAL FRAMEWORK

CHILDBIRTH AS A CRISIS FOR THE SIBLING

Crisis has been defined in a variety of ways, with each discipline having its own definition. However, the majority of definitions are derived from Caplan's conceptualization. His theory of crisis is described as "a state of psychological disequilibrium brought about by a loss of 'basic supplies' and subsequent breakdown in the hypothetical homeostatic problem-solving mechanism". (Caplan, 1959). The operational definition derived from the theory states that crises occur when "the individual" faces a problem that he cannot solve, causing a rise in inner tension, signs of anxiety and the inability to function in extended periods of emotional upset.

(Aguilera and Messick, 1986).

The crisis can be resolved positively if the person experiencing the crisis adapts to a higher level of functioning. If he/she does not, the crisis will be resolved with a resultant fall to a lower level of functioning.

Childbirth is seen as a developmental crisis. It is a normal experience, but can be considered as a period of marked physical, psychological and social change. As a developmental crisis, it affects the whole family including the firstborn. The crisis of childbirth and subsequent family reorganization is most profound for the first child. (Sherwen, 1987). The firstborn child may view the birth of a sibling as a threat to his/her position in the family. The child questions why his parents want another child. Is he/she not what they expected? Is he/she no longer adequate? Thus, the child may become anxious about his future relationships within the family.

This feeling may continue after the new infant arrives home. The firstborn no longer receives all the attention and affection. He/she now must share this with the new sibling, who demands attention from the parents. The division of attention leads to a great amount of stress, with which the firstborn must deal. The firstborn must work through this crisis and adapt to the enlargement of his/her family. (Sherwen, 1987). Crisis theory holds

that a person's ability to resolve a crisis and to grow depends on the support received during the crisis. Thus it allows for the involvement of significant persons around the individual (Infante, 1982). However, a child faced with the crisis of the birth of a sibling is often separated from the most significant person in his/her life: mother. It has been documented that one way a child handles the emotional stress of the crisis is through behavioral changes. (Legg et al., 1974; Dunn et al., 1981; Trause et al., 1981; Field and Reite, 1984). Legg, et al., (1974), found the children regressed in the areas of toileting, eating, sleeping and general behavior. They also noted increased aggressive behaviors displayed toward the new infant, as well as the mother. A later study by Dunn, et al., (1981), was aimed at mothers' perceptions of changes in the firstborn's behavior after the birth of a sibling. Forty families were studied over a period of one to three months before the birth of the sibling to fourteen months after the birth of the sibling. The ages of the firstborn children at the time of the sibling's birth ranged from eighteen to forty-three months. The pre-birth and post-birth maternal interviews were identical, centered on the child's behavior in the areas of feeding, sleeping, toileting and general behavior. No information was given concerning the length of the mother's hospital stay. The results showed the majority of children displayed signs of disturbance or

regression and/or negative behavior toward the mother and infant. The greatest incidence of changes in behavior was noted in the areas of sleeping, toileting, demanding and negative behaviors toward the mother. The authors attributed these changes to differences in the children's temperament, the quality of the mother-firstborn relationship, age of the firstborn and mothers postpartal state (Dunn, et al., 1984).

Therefore, childbirth is seen as a crisis for the firstborn; a crisis to which the child must adapt to maintain the healthy functioning of himself and his family.

SEPARATION ANXIETY

When looking at the effects of separation for childbirth on the relationship between the older sibling and the mother, it is necessary to have an understanding of separation anxiety and its consequences. Separation anxiety may be described as the anxiety which is felt during the threat of, or actual separation from, a loved one, and its effects. (Kreinik, 1980). Bowlby (1973) in his work on attachment and separation, discussed several studies on separation anxiety by various theorists. Sigmund Freud was the first major theorist to examine the concept of anxiety and its effects during childhood. As early as 1905, Freud described anxiety in children as an expression of their feelings over the loss of the person

they love. In later publications Freud continued his discussion of separation anxiety and viewed it as a warning signal and a congenital reaction to the danger of loss of object; he further believed that it was a defense mechanism to protect the ego from the threat of overwhelming demands.

Other theorists, such as Klein and Anna Freud, expanded on S. Freud's theory. Klein viewed separation anxiety as a natural expansion of the child's death instinct and from the trauma of birth - the first experience of separation. A. Freud, through observation of children separated from their families, concluded that the degree of separation anxiety exhibited was directly proportional to the degree of attachment between the mother and child. As the degree of attachment increased so did the degree of separation anxiety. (Bowlby, 1973).

In more recent times, much research has been done on the effects of maternal separation on the child. Heinicke and Westheimer (1966) observed the effects of separation on a sample of ten children who were placed in a residential nursery during a family emergency. Length of stay of the children at the nursery varied from twelve days to 147 days. The children were observed on arrival at the nursery, on six different one-half hour periods during the stay and on arrival at home. The results of the study showed some consistent behaviors among the children during these periods. On arrival at the nursery

and actual departing of the parent(s) who accompanied the child, the majority of the children cried, and had temper tantrums. During the separation period hostile behavior increased. Regression in toileting behaviors was also noted. All the children, when reunited with their mothers, showed some degree of detachment. The children who stayed shorter periods in the nursery displayed lesser degrees of early detachment; eventually four children displayed excessive clinging. Five children, who experienced longer separation, displayed open hostility and defiance which gradually diminished and was replaced with increasing affection.

Ainsworth and Bell (1970) studied the effect of a very brief maternal separation on the behavior of fifty-six infants. The separation occurred for a total of six minutes over a twenty five minute observation period. Each separation period lasted three minutes, the first with a stranger present in the room, the second with the child alone in the room. The key finding of the study was that all of the children exhibited anxious or distressed behaviors during the separation episodes, both in the presence and absence of another person. A replication study by Maccoby and Feldman (1972) with 2 and 3 year old children showed that the display of behaviors related to maternal separation decreased with age. However, it was still significant that the majority of children exhibited anxious behavior when separated from their mothers.

Robertson and Robertson (1971) looked specifically at the effects of maternal separation for childbirth. In their study, the children, aged eighteen months to thirty months, exhibited an increase in crying, clinging and irritability when separated from their mothers. After the separation, which ranged from 10 to 27 days, all children showed an increase in hostility toward their mothers.

These studies show that children separated from their mothers progress through the phases of separation, termed by Bowlby as protest, despair and detachment.

SEPARATION FOR CHILDBIRTH

Much research has been done on the effect of the birth of a sibling; the majority of it centered on the direct effect of the new baby on the sibling. Early studies showed a variety of changes in behavior exhibited by the older sibling. Kayiatos, Adams and Gilman, (1984), studied mothers' perceptions of the firstborns' regressive behaviors after the birth of a sibling. A questionnaire evaluating the mother's perceptions of behavior changes in eating, toileting, sleeping and general behavior was administered three to six weeks after the birth of the sibling. Ages of the study siblings ranged from 15 to 48 months. The questionnaire evaluated the mother's perceptions of behavior changes in eating, toileting, sleeping and general behavior. The results showed 93% of the mothers perceived their children as exhibiting

regressive behaviors. The areas with the most change noted were sleeping and general behavior. Interestingly, when the incidence of regressive behaviors was correlated with sibling visitation in the hospital, it was found that those who had visited showed a significantly lower incidence of perceived regressive behaviors.

The longitudinal study of Stewart, Mobley, Van Tuyl and Salvador (1987) examined the first born's adjustment to the birth of a sibling. The mothers were interviewed prior to the birth of a sibling and at one, four, eight and twelve months after the birth. Ages of the firstborn ranged from two years to four and one-half years. The authors noted that the firstborn children exhibited problems with toileting, eating, clinging and an increase in aggression and confrontation after the birth. The authors also pointed out that the interactions between the mother and firstborn decreased after the birth of the sibling.

Other research in this area has focused on the effects of separation for childbirth on the maternal-first born interaction. The study of Taylor and Kogan (1973) revealed that, after the birth of a sibling, there was a decrease in the expression of warmth with an increase in "emotional flatness" by both mothers and children. Dunn and Kendrick (1980) observed the changes in interactions between forty-one mother-firstborn dyads in their homes before and after the birth of the sibling. They found

that the majority of children "experienced a decrease in maternal playful attention" after the birth of a sibling. Conversely, there was an increase in negative confrontation between mother and child. Another interesting finding was that after the birth of a sibling, it increasingly became the first born's responsibility to initiate conversation, play or attention with the mother.

Field and Reite (1984) approached the problem of maternal separation for childbirth from a slightly different perspective. Not only did they collect information pertaining to the mothers' perceptions of changes in behavior, but they also monitored the children's heart rate and activity levels, as well as obtaining time-lapsed video tapes of the children during nighttime sleep. The children were observed in play sessions with their mothers (1) pre- and (2) post-hospitalization for childbirth, and (3) with their fathers during the hospitalization. The results showed several changes. First, the children increasingly engaged in fantasy play over the observation periods. The fantasy play incorporated more aggression. Secondly, the affective behaviors of both the parents and the child changed during the three periods. In the baseline period, the affect was termed positive; during the hospitalization the affect was seen as negative; after the mother returned home the affect was termed as flat or depressed. Fussiness and aggressive behavior increased during the

mothers' absence, but returned to normal after her return. Activity level and heart rate also increased during the separation, but fell below the baseline level after the reunion.

Sleep patterns changed in several ways. Total sleep time increased during the mothers' absence and returned to baseline after her return. The number of night wakings increased during separation, but returned to baseline after the mothers' return. Night crying also increased during separation, and while it did decrease after hospitalization, it did not return to baseline. A significant number of the children also exhibited regressive behaviors in the areas of toileting, eating, sleeping and general behavior.

Along with these results, the authors' noted that "it is not clear to what degree these behavior changes are associated with separation versus the arrival of a new baby and the related changes in the parent child relationship". (Field and Reite, 1984). However, the authors state the changes occurred during the actual separation period which suggests that they are separation related.

Another study which looked specifically at the effects of separation for childbirth on siblings was conducted by Trause, et al., (1981). The authors assessed the reactions of the firstborn to maternal separation and determined the effects of sibling hospital visitation on

the reaction to separation. The sample consisted of 31 families who were expecting their second child. The separation period ranged from two to six days. The subjects were randomly assigned to a visiting or non-visiting condition. Data were collected two to four weeks prior to the birth, at maternal discharge and one to two weeks after hospitalization. The data collection consisted of observation of maternal - firstborn interaction as well as a questionnaire completed by the mothers, which focused on specifics of child behavior in the areas of eating, sleeping, toileting and general behavior. The results of this study showed a significantly higher number of problems after maternal hospitalization. Specifically, 92% of the mothers reported increased problems in at least one area, while more than half the mothers reported increased problems in three or more areas. The area with the greatest increase was sleeping. There was also a significant increase in problems in general behavior, including temper tantrums, excessive activity and clinging behavior. Another observation the authors reported was that after hospitalization, mothers exhibited increased use of anger and stern commands.

When the control group of children who did not visit during hospitalization was compared to the experimental group, it was found that the experimental group ignored or avoided the mothers at discharge significantly less than

those in the control group. The children in the experimental group also exhibited fewer negative behaviors to their mother's requests for affection and towards the new sibling.

The authors conclude that "children do show at least short term distress following separation from mothers for childbirth". The mothers reported that they attributed the changes in behavior to the separation, as well as the new sibling. The authors pointed out that it remained unclear how the two variables of maternal separation and the appearance of a new sibling interface. Yet it was clear that in this sample the children who were able to visit their mothers, thus breaking up the separation period, responded in a more positive manner. (Trause, et al., 1981).

Another study by Knicely (1981) looked at maternal perceptions of preschool children's behavior before and after varying lengths of maternal separation for childbirth. The author compared maternal perceptions of preschool child behavior in two groups. The first group included those mothers who gave birth in a birth center. These mothers and their preschool child experienced no separation or separation only during the actual delivery. The second group included those mothers who gave birth in a hospital. These mothers and their preschool child experienced separations of up to four days interrupted by at least one sibling visitation to the hospital. The

sample consisted of thirty-seven subjects; eighteen from the birth center and nineteen from the hospital.

Data were collected at two different times. Initial data collection occurred during a prenatal physician's office visit. The mothers were given a two part questionnaire. Part one contained demographic questions related to the subject and her family. Part two requested the mothers' perceptions of their preschool child's behaviors in four areas: eating, sleeping, toileting and general behavior.

The second set of data was collected approximately four weeks after the birth of the sibling. A two part questionnaire was again administered. The first part requested information on the birth experience and separation from the preschool child. The second part focused on the mothers' perceptions of their preschool child's behavior since the separation.

Analysis of the data revealed several things. The most pertinent results showed that there was no statistically significant difference in maternal perceptions of preschool child behaviors before and after the birth of a sibling. More importantly, there was no statistically significant difference between the changes in behaviors for those children who had short or no separation from their mothers at the birthing center and those who had a longer separation period with their mother hospitalization, interrupted by sibling visitation.

In the discussion of the findings, the author noted several reasons for the results. Several mothers stated that after completing the initial questionnaire, their awareness of the need for preparation of the preschool child was enhanced. Thus, they increased and improved the child's preparation for the birth of the sibling and for separation from the mother. This preparation may have contributed to the results. The author also suggested that the time of postnatal data collection may have contributed to the findings. Data collection four weeks after the birth of a sibling may have given the preschool child a sufficient period to adjust to the separation from mother, as well as to the addition of a sibling.

The author recommended several points for future research. She suggested that the study be replicated with a larger sample including families of lower socioeconomic status, and with postnatal data collection within one to two weeks after the birth of the sibling.

With this understanding of maternal separation, this researcher questions if the shorter hospitalization experienced by today's mothers has a positive effect on behavior of the first born. It is hypothesized that the shorter stay will result in no change in mothers' perceptions of their preschool child's behaviors after the separation for childbirth.

SUMMARY

The literature related to maternal separation for childbirth and its effects on the firstborn has been presented in three major categories. First, a discussion of childbirth as a crisis, including literature on crisis theory, and adaptation of the firstborn. Secondly, the concept of separation anxiety. This section included Freud's ideas on separation anxiety, as well as those of Bowlby and others. Findings on studies specific to maternal separation were also discussed. The last major category focused on the research findings on separation for childbirth and its effects on the firstborn.

The information culled from this literature review leads one to believe that the crisis of being separated from the mother for childbirth causes the firstborn stress. In turn, the child reacts to the crisis, quite frequently through negative or regressive behaviors. This research will focus on how shorter hospitalization for childbirth effects behavior of the firstborn as perceived by their mothers.

CHAPTER THREE

METHODOLOGY

This chapter presents the methodology of the study. Topics discussed include description of the sample, instrument, procedure for collection of data and data analysis.

SAMPLE

The subjects (mothers) were recruited from a rural community hospital in southeastern United States. The sample consisted of women who gave birth to a child during the study period, and who had a healthy preschool child at home.

To be included in the study the mothers must have:

- 1) had a normal firstborn of the ages of three years through five years who lived in the home
- 2) had a normal spontaneous vaginal delivery
- 3) had no perinatal complications and/or observable birth defects
- 4) had no perinatal complications resulting in maternal hospitalizations for longer than four days (96 hours)
- 5) had a single birth
- 6) been able to read and write at the 6th grade level

INSTRUMENT

A questionnaire (see Appendix A), Maternal Perception of Preschool Child Behavior, was utilized. Permission to use the tool was obtained from the developer, Knicely, who modified Trause's tool on child behaviors. The instrument was composed of two questionnaires each with two parts. The first questionnaire was completed during the mother's hospitalization. Questionnaire 2 was completed postnatally in the home, within 1 week post hospital discharge. Questionnaire 1 was divided into parts A and B. Part A requested general demographic information, such as age and educational level of the parents and age of the preschool child. Also included were questions concerning the care of the preschool child, such as day care or nursery use. Mothers employment status, the preschool child's previous separation experiences and preparation for the birth of a sibling were other areas included in Part A.

Part B of Questionnaire 1 focused on maternal responses to questions related to the preschool child's behaviors in the area of eating, sleeping, toileting, and general behavior. In each behavioral area the mothers were requested to indicate to what degree the listed statements are characteristic of their preschool child. The statements in each area were either descriptive or developmental, positive or negative. Included in the area

of eating were statements dealing with the child's appetite, feeding skills and actions during meals.

Statements in the area of sleeping involved the child's nap schedule, bedtime routines and behaviors. Statements on toileting included bowel and bladder training during the day and night and general toileting behaviors. General behavioral statements revolved around the child's use of security items, independence behaviors and temper tantrums.

Questionnaire 2, comprised of Parts C and D, was completed within one week post hospital discharge. Part C requested information on the separation. Included were questions on the number and length of sibling visitations, and the care of the preschool child during the separation. Part D was a duplication of Part B of Questionnaire 1. This allowed for comparison of perceived prenatal and postnatal behaviors. Part D also included a separate sheet for additional comments and asked for behavioral changes which the mothers perceived but that were not addressed in the questionnaire.

Scoring of Parts B of Questionnaire 1 and D of Questionnaire 2 involved several steps. The statements in each of the four behavioral areas were designated as either descriptive or developmental, positive or negative. The descriptive statements involved the developmental level of the children. These statements were not scored but were compared prenatally and postnatally as either

progressive, regressive or no change. This was done because of the varying ages of the preschool children. Each child was compared only to himself and was not judged on the developmental level of the other children.

Positive statements were scored from 1 (never) to 5 (always). Negative statements were scored from 5 (never) to 1 (always).

Knicely had the instrument examined for validity by two pediatric nurse clinicians who were experts in preschool behaviors and in questionnaire construction. The instrument had not been tested for reliability.

This researcher conducted a test of the instrument with twenty mothers of preschool children, to determine ease of completion. These subjects initially completed Questionnaire 1 and then Questionnaire 2 within one week.

The respondents in this test indicated the instrument was easily understandable with clear, concise statements. Statistical analysis for reliability was not conducted.

PROCEDURE FOR COLLECTION OF DATA

Approval of the East Carolina University Institutional Review Board and permission from the participating hospital were obtained prior to data collection which took place over a period of 8 weeks.

Subjects for the study were selected in the hospital after a chart review. Only those patients who met the criteria were approached. During the initial meeting subjects were informed of the purpose of the study, its

risks and benefits, and what would be required of them. Patients who gave written consent (see Appendix B) were included in the study. All subjects were aware they could drop out of the study at any time. The initial meeting ended with the subject completing Questionnaire 1. An appointment for a home visit to take place five to eight days post delivery was made at this time, during which the mothers completed Questionnaire 2. The mothers were reminded that their responses would remain completely confidential. An opportunity was given for mothers to voice their concerns about infant and child care, sibling rivalry and any other concerns with which the professional nurse might assist them.

DATA ANALYSIS

A paired t test was utilized in the analysis of before and after scores in the areas of eating, sleeping, toileting and general behavior. The level of significance was set at 0.05 for data analysis. Pearson correlation was performed to determine the correlation between hours of separation, sibling visitation and pre birth preparation with the areas of eating, sleeping, toileting and general behavior. Data were also used to describe the sample subjects.

CHAPTER 4

RESULTS

The purpose of this study was to determine how the shorter hospitalization for childbirth and concurrent separation affect mothers' perceptions of their firstborns behavior. A total of 18 subjects completed Questionnaire 1, while 16 subjects completed Questionnaire 2. A total of 16 sets of Questionnaires were used in the final data analysis. This chapter presents a description of the sample and findings of the study.

DESCRIPTION OF THE SAMPLE

Analysis of the demographic data revealed some interesting information. Age categories for the subjects ranged from 16 years to 37 years. The largest percentage of mothers (43.8%; n=7) were in the category 22-25 (Table 1).

At the time of the birth of the new sibling the firstborn children ranged in age from 28 months to 58 months. The mean age was 42.3 months. The largest number and percentage of preschool children (50%; n=8) were in the categories 36-40 and 41-45 months. Nine (56%) of the preschool children were male, while seven (44%) were female (Table 2).

Educational level of the mother was analyzed and revealed that only one (6%) mother held a college degree. The largest percentage of mothers (44%; n=7) were in the

TABLE 1
Frequency and Percentage of
Age Categories of Mothers

<u>Age in years</u>	<u>(n)</u>	<u>(%)</u>
15 - 17	1	6.3
18 - 21	3	18.8
22 - 25	7	43.8
26 - 29	1	6.3
30 - 33	3	18.8
34 - 37	<u>1</u>	<u>6.3</u>
Total	16	100.0

TABLE 2
 Frequency and Percentage of
 Age Categories of
 Firstborn Children

<u>Age Categories</u>	<u>(n)</u>	<u>(%)</u>
26 months-30 months	1	6.3
31 months-35 months	3	18.8
36 months-40 months	4	25.0
41 months-45 months	4	25.0
46 months-50 months	0	0.0
51 months-55 months	2	12.5
56 months-60 months	<u>2</u>	<u>12.5</u>
Total	16	100.0

$\bar{X} = 42.3$ months

category of high school graduate, two subjects (13%) had not completed high school, and 6 (37%) had some college education.

Each subject was also classified according to socioeconomic status using the Hollingshead Two Factor Index of Social Position. Socioeconomic status was derived from the occupation and educational level of the major income earner in each family as reported on the questionnaire. The largest percentage of subjects (75.1%; n=12) were in class V of the index which is the lowest socioeconomic class. Four of the subjects, or 25%, were unemployed and received public assistance. (Table 3).

Since the major purpose of this study was to determine the effect of separation on mother's perceptions of their preschool child's behavior, the previous separation experiences of the preschool children were reported. In analyzing the use of day care, ten (63%) of the mothers reported their child attended day care. Of the eight mothers who reported employment outside the home six (75%) relied on licensed day care centers or nursery schools for child care (Table 4). The weekly attendance of the preschool children at day care ranged from four hours three times a week to ten hours five days a week. All of the children were cared for outside the home.

Other separation experiences examined were hospitalization and overnight separations. Only three (19%) of the sixteen mothers responded that their child had

TABLE 3
Frequency and Percentage of
Socioeconomic Status of Mothers
based on Hollingshead Two Factor
Index of Social Position

<u>Socioeconomic Class</u>	<u>(n)</u>	<u>(%)</u>
I (highest)	0	0
II	0	0
III	2	12.5
IV	2	12.5
V	<u>12</u>	<u>75.0</u>
Total	16	100.0

TABLE 4

Frequency and Percentage
of Mothers Employment
and Childcare

<u>Employment</u>	<u>Relative</u>		<u>Child Care</u> <u>Daycare</u>		<u>Sitter</u>	
	n	%	n	%	n	%
Full time (n=5)	0	0	4	25	1	6
Part time (n=3)	1	6	2	13	0	0
Unemployed (n=8)	<u>4</u>	<u>25</u>	<u>4</u>	<u>25</u>	<u>0</u>	<u>0</u>
Total	5	31	10	63	1	6

been previously hospitalized. All of these mothers responded that they noted no change in their preschool child's behavior during or after the hospitalization. When asked to respond to questions about their child's previous overnight experiences eight (50%) of the mothers reported that their child had experienced at least one overnight separation. Four of these 8 (25%) reported previous separation periods of three or more nights.

Preparation of the child for the birth of a sibling and for the separation were other areas explored. Nine methods of preparation for the birth of a sibling and six methods of preparation for the separation were tested. Respondents were able to reply affirmatively to all of the methods which were applicable to their situation.

In regards to preparation for the birth of a sibling, the largest percentage of mothers (87.5%; n=14) reported discussing the birth of the baby with their child, followed by allowing the preschool child to feel fetal movements (81.3%; n=14) (Table 5). Interestingly, preparation for the maternal-preschool child separation revealed that the greatest number of mothers (56.3%; n=9) reported no preparation at all for the separation (Table 6).

When the actual separation of mothers from their preschool child was determined, it was found that ten (62.5%) of the preschool children were reunited during the hospitalization through the hospital's sibling visitation

TABLE 5
 Frequency and Percentage of Methods
 Used to Prepare Preschool Children
 for Birth of Sibling

<u>Method</u>	<u>(n)</u>	<u>(%)</u>
Discussion	14	87.5
Feeling fetal movement	13	81.3
Books	3	18.8
Visiting newborns	3	18.8
None	2	12.5
Sibling class	1	6.3
Tour of hospital	1	6.3
Shopping for baby	1	6.3
Buying present for baby	<u>1</u>	<u>6.3</u>

TABLE 6
 Frequency and Percentage of
 Methods of Preparation of Preschool Children
 for Maternal Separation

<u>Method</u>	<u>(n)</u>	<u>(%)</u>
No preparation	9	56.3
Verbal explanation	7	43.8
Other separations	1	6.3
Books	1	6.3
Child staying with person who is to care for him/her	0	0

program. These reunions, following separation, occurred anywhere from 6 hours to 41 hours after the mothers' hospitalization. Six mothers (38%) chose not to have their preschool child visit at all during the hospitalization. Total maternal-preschool child separation ranged from 44 hours to 70 hours for all sixteen subjects.

HYPOTHESIS

The hypothesis stated that there would be no difference in maternal perceptions of preschool children's behaviors before and after separation for the birth of a sibling. A dependent t test was used to test the hypothesis. An alpha level of .05 was set.

The hypothesis was rejected because analysis revealed a statistically significant change in eating behavior, however because the change was noted in only one area the hypothesis was partially supported. The other behaviors of sleeping, toileting and general behavior did not have a significant change in scores. In eating behavior there was a mean change of -1.81 [$t(16)=-3.67$, $p=0.002$]. This denoted a negative change in eating behaviors of preschool children after the maternal separation as reported by their mothers. The area of sleeping behavior had a mean change of 1.06 [$t(16)=1.31$, $p=0.20$], toileting had a mean change of -0.06 [$t(16)=-0.24$, $p=0.82$] and general behavior had a mean change of 1.19 [$t(16)=1.32$, $p=0.21$] (Table 7).

CHANGES IN BEHAVIOR AND OTHER VARIABLES

TABLE 7

Mean Changes in Behaviors of
Preschool Children Before
and After Separation

<u>Behavior</u>	T ₁	T ₂	t	p
Eating	33.44	35.25	-3.67	0.002*
Sleeping	27.50	26.44	1.31	0.21
Toileting	20.13	20.19	-0.24	0.81
General Behavior	22.19	21.00	1.32	0.21

*p < .05

An independent t test was utilized to test change scores in each of the four areas of behavior and selected demographic variables. The differences of mean change scores for mothers who work (n=8) versus those who do not (n=8) were not statistically significant for eating [t(16)=-0.12, p=0.90], sleeping [t(16)=-1.35, p=0.22] and toileting behaviors [t(16)=-0.23, p=0.82]. There was however, a statistical significance for general behavior [t(16)=-2.50, p=0.025] (Table 8).

The differences in mean change scores were not statistically significant for children who were enrolled in day care (n=100) versus those who were not (n=5). The differences of mean change scores were also not statistically significant when comparing previous overnight separation (n=8) with eating [t(16)=-0.88, p=0.39], sleeping [t(16)=-1.73, p=0.12], toileting [t(16)=0.23, p=0.83, and general behavior [t(16)=-0.61, p=0.55).

Methods of preparation for the birth of a sibling varied in statistical significance with change scores. Discussion of the birth as a method was not statistically significant for any of the four areas of behavior studied. The use of books had a noticeable but not significant change when compared with eating [t(16)=1.91, p=0.07] but not with the other three areas. The use of a sibling class was not statistically significant except in relation to the area of general behavior [t(16)=-2.85, p=0.013].

TABLE 8
 Mean Changes in Behaviors of
 Preschool Children and
 Mothers Employment

<u>Behavior</u>	<u>Mean</u>	<u>t</u>	<u>p</u>
Eating			
Employed (n=8)	-1.88	-0.12	0.904
Unemployed (n=8)	-1.75		
Sleeping			
Employed	0.00	-1.35	0.22
Unemployed	2.13		
Toileting			
Employed	-0.13	-0.23	0.82
Unemployed	0.00		
General Behavior			
Employed	-0.75	-2.50	0.025*
Unemployed	3.13		

*p < .05

Allowing the preschool child to feel the movement of the fetus was not statistically significant for any of the change scores in the four behavioral areas. Shopping for baby items [$t(16)=3.20$, $p=0.006$] and buying a gift for the baby [$t(16)=3.20$, $p=0.006$] were significant for change scores in eating behavior only (Table 9).

Methods of preparation for the separation also varied in statistical significance with change scores. Allowing for a separation experience was significant only for general behavior [$t(16)=-2.85$, $p=0.013$]. Discussing the separation was not statistically significant in any of the four areas; as was no preparation of the child. Allowing the child to stay with the separation caretaker before the birth was positively significant with the mean change score for the area of eating [$t(16)=3.67$, $p=0.002$] but not in any of the other three areas. The use of books in preparing for the separation showed a significant change score in the area of general behavior [$t(16)=-2.85$, $p=0.013$] (Table 10).

Interestingly, whether a child made a sibling visit ($n=10$) or not ($n=6$) was not statistically significant in any of the areas of toileting [$t(16)=1.91$, $p=0.07$] (Table 11). The type of caretaker during the separation was also found to be statistically significant for change scores. When the spouse was the primary caretaker ($n=9$) there was an observable score change in the area of toileting [$t(16)=1.81$, $p=0.091$]. When the primary caretaker was

TABLE 9

Mean Changes in Behaviors of Preschool Children
and Method of Preparation for Birth

<u>Method</u>	<u>Eating</u>		<u>Sleeping</u>		<u>Toileting</u>		<u>General Behavior</u>	
	m	t	m	t	m	t	m	t
Discussion (n=14)	-1.79	0.14	0.86	-0.66	0.00	0.61	0.71	-1.44
Feeling fetal movement (n=13)	-1.77	0.18	0.85	-0.54	0.08	1.64	1.00	-0.33
Book (n=3)	0.00	1.91	-0.67	-1.03	0.00	0.11	1.33	0.08
Visiting newborns (n=3)	-2.67	-0.82	0.67	-0.23	-0.67	-1.64	-3.33	-2.56
None (n=2)	-2.00	-0.10	2.50	0.66	-0.50	-0.61	4.5	1.44
Sibling Class (n=1)	-2.00	-0.09	1.00	-0.02	-1.00	-0.91	-7.0	-2.85*
Tour of hospital (n=1)	-2.00	-0.10	1.00	0.24	-1.00	0.87	-7.0	-2.77*
Shopping for baby (n=1)	3.00	3.20*	-2.00	-0.98	1.00	1.04	-1.00	-0.61
Buying present (n=1)	3.00	3.20*	-2.00	-0.98	1.00	1.04	-1.00	-0.61

*p<.05

TABLE 10
 Mean Change in Behaviors of
 Preschool Children
 and Preparation for Separation

<u>Method</u>	<u>Eating</u>		<u>Sleeping</u>		<u>Toileting</u>		<u>Gen. Behavior</u>	
	m	t	m	t	m	t	m	t
No prep (n=9)	-2.00	-0.42	2.11	1.72	0.33	-1.17	1.78	0.73
Verb. explanation (n=7)	-1.57	0.42	-0.29	-1.72	0.29	1.08	0.43	-0.73
Other separations (n=1)	-2.00	-0.09	1.00	-0.02	-1.00	-0.91	-7.00	-2.85*
Books (n=1)	-2.00	-0.09	1.00	-0.02	-1.00	-0.91	-7.00	-2.85*
Child staying with person who is to care for her/him	-1.81	3.67*	1.06	-1.31	-0.06	0.24	1.19	-1.36

*p = <.05

TABLE 11
 Mean Change in Behaviors of
 Preschool Children and
 Sibling Visitation

<u>Behavior</u>	<u>Mean</u>	<u>t</u>	<u>p</u>
Eating			
Sibling visit (n=10)	-1.70	0.29	0.78
No visit (n=6)	-2.00		
Sleeping			
Sibling visit	0.70	-0.57	0.58
No visit	1.67		
Toileting			
Sibling visit	0.30	1.91	0.07
No visit	-0.67		
General Behavior			
Sibling visit	0.80	-0.54	0.59
No visit	1.83		

* $p < .05$

another relative (n=11) there was a statistically significant negative change score in the areas of sleeping [$t(16)=2.37, p=0.036$] and toileting behaviors [$t(16)=-2.56, p=0.023$] (Table 12). The use of daycare during the separation (n=7) was not statistically significant in any of the four behaviors. All of the children (n=16) were familiar with their caretaker during the separation. This was statistically significant with change scores only in the area of eating [$t(16)=-3.67, p=0.002$]. The place where the child was cared for during the separation resulted in no significant change in any of the behavioral areas.

CHANGES IN BEHAVIOR AND SEPARATION

A Pearson correlation was computed to assess the relationship between change scores and the variables of hours before sibling visit, total number of hours of separation and preparation for the birth and separation. Total change scores in the area of toileting showed a significant correlation with total hours of separation, $r = -.5736, p = 0.20$ (Table 13). The area of general behavior showed a significant correlation with preparation for the birth and separation, $r = -.5832, p = 0.018$ (Table 14).

Hours of separation prior to the sibling visit had a statistically significant negative correlation with toileting behavior [$r = -.6497, p = 0.007$]. There was a statistically significant positive correlation between

TABLE 12
 Mean Change of Behaviors
 of Preschool Children and
 Caretaker During Separation

<u>Behavior</u>	<u>Mean</u>	<u>t</u>	<u>p</u>
Eating			
Spouse (n=9)	-2.00	-0.42	0.68
Other relative (n=11)	-0.80	-1.43	0.174
Sleeping			
Spouse	-0.22	-1.74	0.13*
Other relative	1.91	2.37	0.036
Toileting			
Spouse	0.33	1.81	0.091
Other relative	-0.45	-2.56	0.023*
General Behavior			
Spouse	0.11	-1.40	0.184
Other relative	1.27	0.14	0.89

*p < .05

TABLE 13
 Correlation of Hours of
 Separation and Toileting

	<u>Toileting Diff.</u>	<u>Toileting</u>
Hours of separation prior to sibling visit (n=10)	-.4566 p=0.075	-.6407 p=0.007*
Total hours of separation (n=16)	-.5736 p=.020*	-.3672 p=.317

* $p < .05$

TABLE 14
Correlation of Preparation for
Birth and Separation With
General Behavior, Sleeping, and Toileting
n = 16

	<u>General Behavior</u>	<u>Sleeping</u>	<u>Toileting</u>
<u>Preparation</u>	-.5832	.7277	.4363
	p=.018*	p=.001*	p=.091

*p<.05

preparation for the birth and separation and sleeping behavior [$r = .7277$, $p = 0.0013$].

SCALE RELIABILITY

Analysis of the tool for reliability was also performed. Each of the four scales - eating, sleeping, toileting and general behavior - was analyzed for reliability. Descriptive behaviors were not included in this analysis.

The analysis of the eating scale for reliability of eleven items had a total alpha of 0.44. It was noted that if Item #1 was deleted, the alpha would be 0.60. The reliability of the sleeping scale composed of eight items revealed an alpha of .69. This alpha could be raised to an alpha of 0.80 with the deletion of Item #15.

The reliability of the toileting scale composed of five items showed an alpha of 0.43. Deletion of Item #12 would increase the alpha to 0.54. Lastly, the reliability of the general behavior scale had an alpha of 0.37. This alpha could be improved with the deletion of Item #9.

The low alpha levels of the behavioral scales may be used to infer that the instrument has low reliability. Due to time constraints, analysis was not performed based on the item deletions, improved alpha scores and reliability.

SUMMARY

The preceding data may be summarized as follows: (a) there is a statistically significant difference in

maternal perceptions of their preschool child's eating behaviors before and after separation for the birth of a sibling, (b) there is a significant correlation between the hours of separation and scores in the areas of toileting, sleeping and general behavior, and (c) reliability analysis reveals an instrument with low reliability which may be increased through the deletion of certain items.

CHAPTER 5

DISCUSSION, IMPLICATIONS AND RECOMMENDATIONS

The purpose of this study was to determine if there was a difference in the mothers' perceptions of their preschool child's behaviors before and after separation for childbirth. This chapter presents a discussion of the findings, implications for nursing practice and recommendations for further study.

DISCUSSION OF THE FINDINGS

HYPOTHESIS

The hypothesis for the study stated that there would be no difference in the mothers' perceptions of their preschool child's behavior. The hypothesis was partially accepted at the .05 level of significance. There was a significant difference found in eating behavior.

Rejection of the null hypothesis supported results of previous studies in which there was a perceived difference in children's behaviors after maternal separation. (Robertson and Robertson, 1971; Trause, et al, 1981; Field and Reite, 1984).

Several factors may have influenced the results. First, the sample size was very small. Statistics calculated for small samples tend to be less accurate (Polit and Hungler, 1987). Therefore, the statistical analysis may be questioned and the null hypothesis may have been rejected when it should have been accepted,

resulting in a TYPE I error.

Second, the instrument was administered in this study to subjects in socioeconomic classes IV and V, the lower two socioeconomic classes. Previous use of the tool by Knicely was limited to subjects in socioeconomic classes I, II and III, the upper three classes. That study found no statistically significant differences in behaviors.

The instrument may not be reliable with the population of the present study. Reliability analysis of the scales revealed low alpha scores. Even after deletion of certain items the alpha levels still would remain relatively low. Further reliability testing needs to be conducted to determine the instrument's reliability for different populations.

Third, administration of the instrument may have made subjects more aware of their child's behavior. This increased awareness may have resulted in changes in the mother's behavior toward, or concerning, her preschool child. Two mothers were noted to state that reading the first questionnaire had influenced them in having sibling visitation take place.

CHANGES IN BEHAVIOR AND OTHER VARIABLES

Numerous variables in the literature which affect separation responses were significant for this sample. Change scores of the four behavior areas of eating, sleeping, toileting and general behavior were compared with the variables of maternal employment, enrollment in

daycare, previous overnight separation, preparation for birth of a sibling, preparation for maternal separation, sibling visitation, caretaker during the separation, and familiarity with the caretaker. Correlations were computed between hours of separation and change scores. Previously noted research factors may have influenced the results. Specifically, even though there were statistically significant scores in these areas, this significance may be questioned with the low reliability of the instrument.

It is noted with interest that enrollment in daycare had no significant relationship with change in behavior. It was thought, prior to the study, that enrollment in day care would have a positive relationship with changes in behavior. This may have been because of the small sample size, as well as the fact that the majority of the children were not enrolled full time.

Also of note is that those children who were cared for by their fathers had less significant changes in behavior than did those children who were cared for by persons other than their father. This may be used to lend evidence to the importance of both parents in meeting a child's needs.

None of the methods of preparation for birth of a sibling were highly significant in regards to the change scores. Again, this could be due to the small sample size and therefore should not be discounted as an intervention.

This may also be said of preparation for the separation as very few mothers reported any preparation for the separation.

LIMITATIONS

The results of the study cannot be generalized to the population for the following reasons:

- 1) the sample size (n=16) was too small to allow for generalization
- 2) reliability of the scale revealed an instrument with very low reliability; low reliability threatens any statistical results.

IMPLICATIONS FOR NURSING PRACTICE

The following implications were derived from the findings:

- 1) nurses should discuss preschool child behaviors, and possible changes during times of crisis, with mothers prenatally and postnatally
- 2) nurses should continue to foster the development of the "family unit"
- 3) nurses should continue to develop and study methods for preparing children for the birth of a sibling and/or separation from their mother.

RECOMMENDATIONS FOR FURTHER STUDY

The following recommendations are presented for further research:

1) further testing of the instrument with more diverse populations to measure reliability

2) replication of the study using a larger sample and subjects from all socioeconomic classes

3) a study comparing the behavioral responses of children with mothers who have longer hospitalization periods with those children whose mothers have shorter hospitalizations for childbirth

4) a study comparing the behavioral responses of children whose mothers were hospitalized prenatally with those children whose mothers were not hospitalized prenatally.

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APPENDIX A
Maternal Perception
of Preschool Child Behavior
and Key for Scoring

Maternal Perception of Preschool Child Behavior

Questionnaire 1 - Part A

Instructions. Please place an X between the parentheses () by the most appropriate answer. Mark only one answer unless otherwise specified; for example, (X).

Write in your answer for those questions that are followed by a line _____.

1. Your age
 - () 17 and under
 - () 18-21
 - () 22-25
 - () 26-29
 - () 30-33
 - () 34-37
 - () 38-41
 - () 42 and over

2. Your highest education level
 - () less than 12 years
 - () high school graduate
 - () partial college, community college or vocational training after high school
 - () college degree
 - () advanced degree

3. Age of father of the baby
 - () 17 and under
 - () 18-21
 - () 22-25
 - () 26-29
 - () 30-33
 - () 34-37
 - () 38-41
 - () 42 and over

4. Highest education level of the father of the baby
 - () less than 12 years
 - () high school graduate
 - () partial college, community college or vocational training after high school
 - () college degree
 - () advanced degree

5. Who is the major income earner in your family? _____

6. What is the occupation of the major income earner in your family? _____

7. Are you employed outside the home? () Yes () No

If no to # 7, please skip to # 13.

8. If yes to # 7, what is your occupation? _____

9. Do you work () full time () part time?

10. Who provides most of the care for your child while you are at work?

Mark only one response

- () spouse
 () relative (grandparent, aunt/uncle, cousin)
 () licensed agency, i.e. day care center or nursery school
 () babysitter
 () other (please describe) _____

11. Where is most of this child care provided?

- () in your home
 () in a friend's, relative's, or babysitters home
 () at a day care center or nursery school
 () other (please describe) _____

12. Did you take maternity leave? () yes () no

13. Do you plan to either return or start to work? () yes () no

If yes, how soon after the birth? _____

14. Did you attend prepared childbirth classes for this pregnancy? () yes () no

15. Did you attend childbirth classes for the birth of your preschool child?

() yes () no

16. How do you plan to feed your new baby? () Breast () Bottle

17. How did you feed your preschool child? () Breast () Bottle

18. Your preschool child's birthdate _____

19. Your preschool child's sex () Male () Female

20. Has your preschool child ever been hospitalized? () Yes () No

If no to #20, please skip to #23.

21. If your preschool child has been hospitalized, when did this occur and for how long? _____

22. Did you notice anything that was different about your child's behavior after this experience? () Yes () No

If yes, briefly describe how the behavior was different? _____

23. Is your preschool child currently enrolled in nursery school or a day care program? () Yes () No

If yes, how many days a week and for how long each day? _____

24. Has your child ever been separated from you overnight? () Yes () No

If no to #24, please skip to #27.

25. If yes to #24, who took care of your child and for how long? _____

26. How old was your child at the time of the most recent overnight separation? _____

27. How did you prepare your preschool child for the birth of your baby?

Check all those that are appropriate.

- () verbal discussions
- () books
- () sibling classes
- () visiting other newborns
- () tour of the hospital or birthing facility
- () letting child feel the movements of the fetus
- () shopping for baby items together
- () getting a present for the baby
- () none of the above
- () other (please describe) _____

28. How did you prepare your preschool child for your hospitalization for the birth of your other child? Check all those that are appropriate.

- providing the child with other separation experiences
- verbal explanations about hospitalization
- no preparation
- letting the child stay with the person who will be caring for him/her
- books
- other (please describe) _____

29. Check the category that most describes your contact with your child.

- with child every day, all day
- with child every day, most of the day
- with child every day, less than 12 hours per day
- with child every day, mornings only
- with child every day, evenings only
- with child every day, nights only
- with child on occasional days
- other (please describe) _____

Sleeping Behavior

In the last month:

	Always	Mostly	Sometimes	Seldom	Never
D 1. Usually takes only one daily nap					
D 2. Has a special blanket or toy to go to sleep with					
+ 3. Sleeps soundly through the night					
D 4. Usually takes two naps or more per day					
- 5. Cries when you put him/her to bed					
+ 6. Is happy when he/she wakes up					
D 7. Has to be rocked to go to sleep					
- 8. Complains of aches and pains, asks for a glass of water or makes other attempts to prolong bedtime					
D 9. Sleeps in his/her own room					
D 10. Wants to sleep more often than usual					
- 11. Has "sleeping problems"					
D 12. Has to be sung or read to to go to sleep					
- 13. Gets up after you have put him/her to bed					
D 14. Sleeps in his/her own bed					
+ 15. Sleeping behavior this month has been typical of his/her usual sleeping behavior					
D 16. Sleeps in your room or bed					
- 17. Complains of nightmares					

- D 1. Usually takes only one daily nap
- D 2. Has a special blanket or toy to go to sleep with
- + 3. Sleeps soundly through the night
- D 4. Usually takes two naps or more per day
- 5. Cries when you put him/her to bed
- + 6. Is happy when he/she wakes up
- D 7. Has to be rocked to go to sleep
- 8. Complains of aches and pains, asks for a glass of water or makes other attempts to prolong bedtime
- D 9. Sleeps in his/her own room
- D 10. Wants to sleep more often than usual
- 11. Has "sleeping problems"
- D 12. Has to be sung or read to to go to sleep
- 13. Gets up after you have put him/her to bed
- D 14. Sleeps in his/her own bed
- + 15. Sleeping behavior this month has been typical of his/her usual sleeping behavior
- D 16. Sleeps in your room or bed
- 17. Complains of nightmares

General Behavior

In the last month:

- D 1. Uses comforters (special blankets, toys, pacifier, fingers or thumb sucking) at naptime and/or bedtime only
- 2. Has been overly active or restless
- D 3. Dresses himself/herself
- 4. Is more "clingy"
- D 5. Goes out to play by himself/herself 1-3 times per week
- 6. Has temper tantrums
- D 7. Uses comforters (special blankets, toys, pacifier, fingers or thumb sucking) during the daytime and at night
- 8. Has been unusually quiet
- + 9. Is willing to play in a room or an area away from you
- D 10. Goes out to play by himself/herself 4-7 times per week
- D 11. Requests a need for help in dressing
- + 12. General behavior has been typical this month of his/her usual general behavior

	Always	Mostly	Sometimes	Seldom	Never
D 1. Uses comforters (special blankets, toys, pacifier, fingers or thumb sucking) at naptime and/or bedtime <u>only</u>					
- 2. Has been overly active or restless					
D 3. Dresses himself/herself					
- 4. Is more "clingy"					
D 5. Goes out to play by himself/herself 1-3 times per week					
- 6. Has temper tantrums					
D 7. Uses comforters (special blankets, toys, pacifier, fingers or thumb sucking) during the daytime <u>and</u> at night					
- 8. Has been unusually quiet					
+ 9. Is willing to play in a room or an area away from you					
D 10. Goes out to play by himself/herself 4-7 times per week					
D 11. Requests a need for help in dressing					
+ 12. General behavior has been typical this month of his/her usual general behavior					

Maternal Perception of Preschool Child Behavior

Questionnaire 2 - Part C

Instructions. Please place an X between the parentheses () by all appropriate answers. Mark as many as apply to the question; for example, (X).

Write in your answer for those questions that are followed by a line _____.

1. Today's date _____
2. Date and time of admission for labor and birth _____

3. Date and time of birth. _____
4. Date and time of sibling visitation _____
5. Date when you returned home _____
6. Sex of your new baby () Male () Female
7. How are you feeding your new baby? () Breast () Bottle
8. Who was/were the major caretaker(s) for your preschool child while you were in the hospital for your recent birth? Check all those which are appropriate.
 - () spouse
 - () relative (grandparent, aunt/uncle, cousin)
 - () friend or neighbor
 - () licensed agency, ie. day care center or nursery school
 - () babysitter
 - () other (please describe) _____
9. How familiar was your preschool child with the person(s) who primarily cared for him/her during your hospitalization?
 - () very familiar
 - () somewhat familiar
 - () unfamiliar

10. While you were hospitalized for this last birth, where was your preschool child cared for?

in your home

in caretaker's home

in a day care center or nursery school

Maternal Perception of Preschool Child Behavior

In general,

1. Were there any changes in feeding, sleeping, elimination or general behavior which you noticed in your preschool child when you came home from the hospital or birthing center but which are not now present? () Yes () No

If yes, please explain _____

2. Are there any other changes in your preschool child's behavior since your return from the hospital or birthing center which you feel were not addressed in this questionnaire? () Yes () No

If yes, please explain _____

3. What types of behaviors have you noted in your preschool child toward the baby? Mark all those that are appropriate and which have occurred more than once?

- () wants to participate in infant's care
- () bothers the baby
- () makes noise to waken the baby
- () shows affection for the baby
- () wants to be treated like a baby
- () shows pride in baby- wants to show him/her to friends
- () hits the baby

APPENDIX B

Consent Form

I am a graduate student at East Carolina University School of Nursing engaged in a study of mothers' ideas about their preschool children. Information from this study will be helpful to mothers and health care professionals who work with mothers and their children.

Your participation in this study will consist of two activities. You will complete two questionnaires, one during this visit and another in one week. Each questionnaire will take approximately 15 to 20 minutes to complete.

Your involvement in this study will not affect the health care of you or your baby and does not present any risks to you. You may withdraw from this study at any time by telling me. All information will be kept confidential and your name will not appear on the data.

I hereby agree to participate in this study by Caroline Burton.

Signature _____ Date _____