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To the Graduate Council:

I am submitting herewith a dissertation written by Melinda K. Sprinkle Collins entitled "Becoming Tied: A Theory of Adolescent Maternal-Infant Interaction." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Nursing.

Johnie Mozingo, Major Professor

We have read this dissertation and recommend its acceptance:

Mitzi Davis, Priscilla Blanton, Joanne M. Hall, Pamela S. Hinds

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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BECOMING TIED:
A THEORY OF ADOLESCENT MATERNAL-INFANT INTERACTION

A Dissertation
Presented for the
Doctor of Philosophy Degree
University of Tennessee, Knoxville

Melinda K. Sprinkle Collins
August 2007

Dedication

John B. Sprinkle

This dissertation is dedicated to the memory of my father, John B. Sprinkle. The love and devotion he showed me for 36 years provided me the confidence to pursue my doctoral degree and complete this study.

Acknowledgements

I owe a great deal of thanks to several individuals for their support in helping me complete this dissertation: to Dr. Pamela Hinds for teaching me how keep my head above the water in my ocean of data, Dr. Johnie Mozingo for her encouragement and invaluable editorial support, to the nurses of Sycamore Shoals Hospital for helping me recruit participants, to the participants for their beautiful descriptions of how they were getting to know their babies, to Phyllis King and Mary Fabick for making it work when it was all about me, and Dr. Mark Matson, Academic Dean of Milligan College for his generous support. Finally, I am forever grateful to my husband Mark A. Collins, Sr. for his unconditional love, support, and encouragement and to my sons Mark A. Collins II and John Woodson “Marshall” Collins for their patience and understanding while mom worked on her dissertation “again.”

Abstract

The purpose of this study was to describe the interaction that occurs between adolescent mothers and their newborns while situated together in the immediate postpartum period. The researcher sought to determine: 1) What are the interactive process (es) that occur between adolescent mothers and their newborns while situated together in the immediate postpartum period, 2) What categories emerge from the adolescents' descriptions of the mother infant situation?, and 3) How do the emergent categories relate?

Ten primiparous adolescent mothers age 17 years or less were purposively sampled to participate in this qualitative Grounded Theory study. Face to face interviews about what participants had been doing to get to know their babies were conducted either the in-patient setting or the home of each participant at their request within one week of delivery

The adolescent mothers described a distinct process that begins at the moment of birth and encompassed them forming a relationship with their newborn, recognizing self-change based on that relationship, and moving forward with their baby as the central component of their life. Three core concepts, "Connecting Together," "Taking Baby into the Inner Being," and "Embarking Together" emerged from the rich descriptions provided by the participants to represent the theory "Becoming Tied." The theory provides a new way of viewing the process of how adolescent mothers and their newborns relate in the immediate postpartum period.

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Chapter I

Introduction

The concept of bonding has enjoyed a long and popular life within maternity nursing since being introduced by Klaus and Kennell in the early 1970's. Bonding, "the process that occurs soon after birth in which a mother forms an affectionate attachment to her infant," (Campbell & Taylor, 1980, pg. 4) has been accepted by nurses as vital to the formation of a healthy maternal-child relationship. Although Klaus and Kennell and other early researchers acknowledged that human bonding is multifactorial, the concept of early contact being essential to bonding has been embraced by hospitals. Staffing patterns and interventions for postpartum patients are centered on the idea that bonding happens the same way in all patients and requires constant contact between the mother and infant in order to avoid catastrophic results in the life of the child.

The adolescent mother, representing a large segment of the maternal child patient population, is especially impacted by such an unsubstantiated acceptance of bonding theory. Adolescent mothers, a population who have received little attention in research of maternal infant bonding, are placed in the same environment and receive the same interventions as adult mothers in the provision of postpartum care, regardless of their standing in the developmental spectrum. This standard of inpatient postpartum care ignores Joint Commission on Accreditation of Healthcare Organizations requirements that all patients receive developmentally appropriate care. Further, this standard of care is in direct conflict with other areas of patient care which embrace and approach the nursing processes with adolescent patients within a developmental framework. If the

literature supported such an approach to adolescent mothers, it would be acceptable because care would be developmentally appropriate, but it does not. Therefore, nursing may be providing care to a significant segment of the obstetrical population, adolescent mothers, that is not based on full awareness of the special needs of this population.

The literature is also muddled by lack of clarity in definitions of the concept of bonding (Coffmann, 1992). Much of the nursing research professing bonding as the phenomenon of interest is confused with the concept of attachment which is “the affectional tie between infant and parents, especially the mother, that develops gradually over the first year of life (Campbell & Taylor, 1980, p. 4). Some researchers do not confuse the concepts but simply do not define the concept under study, and use the terms bonding and attachment interchangeably in reports of their research, which may likely be a cause of the conflicting findings between researchers. Many of the frameworks guiding research related to bonding are not bonding theories. In a review of 26 studies, Coffman (1992) found that approximately half the researchers indicated they used the attachment frameworks of Bowlby (1969) and Ainsworth (1973), with studies delimited to the immediate postpartum period to measure behaviors of the mother allegedly associated with bonding.

The process of bonding has been measured almost exclusively in samples of adult mothers. In this population, observation and self-report are the most common means utilized to capture the behaviors thought to indicate maternal infant bonding, such as talking to the infant, holding in the en face position, stroking and touching the infant. In addition to the commonly cited biases with these types of instruments, most of the tools utilized were developed and reliability established with adult mothers. Few investigators

have reported validity for instruments measuring bonding (Calvert, 2000). Therefore, since reliability of instruments purporting to measure bonding has not been established with adolescent mothers, validity also remains to be established in the context of this population (Polit & Hungler, 1999).

Most of the research in regard to maternal infant bonding was conducted with small samples. Four longitudinal studies had sample sizes over 100, but the primary focus of the studies was not bonding. Very few of these studies included adolescents, and those that did experienced attrition rates of 30% to 40% in adolescent mother subjects. The combination of theoretical confusion, small samples, and limitations of the instruments used to measure bonding has resulted in conflicting findings within the empirical research.

For example, research conducted during the prenatal period by Carter-Jessup (1981) revealed that fetal palpation and abdominal massage during pregnancy increased postnatal bonding behaviors. However, similar studies designed to increase fetal awareness did not reveal an increase in postnatal bonding behaviors in adolescent mothers (Carson & Virden, 1984; Grace, 1984). Research in the postpartum period has also produced conflicting findings.

In a study comparing mothers who received increased rooming-in time with their infants to those who received routine postpartum care, Norr and Roberts (1989) found increased maternal “attachment” behaviors in the experimental group regardless of age. Conversely, increases in maternal age were found to correlate with increased “attachment” behaviors in similar studies by Norr and Roberts (1991) and Mercer (1986).

Statement of the Problem

The concept of maternal-infant bonding is a central component of care in maternal child nursing. However, the theoretical and empirical weakness of the nursing literature that surrounds bonding brings into question research findings and resultant recommendations for practice interventions with adolescent mothers and their infants.

To approach a study utilizing the concept “bonding” as set forth by the literature would require the researcher to assume that: 1) bonding in fact occurs soon after birth, 2) requires frequent, close contact of the mother infant dyad in the immediate postpartum period, and 3) nursing interventions must allow generous uninterrupted time for the mother infant dyad.

The only assumption that was made pursuing this study, however, is that the mother and infant are situated together. The mother belongs to the infant, and the infant belongs to the mother. Statements that offer more about feelings, activities, behaviors, or the nature of the dyad’s relationship were incongruent with the theoretical framework and method employed in this study. Therefore, in this study, no attempt was made to label the maternal infant situation as “bonding” but rather to describe the adolescent mother’s interactions with her baby during the first two weeks after delivery.

Significance

This study attempted to fill in gaps in the nursing literature by using a method not previously employed to develop a theory explicating the process (es) of interaction

between adolescent mothers and their infants. This study utilized the grounded theory method to describe these processes.

Purpose Statement

The purpose of this grounded theory study was to describe the interaction that occurs between adolescent mothers and their neonates while situated together in the immediate postpartum period. The study resulted in the development of a substantive theory from which testable hypotheses can be developed.

Research Questions

- 1) What are the interactive process (es) that occur between adolescent mothers and their infants while situated together in the inpatient postpartum environment?
- 2) What categories emerge from the adolescent's description of the early mother infant interaction?
- 3) How do the emergent categories relate?

Delimitations

The study confined itself to adolescents who were receiving nursing care in an inpatient setting or had been discharged home and were in the immediate postpartum period following delivery of their first infant.

Limitations

The limitations of the study were:

1. Theoretical sampling did not allow for generalization of findings to the larger adolescent maternal population.

2. The study did not specifically address the influences of significant others in the maternal infant environment; therefore, their influence on the maternal infant situation, if any, were not incorporated into theory development.
3. The time of interview of participants varied from eight hours after delivery up to one week postpartum.
4. For those mothers interviewed within 24 hours of delivery, interview data may have been limited related to maternal fatigue and pain.
5. Interaction may have been affected by the presence of the researcher.
6. Because sampling occurred at only one point in time, it is impossible to know how much the theoretical construct was influenced by the “honeymoon” phase of new motherhood for the adolescent mothers.

Theoretical Perspective

The purpose of this study and the method employed was to generate rather than test theory. An assumption of the grounded theory method is that the researcher approaches the study without an a priori theoretical framework guiding its direction. However, no researcher is atheoretical in their approach to a study; therefore, I utilized Symbolic Interactionism (SI) as a perspective for my study because it matched the phenomena of concern and was the perspective from which Grounded Theory was derived. In this section I will explain the related concepts of SI, and discuss the Grounded Theory research method and its development. The congruence of describing the process (es) of adolescent maternal infant interaction with the Grounded Theory method are demonstrated in Table 1.1.

Table 1.1: Congruence between SI concepts and phenomenon of concern in Adolescent Maternal-Infant Interaction

Symbolic Interactionism Concepts	Adolescent Maternal-Infant Interaction Phenomena of Concern
Objects: Anything a person indicates, refers to, or designates. An object's nature is derived from its meaning. Meaning arises out of how a person is prepared to act toward the object. Humans can assess and plan an action toward an object.	Infant
Self/Self as Person: Ability to assign meaning to objects is based on self as process. Internal dialogue between the "I" and the "Me." Allows for transformation, modification, or revision of acts as people encounter objects in different situations in their environment.	Adolescent Mother Thought processes, feelings about infant. Meaning of infant to mother
The Act: Through self as process, a person can formulate a line of action. Thoughts and behaviors are constructed by the self.	Process of Adolescent Maternal-Infant Interaction

Symbolic Interaction is based on three assumptions that build one from another. First, "human beings act toward things on the basis of the meaning that the things have for them" (Blumer, 1969, p. 2). These things can be objects, other humans, institutions, or social structures. The ability to act based on meaning is a central component of SI and delineates the unique nature of humans.

The second assumption, building from the first, is "the meaning of things is derived from, or arises out of, the social interaction that one has with one's fellows" (Blumer, 1969, p. 2). Human conduct is developed through interaction with others. More specifically, "human nature, mind and self are not biological givens; rather, they emerge out of the process of human interaction" (Manis, 1978, p. 6). Meanings derived by individuals develop from how others respond to them. Therefore, meanings are viewed as social products, formed by the assignment of definitions to things through interaction (Blumer, 1969).

The third assumption, building from the first two is that “meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things he (sic) encounters” (Blumer, 1969, p. 2). This assumption serves to refute deterministic thinking and allows for the idea of choice in human behavior. Through this interpretive process, humans are able to “form new meanings and new lines of action.”(Manis, 1978, p. 7).

Symbolic Interactionism is a theory for studying how “individuals interpret objects and how this interpretation leads to behavior in specific situations” (Benzies, 2001, p. 245). SI is a broad, abstract theory with concepts and many sub-concepts, discussion of which is beyond the scope of this brief overview. However, I will discuss the central, interrelated concepts of SI which will be foundational to my study: (1) objects, (2) self, (3) acts, and (4) social interaction (Blumer, 1969; Manis, 1988).

Objects are anything a person indicates, refers to, or designates. Objects are “human constructs and not self-existing entities with intrinsic natures. Their nature is dependent on the orientation and action of people toward them” (Blumer, 1969, p. 68). Five important principles are set forth in defining objects. First, an object’s nature is derived from the meaning it has for a person or persons for whom it is an object. Second, meaning arises out of how a person is prepared to act toward the object. Third, all objects are social products of social interaction. Fourth, humans act toward objects based on the meanings the objects have for them. Fifth, humans, instead of responding immediately, can assess, think about, and plan an action toward an object. To pull together these five principles regarding objects, Blumer (1969) proposes that “human beings are seen as living in a world of meaningful objects - not in an environment of stimuli or self-

constituted entities. This world is socially produced in that the meanings are fabricated through the process of social interaction” (p. 69). Individual behavior toward an object is obviously individualized yet can be coordinated with others into complex social acts and structures. Symbolic interactionists purport this ability to be based on the second central concept of SI, self.

Self is viewed as an interacting process between two components, the “I” and the “Me.” The “self as process” or “self-interaction” is an internal conversation in humans that takes place when encountering an object. The dialogue is between the “I” which is the spontaneous, impulsive tendency in humans and the socially determined “Me” representing the expectations of others (Benzies, 2001; Blumer, 1969). This dialogue, or self as process, results in self as object. Said another way, each time the “I” and the “Me” have a dialogue; a person is acting toward an object, himself. This concept is important to SI because the “self as process” allows for the transformation, modification, or revision of acts as people encounter objects in different situations.

When a person encounters an object, he acts toward himself as an object. Through the internal dialogue between the “I and the “Me,” a person makes indications to himself and by interpreting what he indicates, he can “forge or piece together a line of action” (Blumer, 1969, p. 65). This line of action defines the concept “the act.” The act is seen as behavior that is constructed by the self instead of a “response elicited from some kind of preformed organization in him” (Blumer, 1969, p. 65). Acts are interpreted based on the meaning they have for another and result in the concept we call social interaction.

Two forms of social interaction, non-symbolic and symbolic interaction are identified within the SI framework. Non-symbolic interaction is the direct or impulsive

response to another's actions. Symbolic interaction involves two processes:

“interpretation of the meaning of the action of the other person and definition; and conveying indications to another person as to how he is to act” (Blumer, 1969, p. 66).

Interpretation and definition, forming the concept of symbolic interaction, operates to “sustain established patterns of joint conduct and to open them to transformation”

(Blumer, 1969, p. 67). More importantly, with symbolic interaction at the heart of human interactions, larger social concepts such as cooperation, conflict, and exploitation can be addressed by the theory (Blumer, 1969).

Symbolic Interactionism is a theoretical perspective that emphasizes human interaction and assignment of definitions and meanings to people, situations or events. The perspective delineates the uniqueness of humans as thinking beings rather than mere responders to stimuli, thus allowing for limitless alterations and transformations in humans and their behavior as well as providing a framework that was suitable for this study. SI theory was utilized to loosely frame the study, supporting its purpose of generating a theory from the data, not testing a theory with data.

Chapter 2

Review of the Literature of Adolescent Maternal Infant Bonding and Attachment

The research literature addressing adolescent maternal- infant bonding and attachment is minimal. The literature reviewed for this research concentrated on two areas. First to be explored were the landmark theories and studies of bonding and attachment. Second, factors implicated as influential to the maternal infant bonding and attachment process were explored in the context of nursing research conducted during both the prenatal and postpartum periods. With the scant amount of literature regarding adolescent maternal infant bonding, studies that represented adult mothers exclusively or both adolescent and adult mothers were also included. The studies used in this literature review were located via a comprehensive search of the literature. Electronic searches were performed on the CINAHL, MEDLINE, and PSYCINFO data bases using the indexing terms: bonding, attachment, maternal-infant bonding, maternal-infant attachment, adolescent mother, maternal child nursing, practice, and research.

Bonding and Attachment Theory

The primary frameworks referenced in nursing research related to maternal infant bonding and attachment were Bonding Theory, (Klaus & Kennell 1976), Attachment Theory, (Ainsworth, 1973; Bowlby 1958); and Rubin (1975). Bonding theory originated and is most closely associated with the work of Klaus and Kennel (1976) who use the terms bonding and attachment interchangeably. The theory's development was a direct response to the multi-disciplinary, longstanding research related to the way infants form

attachments to their mothers, to the exclusion of mother to infant attachment. Bonding theory originated out of animal studies related to imprinting and centers on the notion that “there is a sensitive period in the first minutes and hours of life during which it is necessary that the mother and father have close contact with the neonate for later development to be optimal” (Klaus & Kennel, 1976, p. 14). This original mother-infant bond is thought to be the foundation for determining the quality of all the infant’s lifelong relationships (Klaus & Kennel, 1976).

The original research consisted of a small sample of 28 adult mothers equally divided into experimental and control groups. The members of the experimental group were allowed extra contact with the infants during the first three postpartum days, while the control group received routine contact (infants kept in the nursery except for feeding times) during the same timeframe. At one month postpartum, the mothers in the experimental group scored significantly higher on measures of responsiveness to their infants (Klaus et al., 1972). Comparison of maternal language characteristics in five randomly selected dyads from each group delivery demonstrated a statistically significant difference in the experimental mothers at one and two years post delivery (Ringler et al., 1975). Similar findings were found in relation to IQ scores and language tests in the children at two years of age (Ringler, Trause, & Klaus 1976). Upon publication of Klaus and Kennel’s findings (1976), the pendulum of hospital postpartum care shifted from scheduled, sterile, maternal infant interaction to liberal, open, rooming-in (Association of Women’s Health, Obstetric and Neonatal Nurses, 1998).

Bonding theory has been criticized for its assumptions that human behavior would mirror lower mammalian behavior and that a critical bonding time exists to ensure well-

being of the infant. (Billings, 1995; Tulman, 1981). Likewise, questions have been raised as to whether the interest in the experimental group was more of an influence on outcome measures than the intervention (Herbert et al., 1982). It should be noted that Klaus and Kennell's original study sample is small (N=28, 14 in each group) and lacked socioeconomic and ethnic diversity. However, the most disconcerting aspect is the lack of conceptual clarity in the theory. Klaus and Kennell's publication of their theory, Maternal-Infant Bonding, does not define bonding nor does it offer a reference for the concept in the subject index. The following quotes demonstrate the lack of conceptual clarity in the theory.

This book describes the development of attachment in the opposite direction, from parent to infant: How it grows, develops, and matures and what distorts, disturbs, promotes or enhances it (Klaus & Kennell, 1976, p. 1).

Perhaps the mother's attachment to her child is the strongest bond in the human.

This relationship has two unique characteristics. First, before birth the infant gestates within the mother's body, and second, after birth she ensures his survival while he is utterly dependent on her. The power of this attachment is so great that it enable the mother or father to make unusual sacrifices necessary for the care of their infant day after day (Klaus & Kennell, 1976, p. 1).

It is the nature of this attachment that we explore. This original mother-infant bond is the wellspring for all the infant's subsequent attachments and is the formative relationship in the course of which the child develops a sense of himself. Throughout his lifetime the strength and character of this attachment

will influence the quality of all future bonds to other individuals (Klaus and Kennell, 1976, p. 1-2).

“Attachment can be defined as a unique relationship between two people that is specific and endures through time” (Klaus & Kennell, 1976, p. 2).

The concept of attachment is also inadequately defined and confused with bonding in the literature (Coffman, 1992; Goulet, Bell, Tribble, Paul, & Lang 1998).

Attachment Theory, as introduced by Bowlby (1958) and Ainsworth (1973), denotes the quality of the affectional tie between infant and parents, especially, mother, which develops over the first year of life. The focus of Bowlby’s work compared the reactions of infants and non-human primates to separation from their mother. Building on Bowlby’s work, Ainsworth’s (1970) “Strange Situation Study” demonstrated that “as the infant grows and develops, the caretaker is used as a secure base for exploration and as a haven of safety when danger threatens. The responsiveness of the caregiver to infant cues is suggested to be the primary factor influencing infant attachment security” (Coffman, 1992, p. 442).

The first nurse to attempt to conceptualize and define the maternal role was Rubin. Through her landmark studies of antepartum and postpartum women (1961, 1967a, 1967b, 1975, 1977), she conceptualized maternal role attainment as a process that encompasses cognitive and social abilities and is both learned and interactive. Maternal behaviors are influenced by interaction with the baby and the mother’s self-concept. Maternal role attainment occurs during the antepartum, intrapartum, and postpartum phases and is measured by the woman’s comfort in the role.

According to Rubin, five behaviors are employed by postpartum mothers to achieve the maternal role. These include: (1) mimicry- imitating the behaviors of others, (2) role-play- acting out the role, (3) fantasy- cognitive internalizing and expansion of the role, (4) introjection-projection-rejection- comparing one's own behavior with others, measuring against self values, and then rejecting or accepting the role, and (5) grief work- relinquishing of former roles. As conceptualized by Rubin (1967), physical and emotional energy is turned inward immediately following delivery and then turned toward others in the immediate environment in a process known as puerperal change. Rubin believed that these energies could be observed in behaviors and attitudes of the mother and operationalized them into the "Taking-in phase," seen in the first and second postpartum day, and the "Taking-hold stage" beginning on the third postpartum day. Later studies by Ament (1989) and Martell and Mitchell (1984) supported the idea of puerperal change; however, researchers in both of the later studies concluded that the changes occurred at a much faster rate than first described by Rubin. The differences in the rates of puerperal change should be considered in the context that the original research by Rubin was conducted at a time when women received more sedating medications during and after delivery, thus, most likely inhibiting postpartum behaviors.

Four developmental stages of pregnancy were identified by Rubin (1975). These included: (1) seeking safe passage for her child and herself during the intrapartum, antepartum a postpartum phases, (2) obtaining acceptance of the infant by significant others, (3) bonding to her child, and (4) learning to give of self to others. Progression through and successful completion of the four developmental tasks leads to the demonstration of mothering behaviors. Rubin's initial work focused on postpartal,

behavioral interactions between mothers and infants. Later, Rubin (1977) explored the implications of prenatal maternal behaviors or “binding-in” to attainment of the maternal role. She hypothesized that the binding in process is enhanced with quickening (first movements of the fetus in utero felt by the mother) and serves to be the foundation of the post delivery bond between mother and infant.

Rubin's theoretical work was based on studies of primiparas without selection criteria for age, ethnicity, or socioeconomic status. Further, her theory was based primarily on her personal observations of patients, making replication of her studies and findings difficult. However, her work was and is widely accepted as a foundation for maternity nursing care (Lowdermilk & Perry, 2006; Olds, London & Ladewig, 2008).

Summary

Bonding and attachment are aspects of the affectional relationship between a mother and infant (Campbell & Taylor, 1980; Gay, 1981; Symanski, 1992). Campbell and Taylor (1980) in attempting to clarify bonding and attachment theory purport, “bonding is primarily unidirectional (parent to infant), rapid (within the first hours or days after birth), and facilitated or optimized by physical contact. Attachment, on the other hand is reciprocal (mother/infant), develops gradually during the first year of life, and is influenced by psychological variables such as the quality, timing and pacing of adult-child encounters” (p. 4). Conceptual confusion within the theories as well as the empirical research is evident.

Empirical Nursing Research

A major component of maternal role attainment is attachment by the mother to her infant both prenatally and in the early postpartum period. The nursing literature was

reviewed regarding bonding and attachment based on the concept cited in the article title and whether the study was conducted in the prenatal or postpartum period.

Maternal-Fetal Attachment

Recognizing that research about maternal attachment is largely focused on the early postpartum period, Cranley (1981) developed and tested the Maternal-Fetal Attachment Scale (MFAS). Maternal-fetal attachment was defined as “the extent to which women engage in behaviors that represent an affiliation and interaction with the unborn child” (Cranley, 1981, p. 282). The scale is composed of 24 self-descriptive statements about reactions to the fetus to which the mother responds on a 5-point Likert scale with options ranging from “definitely yes” to “definitely no.” The MFAS contains five subscales developed from review of the literature about attitudes and behaviors of mothers during the prenatal period. Cranley used the MFAS to study two groups of women, each consisting of 41 subjects. The first group was recruited from an antepartum class at a vocational technical school. The second group consisted of 30 volunteer participants from three obstetrical offices.

Subjects were interviewed during their pregnancy and 3 days postpartum with both groups between 35 and 40 weeks gestation at the time they completed the MFAS. As a criterion measure for the MFAS, the second group of 30 women also completed the Neonatal Perception Inventory (NPI), which compares the mother’s beliefs about her baby and an imaginary average baby (Broussard, 1979). Cranley reported that “Results of the analysis of the Maternal –Fetal Attachment Scale support the belief that women demonstrate attachment to their fetuses during gestation” (p.284). Seventy eight percent

of the subjects indicated that they engaged in behaviors measured by the MFAS. The most frequently occurring behavior was giving of self and the least frequent was interaction with the fetus. Mean scores on the MFAS revealed no significant difference between the two groups, and Cranley did not specify what the expected differences were. Perhaps differences were expected related to socioeconomic status and education. Most interestingly, no correlation was found between the MFAS scores and the NPI scores.

Fuller (1989) used the MFAS (Cranley, 1981), the Nursing Child Assessment Feeding Scale (NCAFS), and the Funke Mother –Infant Interaction Assessment (FMII) to examine the relationship between maternal-fetal and maternal-infant attachment in a sample of Canadian women. The small convenience sample (N=32) consisted of women between 35 and 40 weeks gestation, ranging in age from 17 to 35 years (M=26.7). Thirty-one of the subjects were married, with no criteria for gravida status or route of delivery indicated. Findings revealed a positive and significant relationship between prenatal maternal fetal attachment behaviors and subsequent mother-infant interaction.

Utilizing Cranley's prenatal attachment tool in comparing adolescent and adult mothers, Kemp, Sibley, and Pond (1990) investigated the relationships among maternal age, maternal prenatal attachment, perception of birth experience, and maternal role attainment. The study group consisted of 52 women recruited from an antepartum clinic in the southeast. The adolescent group, N=20, was limited to women 16 years or younger while the adult group, N=32, consisted of women 21 years and older. Cranley's prenatal attachment tool was administered upon entry into the study at the antepartum clinic. Following delivery, the subjects were video taped during a feeding session, and observations were made for maternal sensitivity and responsiveness to the infant using

the Maternal-Infant Adaptation Scale (MIAS). Some participants were taped on the first and others the second postpartum day. Following the videotaping, the participants completed a 24-item questionnaire designed to elicit descriptive data of pregnancy, labor, delivery, preparation for motherhood, and demographic information. The mean scores for prenatal attachment and MIAS revealed no significant differences between the groups. However, the descriptive responses revealed "adolescents rated pregnancy as easier than did adults, but the adults more frequently rated the overall experience of pregnancy as good" (p. 72). Both groups tended to rate labor in a similar manner. However, the researcher noted that the most interesting finding was that "adolescents perceived themselves as more prepared to be a mother than did the adults" (p. 72). This finding supports Julian's (1983) finding that adolescent perceptions do not match behavior.

The lack of research addressing the adolescent attachment process was the impetus of Bloom's (1995) longitudinal study, in which data collection occurred at the initial point of prenatal contact, 20-29 weeks, 30-40 weeks and 1 week after delivery. The number of subjects entering the study was 79 but decreased over the course of the study to 47. The remaining subjects were divided into three age groups, early adolescents (12-14 years), middle adolescents (15-17 years), and late adolescents (18-19 years). Maternal-fetal attachment was measured by having participants complete the Maternal-Fetal Attachment Scale (MFAS) following entry into the study. Second and third measurements were obtained at subsequent prenatal visits. Maternal-infant interactions were measured by administration of the Maternal Attachment Assessment Strategy (MAAS) within 1 week of delivery. The findings of the study demonstrated the existence

of maternal-fetal and maternal-infant attachment in adolescents without variation among age groups. Bloom (1995) noted that the differences were surprising considering the variation in developmental abilities between 12 and 19-year-old adolescents. However, only five subjects represented the 12-14 years age group.

Kemp and Page (1987) compared maternal-fetal attachment in adult women experiencing normal versus a high-risk pregnancy. Scores from Cranley's prenatal attachment tool were utilized to conduct t-test comparison of the 88 subjects. Results of a two-tailed, pooled t-test indicated no significant differences in the scores between the two groups on prenatal attachment. No significant correlations were found between the attachment scores and educational level, age, race, whether pregnancy was planned, whether the women had an ultrasound, or the positioning of the fetus. However, the study findings were limited due to the small sample size, non-probability sampling, and over-representation of African Americans indicating an unplanned pregnancy and being in the high-risk group.

Utilizing another prenatal variable, Croft (1982) "attempted to empirically examine the relationship between Lamaze childbirth education and maternal-infant attachment" (p. 334). The variable of maternal infant attachment was not defined but was operationalized using the Neonatal Perception Inventory (NPI), which measures maternal perceptions of their infants compared to their image of average infants. The only information provided about the subjects was that they were married primiparas recruited from two urban hospitals. The study consisted of a convenience sample, experimental group of 45 mothers who had attended Lamaze class and a control group of 14 mothers who did not attend Lamaze class. Croft (1982) indicated that lower number of subjects in

the control group was due to difficulty in finding subjects who had not participated in childbirth education classes. Data analysis, utilizing a two-tailed t-test to determine differences in mean scores on the NPI, revealed no statistically significant difference between the two groups; however, at one month postpartum, the mean NPI scores were higher in the control group (Croft, 1982).

Experimental studies conducted to determine whether interventions to enhance maternal-fetal attachment actually impact maternal-infant relationships, have produced conflicting results. Carter-Jessup (1981), widely cited in the attachment literature, reported that the implementation of interventions such as having the mother rub her abdomen and count the number of fetal movements per day, resulted in increased maternal attachment scores. However, serious weaknesses were present in the study. Maternal-attachment was assessed using the Postnatal Attachment Test, developed and noted by the researcher to have no established reliability or validity. Further, the study sample was limited to white, married, adult women ranging in age from 21 to 34 years.

In a similar experimental study, Koniak-Griffin and Verzemnieks (1991) evaluated the effects of a nursing intervention program on affective and behavioral dimensions of maternal role attainment. Adolescents receiving the intervention (classes, recording fetal movements, and maintaining maternal diaries) demonstrated a significant increase in prenatal attachment scores as measured by Cranley's Maternal-Fetal Attachment Scale. However, significant increases in mothering behavior measured by the Nursing Child Assessment Feeding Scale were not evident in the experimental group, calling into question the theoretical assumptions regarding affective and behavioral components of mothering and validity of the instruments used.

Grace (1984) reported that, "mother-infant interaction does not seem to be significantly enhanced by prenatal information about fetal gender" (p. 42). However, her sample consisted of upper-middle-class women ranging in age from 30 to 41 years. No indication was given as to the ethnic backgrounds of subjects. Most importantly, the researcher used a checklist that had not been formally validated to evaluate mother-infant interaction.

Maternal –Infant Attachment

Expanding earlier work in regard to age as a variable salient to maternal role attainment, Mercer (1986) focused on "age group/developmental differences in personality traits and self-concept, and the relationship of these variables to maternal behavior" (p. 25), all of which are factors associated with maternal infant attachment. Measured personality traits included: (1) flexibility (Larson Maternal Rigidity Scale), (2) empathy (Maternal Empathy Scale), (3) temperament (Maternal Temperament Measure), (4) self-concept (Tennessee Self-Concept Scale), (5) personality integration (Tennessee Self-Concept Scale), and (5) maternal behavior (Blank's Maternal Behavior Scale).

The total sample consisted of 250 first time, English speaking mothers with term healthy infants, who lived within an hour's drive from the hospital. Of the 250 participants, 43 were 15-19 years, 119 were 20-29 years, and 88 were 30-42 years. Participants were initially tested with the above-mentioned instruments in the hospital and then at one, 4, 8, and 12 months. Visits following discharge from the hospital occurred in the subject's home or other locations the participants selected. Instruments were mailed to the subject's home 2 weeks before a researcher's visit. Members of the

research team were graduate nursing students in maternity, pediatric, and maternity clinical specialists programs. Results of the study suggest, "personality integration and flexibility represent developmental constructs in the study sample" (p. 30) and that personality development increase and correlate with age. Conversely, empathy and temperament traits were not identified as developmental constructs or correlates with age. However, the correlation between empathy and maternal behavior was moderately strong in the teen group (Mercer, 1986). Mercer asserts that "the teenager is typically egocentric, and the ability to be empathetic may be more critical with the younger group than the older group" (p. 31). Thus, further study of empathy as a developmental construct is warranted.

Mercer's work is notable as a longitudinal study with a large population that included adolescents. However, only 30% of the teens were Caucasian compared to 67% Caucasian in the 20-29 years and 81% in the 30-42 year age groups. Additionally the grouping of the teenage population with an age range of 15-19 decreases the reliability of the measures of developmental constructs. At the higher end of the adolescent range, 18-19 years, developmental behaviors are closer to those of the adult group 20-29. By dividing the adolescent group further, a better understanding could have been gained about developmental constructs in the adolescent mother.

Mercer provided no information on the reliability of the instruments used in the study with adolescents. Further, the maternal empathy scale was adapted from a 96-item scale to a 12-item scale. While the empathy scale showed a "high inverse correlation with child abuse, and high content validity" (p. 27), it is questionable for reliability and

validity in this study based on the extent to which it was adapted and its use for the unintended purpose of correlating aspects of maternal role attainment.

In a study specifically focusing on attachment, Mercer (1995) “explored the differences between maternal-infant attachment and variables affecting attachment for 136 experienced mothers and 166 inexperienced mothers during postpartum hospitalization, and at 1, 4, and 8 months” (p. 344). Maternal attachment was assessed with measures of maternal-fetal attachment, maternal competence, self-esteem, sense of mastery, depression, state anxiety, support received during the last 4 weeks, perceived support now, partner relationship, family functioning, perception of health status, stress of negative life events, pregnancy risk. Statistical analysis did not demonstrate a difference between experience and inexperienced mothers in relation to maternal-infant attachment at any of the testing periods. Multiple regression analysis demonstrated that 23% to 43% of the variance was explained in experienced mothers’ attachment by the variables of perceived support and self-esteem respectively with self-esteem being the highest predictors of attachment in the experienced group. In the inexperienced group, 13% to 38% of the variance was explained with fetal attachment, and sense of mastery was revealed as the major predictor of maternal attachment.

Comparing early maternal attachment behaviors of low-income, inner-city adolescents and adult primiparas, Norr and Roberts (1991) found that adolescent mothers under the age of 18 demonstrated fewer maternal attachment behaviors than older mothers during the first three postpartum days. The study sample consisted of 184 medically indigent mothers. The predominately African-American subjects were grouped according to age with 69 subjects aged 14 to 17 years, 36 aged 18-19 years, and 79 mothers 20-24

years. Only primiparas with uncomplicated, vaginal deliveries of healthy term infants were recruited.

Maternal attachment behaviors were measured during a 15-minute infant feeding using the Avant Maternal Attachment Observation instrument. The Avant instrument has 13 items in four subscales measuring affectionate behaviors, proximity of mother to infant, care-taking behaviors, and attention to infant (Avant, 1982). Before observation, the subjects were asked, "While you've had baby with you, what have you been doing to get to know baby? (Norr & Roberts, 1991, p. 336). A five-member research team composed of experienced social scientist and graduate level nursing students questioned the mothers about their activities and observed them during a 15-minute infant feeding episode. No information was given as to the training of the researchers, their knowledge about the study, and whether they were blind to the ages of the mothers. The majority of subjects received rooming-in care and were observed at 9:00 a.m. Mothers not receiving rooming-in care were observed during an afternoon feeding. No specific information was given regarding the distribution of age groups and rooming in; however the researcher indicated that the 18 to 19 year old mothers were "significantly less likely than the other two groups to have experienced rooming-in" (p. 337).

Responses to the questions asked before observation of the subjects were coded into two measures, i.e. attachment and affectionate behaviors. Attachment behaviors are those activities reported other than care-taking activities such as holding and rocking. Affectionate behaviors are activities that are measured in the Avant affectionate behaviors subscale such as en face gazing, kissing, and smiling.

Analysis of variance with Tukey post hoc test revealed that mothers younger than 18 years of age had significantly lower mean maternal attachment scores during the observed feeding than mothers 18 to 19 years old and mothers over 20 years of age. Mothers in the 18 to 19 year old age group had significantly higher attachment scores than the younger adolescent group but significantly lower scores than the adult group. Norr and Roberts noted that "Nearly all the difference between adolescent and adult maternal attachment scores was due to significant differences in affectionate behaviors sub scores" (p. 337).

Realizing that maternal attachment can be exhibited in a variety of behaviors, the researchers compared specific behaviors that differed between the adolescent and adult groups. The comparison revealed that both adolescent groups talked to and smiled at their infant less than their adult counterparts. A low to moderate correlation between mothers' reports of what they were doing with their infants and observed maternal attachment scores was found. While the study findings are significant, a weakness of the study is the use of the Avant Maternal Attachment observation instrument. The researcher established inter-rater reliability at .90 for the instrument. However, the researchers did not discuss validity and reliability of the instrument with adolescent and minority groups, both a large part of the sample population. The lack of longitudinal studies documenting that postpartum attachment behaviors have a long term effect on the mother child relationship and the lack of evidence that "particular behaviors examined by the Avant maternal attachment observation are the most important clues to the quality of the mother-infant relationship over the long term" (p. 341), warrant caution in generalizing the findings.

In a descriptive correlational study including adolescent and adult mothers, Troy (1995) found a correlation between the time of first contact with the infant and the time of development of feelings of attachment. The study consisted of a purposeful sample of 67 women ranging in age from 16 to 37 years ($M=24.2$) and utilized the Maternal Feelings Questionnaire (MFQ) developed for the study with content validity established by an expert panel and Cronbach's alpha of .95. A weakness of the study was the statistical analysis. The assumption of normalcy for Pearson product –moment correlation was violated and scores were transformed for testing the “research hypothesis and all other ancillary analyses” (Troy, 1995, p. 66).

Maternal-Infant Bonding

The lack of research about the “development of positive feeling” by mothers toward their newborns was the impetus for Pascoe and French's (1989) descriptive study. Specifically the research questions were 1) “How do primiparous mothers describe their initial positive feelings toward their infants, and 2) which prenatal and perinatal factors are associated with these positive feelings?” (Pascoe & French 1989, p. 453).

Demographic information was provided about the 100 mothers who participated in the study only in reporting of percentages of findings. Exact numbers were not given for participants' age, ethnicity, education, or marital status.

Positive feelings were assessed by a 30 minute interview “which explored when and how mothers felt love. The interview was piloted on 10 healthy, primiparous mothers by the co- investigator who had 30 years of maternity nursing experience” (Pascoe & French 1989, p. 452). The findings revealed that one half of the mothers who planned to

become pregnant experienced their first positive feelings toward their baby prenatally while 57 percent who did not plan their pregnancy reported positive feelings during birth or the first day post delivery. “Delay in first positive feelings until after the first day was associated with labor longer than eight hours, disappointment with the ‘bonding’ experience, breast-feeding, and high depressive symptoms” (Pascoe & French 1989, p. 452). The lack of information about the subjects as well as the bias that existed in the interview process makes interpretation and generalization of the findings questionable.

Chapter Summary

The nursing literature uses the concepts of attachment and bonding interchangeably. Study titles that included the term attachment were really focused on bonding with many of the studies not offering a theoretical definition of attachment, only an operational definition. Attachment and/or bonding studies were represented largely by correlational, quasi-experimental, and descriptive designs. Validity and reliability of instruments were explicated clearly in some studies and not at all in others, with none addressing applicability to the adolescent population. Studies implied that adolescents were included in the study in the report of findings sections, but demographic data were not explained clearly to allow for interpretation and critique.

The concepts of bonding and attachment and the roles they play in the maternal infant relationship have been embraced by nursing and serve as a foundational component of maternal infant nursing care. However, little research exists to support the use of these psychological and sociological theories to guide nursing practice, especially with adolescent mothers. While the importance and outcomes of the maternal infant relationship are widely accepted, the essence of the relationship is clouded by lack of: 1)

conceptual clarity between bonding and attachment, 2) reliable operational definitions and measures of bonding and attachment. 3) inclusion of adolescent mothers in study populations, and 4) use of qualitative research methods to explore the nature and processes of bonding and attachment.

Chapter 3 Methodology

This chapter includes an overview of the characteristics of qualitative research and the grounded theory method, followed by a discussion of how the grounded theory method was used in this study. Finally, the design of the study will be explicated.

Methodology

Qualitative Research

Qualitative research, with a strong history in the human disciplines of sociology and anthropology, “seeks to make sense of, or interpret, phenomena in terms of the meanings people bring to them” (Denzin & Lincoln, 1998, p. 3). More specifically, qualitative research can be considered a set of interpretive activities, assuming no objective reality, which employs multiple methods of inquiry. Qualitative research is broad methodology that does not claim ownership of one specific paradigm, theory or method. Little qualitative research exists related to the process and meaning of the interactions of adolescent mothers with their infants and none has been located utilizing the grounded theory method.

Method

Grounded Theory

The grounded theory method was developed by sociologists Barney Glaser and Anselm Strauss and introduced in a joint collaboration *Discovery of Grounded Theory* (Glaser & Strauss, 1967). Glaser and Strauss were recruited by Dean Helen Hahm, who was developing a new Doctor of Nursing Science program at the University of California

at San Francisco (UCSF), to serve as guides in nursing research. Strauss, a protégé of Herbert Blumer, came from the University of Indiana with a strong background in Symbolic Interactionism (SI) and saw UCSF as a place to develop a program of research based on the SI paradigm. Strauss recruited Glaser, with a background in factor analysis statistics and an interest in developing sociological theory.

While at UCSF Glaser and Strauss received funding for “a study of the consequences of who knows what about patients who happen to be dying in hospitals” (Stern & Covan, 2001, p. 18). This research resulted in *Awareness of Dying* (1965) and the discovery of a research method that combined the philosophy of SI and the systematic principles of factor analysis.

During his studies at the University of Chicago, Strauss was influenced by the interactionist perspective, which in turn influenced his reasoning for the need of the Grounded Theory method. More specifically, Strauss’ interactionist contributions to the method’s development were reflected in his assertions of (1) “the complexity and variability of phenomena and of human action; (2) the belief that persons are actors who take an active role in responding to problematic situations; (3) the realization that persons act on the basis of meaning; and (4) the understanding that meaning is defined and redefined through interaction” (Strauss & Corbin, 1998, p. 9).

Glaser's contributions to the grounded theory method are evident from his background in factor analysis statistics. “By means of a series of intricate computer rotations, factor analysis examines every piece of data with every other piece of data. Enormous amounts of data can thus be reduced to a solution of a few factors” (Stern, Allen, & Moxley, 1984, p. 372). Glaser added a “systematic, disciplined approach of

qualitative factor analysis” (Stern & Coven, 2001, p. 18) to provide reliability and validity to the method.

Maternal infant interaction for the adolescent mother is thought to be at risk due to the limited repertoire of experience by the adolescent in forming intimate relationships, primarily related to her developmental level, yet researchers “have been slow to investigate teen mothering from a relational perspective” (Smith-Battle, 2000, p. 29). From the feminist perspective, female adolescent development and identity formation is thought to be driven less by autonomy and differentiation than by relationship formation (Gilligan, 1982). Because the purposes of this study were to describe the process (es) that occur during interaction between adolescent mothers and their infants, the meaning assigned to that interaction, and development of a substantive theory, the Grounded Theory method was selected (Glaser & Strauss, 1967; Glaser, 1978; Strauss, 1987; and Strauss & Corbin, 1998) as a basis for the study. Grounded theory is a qualitative method founded on the social constructivism paradigm and more specifically the theory of Symbolic Interactionism. Grounded theory “uses a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon (Strauss & Corbin, 1990, p. 24). Strauss and Corbin (1998) assert the following:

A Grounded Theory researcher does not begin a project with a preconceived theory in mind (unless his or her purpose is to elaborate and extend existing theory). Rather, the researcher begins with an area of study and allows the theory to emerge from the data. Theory derived from data is more likely to resemble the 'reality' than is theory derived by putting together a series of concepts based on experience or solely through speculation (how one thinks things ought to work).

Grounded theories, because they are drawn from data, are likely to offer insight, enhance understanding, and provide a meaningful guide to action (p. 12).

The interaction between adolescent mothers and their infants had not been studied from a qualitative perspective. Clearly, interaction and process is not easily quantified. According to Schreiber (2001), grounded theory is useful in understanding “how people manage their lives in the context of existing or potential health challenges and as such, is admirably suited to nursing inquiry” (p. 57). Further, “grounded theory is also useful for research in areas that have not previously been studied, where there are major gaps in our understanding, and where a new perspective might be beneficial” (Schreiber, 2001, p. 57).

The Researcher's Role: Biases and Strengths

As a perinatal nurse in active clinical practice in rural northeast Tennessee, I had a great deal of contact with the adolescent maternal population. I believed very strongly that individuals exist at varying developmental levels throughout the life span with individual developmental needs and goals. Therefore, I was biased in that I thought adolescent mothers were at a developmental disadvantage for forming a maternal-infant bond and subsequent maternal role attainment. Yet, many adolescent mothers manage quite well in the maternal role. Despite my bias to developmental theory, I believed there were components and meanings of those components that exist for the adolescent mother while interacting with her newborn that had not been identified, and I was committed to finding them so that ultimately nursing care to this patient population can be improved.

Strauss and Corbin (1998) identified six characteristics of a grounded theorist:

(1) the ability to step back and critically analyze situations, (2) the ability to recognize the tendency toward bias, (3) the ability to think abstractly, (4) the ability to be flexible and open to helpful criticism, (5) sensitivity to the words and actions of respondents, and (6) a sense of absorption and devotion to the work in process. In spite of admitted bias, the researcher has all of these characteristics, thus, further supporting the selection of Grounded Theory as a method for this study.

Design

Setting

Data were collected in either the participant's home or inpatient setting at the participant's request. Participants' homes were located in the same geographic region as the inpatient setting and were single family dwellings in which the participant, her baby and the participant's parent or guardian resided together. The inpatient setting was a hospital obstetrical unit in northeast Tennessee that utilized the Labor, Delivery, Recovery, and Post-partum (LDRP) concept of obstetrical care. The LDRP concept of obstetrical care allowed mothers to remain in the same room during their entire inpatient obstetrical experience with continuity of care from the same nurses. All obstetrical rooms were private with private bath and sofa bed allowing overnight stays of a significant other if desired by the mother.

Care of neonatal patients was provided under the concept of rooming-in focusing on extended contact with and care provided by the mother and other family members. The newborn nursery was housed within the obstetrical unit. This facility was utilized

because approximately 40% of the maternal child population was represented by individuals meeting inclusion criteria for this study. In addition, the LDRP and Rooming-In concepts of care provided in this facility allowed for maximum interaction between mothers and infants as well as privacy for participant recruitment and interviews.

Participants

When conducting grounded theory research, data analysis is an ongoing process of identifying, developing, and relating concepts requiring the use of theoretical sampling (Glaser & Strauss, 1967; Schreiber, 2001). Theoretical sampling is not directed by a preset number of participants but by the emerging theory that is built with the concepts reported by participants knowledgeable about the phenomenon under investigation. Fourteen adolescent mothers were asked to participate in the study while in the hospital setting during their post-partum recovery. Four mothers declined to enroll indicating they did not have time to participate. Of the ten mothers volunteering to participate in the study, nine were Caucasian and one was Hispanic. Ages of the participants ranged from 15 to 17 (mean = 15.9 years). One participant was married, eight participants indicated they were together as a couple with the father of their baby, and one participant was not in a relationship with her baby's father and did not anticipate he would have contact with the baby. Six participants were exclusively breastfeeding, two were breast and bottle feeding, and two were exclusively bottle feeding their babies. All participants experienced a vaginal delivery with nine receiving epidural pain management and one electing natural childbirth. The 10 participants gave birth to 5 boys and 5 girls. The number of years of school completed by the participants ranged from 8 to 11 (mean = 9.4)

with all participants indicating they intended to return to school to earn their high school diploma or complete GED studies.

All participants were postpartum (after delivery) patients who met four criteria for inclusion in the study. First, the woman was primiparous, having given birth to a first child from a first pregnancy. Primiparous women were utilized to avoid comparisons of interaction processes with previous born children and to ensure the interview reflected the interaction process solely with this baby. Second, participants were 17 years of age or less. Previous nursing research with adolescent mothers indicates that those over the age of 17, while still adolescents, tend to reflect the developmental level of an adult. Therefore, the inclusion ages of 17 years or less ensured the interactions and associated meanings of adolescent mothers were obtained. Third, participants were medically stable, receiving routine postpartum care and able to provide self and infant care. Medically unstable clients would have been less likely to have adequate contact with their infants to allow interaction and assignment of meaning to those interactions. Mothers who are medically unstable are also more likely to be focused on themselves. Therefore, even if the mother did have adequate contact with the infant, the interactions and meanings could be influenced by the medical problems of the mother. Fourth, participants must have delivered an infant without congenital or genetic anomaly or a medical condition prohibiting room-in. Any interaction with the newborn may likely have been influenced by the presence of the anomaly or medical condition which is not the purpose of this study. The infant must also have been able receive rooming in care in order for maternal interaction to occur.

Ethics and Protection of Participants

Institutional review board approval was obtained from the University of Tennessee (Knoxville), Mountain States Health Alliance, and Milligan College prior to data collection. Participants were informed verbally and in writing about the nature of the research. Participants who were emancipated minors signed informed consent. Participants who were not emancipated minors signed assent, and written consent was obtained from their parent or legal guardian to participate in the study (see appendices A, B, and C). Consent allowed the researcher to conduct the initial interview and follow-up interviews for validity of findings following data analysis. Copies of the informed consent and assent forms were given to all participants.

Participants were informed that the initial interview would be audio taped and transcribed verbatim. Anonymity was maintained by asking the participant to select a pseudonym by which to be identified on the interview tapes. This pseudonym was used in referencing the participant in any context of the study, as well as labeling audiotapes, observation notes, and memos. The only people who had access to interview tapes were the researcher and transcriptionist. Confidentiality was maintained by having the transcriptionist sign a confidentiality agreement. Audio taping of the interview was necessary because every word of the participant is important during data analysis, and participant quotes were needed for illustration of the findings of the study. Informed consent forms, audio tapes, transcripts, and observation notes were stored under lock and key in the researcher's office. Audio tapes will be shredded with all other materials archived for future work upon successful defense of the researcher's dissertation.

Assurances were given to the adolescent mother and her legal guardian that medical care for the mother and newborn would in no way be affected by her decision to participate in the study and she could discontinue her participation at any time without consequence. All participants were informed that if the researcher witnessed behavior that could endanger the infant during the research study she was required by law to report the situation to the proper authorities.

Specific Risks and Protection Measures

The content of the adolescent mother interviews was about how it was for her getting to know her baby and the interactions that were occurring between them. There was little to no risk to the participant. A small risk existed that the content of the interview could have caused the new mother to feel overwhelmed and emotional about having a new baby. If participants had become emotionally overwhelmed, the mother would have been reassured these feelings were normal immediately after delivery and her LDRP nurse would have been asked to offer continued support and assistance after the interview. Participants providing interviews at home would have had access to the LDRP nurses at the hospital if they had become emotionally overwhelmed with the interview process. Referral to other resources such as a mental health counselor was also available to outpatient participants. None of the participants became emotionally overwhelmed during the interviews.

Benefits

The content of the interviews may have served to help the adolescent mother clarify her feelings and actions experienced since the birth of the baby, perhaps

enhancing the birth experience. All the adolescent mother participants thanked me for letting them be in the study and said they “had a good time” or “enjoyed” talking about their babies. Upon completion of the initial interview, each adolescent mother participant received a \$25.00 Wal-Mart gift card as a token of appreciation for their participation in the study

Data Collection

Everything is data in grounded theory, and good theories are built on multiple sources of data, varying perspectives, and directed by the emerging concepts (Schreiber, 2001). Therefore, interviews and observation were utilized in the study. Since this was a grounded theory research study, data analysis began with the initiation of data collection. Theoretical sampling was employed with data collection considered to be completed when theoretical redundancy was reached.

Participant Interviews

Prior to initiating the interview, the researcher requested information for a demographic data sheet (see appendix D) and asked the participant to select a pseudonym to utilize during the interview process. Unstructured, face to face interviews were conducted individually with each participant, audio taped, and transcribed verbatim. Interviews were conducted prior to discharge from the inpatient setting or in the participant’s home. Interviews were conducted no earlier than 8 hours post-delivery and no later than one week after delivery to allow for interactions with the neonate, assure medical stability of the participant and minimal intrusion by the researcher during the post-partum process. Six interviews were conducted in the in-patient setting where the

mothers were with their baby continuously receiving mother-baby care and four were conducted in the participant's home.

Each interview began with the directive "Tell me about baby" and was followed by "Tell me what you have been doing to get to know baby." Subsequent questions were based upon emerging concepts and categories from the participants' and the researcher's mutual reflections. The researcher prepared prior to each interview to theoretically sample participants about emerging concepts, categories and ideas derived from prior interviews, but many times the participant would begin to discuss a particular emerging category and its characteristics before she could be asked about it. However, theoretical sampling was utilized to verify the researcher's ideas about emerging concepts and categories such as the mediating and moderating factors and the order in which interactive activities occurred. The length of each interview was dependent on the amount of information the participant shared and lasted between 30-90 minutes.

Schreiber (2001) advises that novice grounded theorists develop an interview guide to utilize during interviews. Because this research was the researcher's first grounded theory study, an interview guide was developed that consisted of the opening question mentioned above, and the following questions which were asked once the participant completed the interview: Is there anything else I should know about how it has been for interacting with baby that I did not ask? Because "Grounded theory involves interaction between the researcher and the world they are studying" (Cutcliffe, 2000, p. 1479), in later interviews I used the same initial questions as well as "Others have told me..... Other research done with new moms indicates"..... to explore and relate emerging concepts and intuitive hunches. Development of good grounded theory

is dependent in part on the researcher's awareness of and willingness to bring forth in discussions tacit knowledge or hunches; allowing for emergence of concepts and theoretical richness that might not otherwise be known. (Lincoln & Guba, 1985; Turner, 1981). Cutcliffe (2000) suggested:

The mechanism for checking the authenticity or representativeness of such knowledge and insight exists within the grounded theory method, whereby such trustworthiness is achieved by exploring the possible or emerging concepts/categories in further interviews. If the hunch belongs solely to the researcher, and is not a part of the world being investigated, this will have no meaning for the interviewees and can be discarded in due course (p. 1480).

Mothers' interactions, behaviors toward, and activities with their infants were observed during the audio taped interview. The presence, absence, and amount of interaction, behaviors, and activities were considered data and were considered within the context of the infant's activities. Immediately following each interview, objective observational notes and memos were written noting the environment, mother-infant interaction behaviors, and impressions of the researcher regarding the content of the interview. These notes were later attached to the interview transcript for consideration during data analysis.

Follow-up Interview

All participants were informed that they might be contacted during and/or at the completion of data analysis to verify that findings reflected the intent of the participants, thus serving as a measure of validity in the study. The follow-up interviews were

documented through field notes and memos, and confidentiality and anonymity were maintained as in the initial interviews.

Data Analysis

Coding

The basic analytical process in grounded theory is coding which results in the identification of concepts along with their dimensions and characteristics (Strauss & Corbin, 1990). Coding began and continued with data collection and served to sort, synthesize, and summarize large amounts of data. During data analysis, first, second, and third level codes were developed by line-by-line analysis of the interview transcripts in an overlapping process as concepts emerged from the data.

First level codes, also known as open, in situ, or in vivo codes, are pieces of data, preferably the participants' own words that were assigned conceptual names. Many codes at this level were developed, with each occurrence of the concept compared for similarities and differences. Analysis continued with ongoing data collection, with incidents added to first level codes and new codes added only as they emerged. Since this study is the researcher's first Grounded Theory study, recurring incidents of a particular concept were included in data analysis documentation to ensure theoretical saturation. After development of several first level codes, second-level coding was initiated.

During second level coding, the level of abstraction of the data was raised by synthesizing first level codes. Second level codes represent "an emergent set of categories and their properties which fit the data, work and are relevant for integrating into theory" (Glaser, 1978, p. 56). This level of coding was the beginning of a

retroduction approach to the data. First level codes were compared to incoming data, second level codes were identified, defined and compared to first level codes and incoming data. By this retroductive process, the level of abstraction of concepts rose but was directly linked back to the data. Also, during second level coding, a rudimentary process began to emerge as to how the adolescent mothers interacted with their newborns while situated together in the immediate post-partum period. Once most first level codes were collapsed into second level codes, third-level coding was initiated.

Third level or theoretical codes focus on relationships between and among lower level codes (Schreiber, 2001). These relationships were tested with further data collection and analysis utilizing retroductive thinking. Third level coding was enhanced by reading each participants transcript again and thinking about what the participants were saying was going on between them and their newborns in a broad way instead of focusing on incidents of data units and their individual properties. By stepping back from the data and looking at the larger picture; 1) categories were placed in a schema depicting the interactive processes occurring between the adolescent mother and her newborn, 2) the core category, “Connecting Together”, clearly emerged, and 3) “Connecting Together”, along with “Taking Baby into the Inner Being”, and “Embarking Together” were identified as three theoretical codes or core concepts that linked together less abstract categories of the theory. During third level coding a central organizing construct, “Becoming Tied,” emerged that links all categories and concepts of the theory together.

Core category

During second level coding a core category, which will be explicated further in chapter 4, began to emerge that was eventually called “Connecting Together”. A core category is any kind of theoretical code that consistently occurs and links other categories together. Said another way, it is the central concept to which all others are linked and are related. Glaser (1978) characterizes core categories as having explanatory power or “grab” that can be carried throughout data analysis. Core categories can be considered “right there” and are many times identified by intuition or when they just emerge. Core categories are not accepted because they “magically appear” (May, 1994), but must be verified with the data. The core category remained “right there” for the researcher but emerged clearly during second and third level coding when asking of the data, “What is going on here, and what is the story the participants are telling me?”

Data analysis began with data collection as both “are tightly interwoven processes, and must occur alternately because the analysis directs the sampling of data” (Strauss & Corbin, 1990). The constant comparative method allowed the researcher to appreciate the richness of the data, resulting in the development of a complex theory that represented the raw data. The constant comparative method aided the researcher in inspecting data and redesigning an emerging theory that was “integrated, consistent, plausible, close to the data and at the same time... in a form clear enough to be readily, if only partially, operationalized for testing in quantitative research” (Glaser & Strauss, 1967, p. 103). Interview tapes were transcribed verbatim by the same transcriptionist throughout the study. Data analysis was conducted by reading each interview transcript while listening to the audio tape interview and then proceeded with memoing and coding.

Individual transcripts were merged into a Microsoft word table with 3 columns. The left hand column contained the verbatim interview transcript. The second column was utilized to note emerging concepts or first level codes. First level codes were developed next to each line or phrase of the interview to allow easy reference to the data. This process was conducted with each participant transcript. The third column was utilized for writing quick memos which were later transferred to a separate Microsoft word document. After conducting first level coding on the second transcript, a second table was developed on which emerging first, second, and third level codes were placed in three columns respectively as they emerged. The coding table allowed for easy comparison of incidents with first level codes and integration of concepts into categories as each transcript was analyzed as well as finding similarities in the significant number of categories that were developed for further reduction, leading to a more parsimonious theory.

Memoing

Memoing is a process that occurs prior to and during data collection and analysis and serves to provide 1) a record for explaining the researcher's personal and theoretical assumptions and biases, 2) an audit trail for methodological decision making, and to 3) retain thoughts and impressions that emerge during data analysis and the action taken. Memoing was conducted prior to the first interview and consisted of personal reflection and documentation of the researcher's personal biases regarding the forming relationships observed between adolescent mothers and their newborns. These biases were formed primarily while providing direct patient care in the in-patient setting over the course of 17

years of nursing practice but may also have been influenced by educational instruction or other life events. This first memo served as a reminder of the researcher's biases during data analysis and to avoid imposing personal opinion or belief onto the emerging categories and concepts. Memoing was often conducted during data analysis to capture impressions and thoughts about emerging categories and concepts and their relationships while immersed in the data and served to keep track of changes made to categories and concepts and the rationale behind said changes, particularly during third level or theoretical coding.

Validity

Internal validity was supported by clarification of researcher bias and utilizing multiple pieces of data. Participants and non-participants in the study were consulted to obtain verification and level of clarity of data analysis. The researcher also consulted with an expert in Grounded Theory during data analysis.

Multiple Pieces of Data

Data consisted of face-to-face interviews about and observations of mothers' interactions, behaviors toward, and activities with their infants. The presence, absence, and amount of interaction, behaviors, and activities were considered data and were considered within the context of the infant's activities. Immediately following interviews and observations, observational notes and memos were written and later attached to the interview transcript for consideration during data analysis.

Adolescent mother verification

Three adolescent mothers were part of data analysis. Follow-up interviews were conducted in the homes of two mothers who participated in the study and with one mother in the post-partum inpatient setting who did not participate but met the criteria for inclusion in the study. A schema of the theory explicating the categories, core category, core concepts, and central organizing construct and their definitions were shown to all three adolescent mothers to determine if the theory was recognizable, fit the data, and resonated with what they experienced and where they currently situated themselves in the process. (Schreiber, 2001). While the researcher was explaining the theory, all three adolescent mothers nodded their heads and indicated they understood the theory, categories, and constructs and felt they were an accurate depiction of their experiences. One mother who participated in the study even ran ahead of the researcher when explaining the theory and began to discuss what particular categories were before they could be discussed. This same participant added a very valuable piece of data in saying that while the theory represented the interactive process of the adolescent mother and her baby during the immediate post-partum period, the theory could be applied indefinitely as she felt she was continually going through most of the processes depicted in the schema. The two mothers who participated in the study excitingly recalled how they had proceeded through all parts of the process and agreed the conceptual names and definitions were reflective of their experiences. The mother who had not participated in the study said the concepts, definitions, and schema was very clear to her as well.

Mentor Consultation

Dr. Pamela Hinds, an expert in the Grounded Theory method, was consulted during data analysis to assure analysis was conducted according to the tenets of Grounded Theory. The researcher's developing concepts, categories, core categories and central organizing construct were submitted electronically to Dr. Hinds and discussed by telephone.

Chapter Summary

Because of the lack of qualitative research explicating the concepts of bonding and attachment, especially with adolescent mothers, the grounded theory method was employed in this study. Face-to-face interviews and observations of adolescent mothers with their newborns were utilized to describe the process (es) that occur during maternal infant interaction. These descriptions, documented on audio tape, were analyzed using the constant comparative method of data analysis to determine the interactive processes that occur between an adolescent mother and her newborn in the immediate postpartum period. Related categories emerging from the data were used to formulate a theory and were then verified by adolescent mothers.

Chapter 4

Findings and Analysis

The purpose of this grounded theory study was to explore the interaction that occurs between adolescent mothers and their neonates while situated together in the immediate postpartum period. Data analysis following the tenants of Grounded Theory Method as set forth by Glaser and Straus (1967) was utilized to determine categories emerging from the adolescent's description of the mother-infant situation and how these emerging categories related. Eight categories and their relationships emerged from the adolescent participants' descriptions of the mother-infant situation. From these eight categories, three core concepts emerged, one of which was also the core category. In this chapter, the findings of the study will be provided including: 1) the story line of the participants, including direct quotes from their descriptions, 2) definitions of the eight emergent categories and the core category, 3) the substantive theory represented by three core concepts and their definitions, and 4) a definition and schema of the central organizing construct of the theory "Becoming Tied Together".

The Story Line

Sensing We Know Each Other

In the immediate post-partum period, adolescent mothers and their newborns begin to interact immediately at birth as encompassed in the category "Sensing We Know Each Other". The mother receives her baby from health care personnel and notes an immediate sense of acquaintance at which time she gives her full attention to her newborn. During this time of focused attention toward the newborn, the mother engages

in reciprocal eye contact and perceives that her newborns knows her by looking at her and making efforts to obtain physical closeness.

“And then there she was and she, when they handed her to me she just, her eyes was wide open and she just looked at me. I only got to hold her for a couple of minutes; but, when they first handed her to me, but, she knew who I was. Uh, like I said, by my voice and by, you know, the smell of my skin and, you know all that. The way I hold her too.”

“Well, I didn’t really get to see him because I was laying flat on my back, but they sat him on my chest, and I was able to hold his head. But, as soon as they did that he didn’t squirm that much, I mean he was moving his arms and legs, but he wasn’t really moving all that much to where I was able just to calmly hold his head and stuff.”

“You know it when it (the baby) when it comes out.”

“Like she knew I was there. She could, she, she hears my voice, I’m sure, and knew who I was by my voice and by the smell of my skin when they’re born.”

“Just seeing her for the first time. She had been living inside of me for 9 months, and I got to see her and hold her” So you knew her when you saw her? “Yeah.”

Did you feel like you knew her before she was born? “Not really. I knew something was there but until I actually seen her and got to hold her and feel her.”

“Well, when she first came out, I was the first thing she saw was me, so... Then she looked at me and started crying. And then, right after that, they gave her to me and we spent some time, and she was just all snuggled up on me. So I felt like we bonded a little bit there, that she knew that I was like her parent.”

Following the initial period of interaction, the mother starts “Sizing up the Newborn”.

Sizing Up the Newborn

When “Sizing up the Newborn”, starting at birth and proceeding through the initial post-partum period, the mothers note physical and personality traits of their newborns and qualify them in a positive way. Physical traits are linked to the mother and others with a movement to a more in-depth assessment of the newborn’s personality

traits which includes the perception the baby exhibits preferences for environmental stimuli and people. The mother also perceives her baby can consciously differentiate between her and other people with whom he or she interacts.

“He is a good boy. Like right now. He’s going to be someone when he grows up, that’s what I expect.”

“She’s quiet. She’s a good baby.”

“He is very mellow.”

“I just think he is cute, and I just want to squeeze him. He’s too cute.”

“Seven pounds and one ounce and he was 19 and $\frac{3}{4}$ inches. He has dark hair, soft skin, dark, dark, dark, blue eyes. Looks like he’s gonna have dark skin like his dad.”

“But there’s like just certain things, like certain faces he makes, me and Kyle still makes them.”

“He loves kisses. He just loves it and smiles at you the whole time.”

“He is stubborn; already I can tell he is stubborn.” How do you know that?

“Well, for one thing, if he doesn’t want you to put his diaper back on, he will put up a fight trying to make sure that diaper doesn’t go back on.” What does he do?
 “He will kick and roll over and just try everything to get you to not be able to put it on. He will roll over to his side and will start kicking and everything.”

“She crosses her hands a lot. She likes a pacifier and she don’t like people to mess with her feet.....she don’t want to wear her socks. She’ll kick’em off here in a minute.”

“He is not too fond of his uncle—that’s for sure. Every time my brother holds him, he just starts screaming at the top of his lungs. I don’t know why—I have no clue.”

“He smiles at my dad all the time because my dad will hold him with his legs together and lay him right there, and just like talk to him and he will just start smiling and grinning at him. It’s adorable.”

“Yeah, she knows who I’m. When somebody else got her, she started crying a little bit, whimpering.”

“She would rather her mother have her. I think she likes me.”

“Everywhere I look, she’ll just follow my head. She’ll just, she’s always aware that I, that I’m here with her... that I’m holding her. She always knows it’ me holding her. Now she’ll stop crying just when I hold her. If her dad holds her, she knows that. She knows her dad.”

“Whenever I hold him he’ll calm down a little bit faster when I talk to him; or he just, or he pays more attention to me. You know, he’ll look at me and he won’t look around, he’ll just look at me.”

“He knows the people around him is what he has.”

“When he wants me, you know, he’ll keep on until, you know, he sees me. He gets his point across, you know, ‘That’s the one I want to be with, not you’.”

Along with recognizing the distinct physical, behavioral, and personality traits of the newborn, comes the realization by the mother that the infant is indeed a separate and distinct individual:

“Having a little person grow inside you and bringing that person into the world, gotta think about that little person.”

“I think well, actually, I don’t know. I think he’s got something of his own.. His toes and the when he stretches his legs all the way out, he is all wrinkly. He’s got long fingernails too.”

The mother recognizes the infant as someone with whom she can have a more focused interactive acquaintance dialogue and intensify the level of their relationship by

“Responding to Each Other” and “Forming Emotional Ties”.

Responding to Each Other and Forming Emotional Ties

The categories of “Responding to Each Other” and “Forming Emotional Ties” emerged as separate processes but were found to relate back and forth in a feedback loop.

The participants’ descriptions of their interactive processes included emotions they felt

and perceived their babies felt as result of the interactions. A specific interaction did not lead to a specific emotional feeling in a linear process, but were described to be intricately linked, with ongoing interaction expanding emotional feelings and emotional feeling encouraging more interaction.

During the process of “Responding to Each Other,” the mother-baby dyad encounter each other by being in each others’ presence, looking at one another, as well as having physical and verbal exchanges. The process of “Responding to Each Other” is not just a series of encounters between the dyad as part of being situated together, but is purposefully initiated by the mother to further solidify her newborn’s awareness of her identity as his or her mother. The on-going interfaces between the mother and her newborn increase the level of acquaintance in that the mother learns more about and becomes more comfortable with her baby. As a result of and along with the increased level of acquaintance achieved while responding to each other, a distinct expansion and awareness of the affectional components of the relationship emerge as the dyad begins “Forming Emotional Ties.”

“Forming Emotional Ties” encompasses the mother’s identification of her newborn as someone to love and who belongs exclusively to her. Mothers make purposive attempts to show love toward their newborns and perceive their babies do and will continue to love them for their efforts. The mother desires to maintain close proximity with her infant as she feels a sense of emotional dependence on her baby and perceives her baby does likewise. The formulation of the affectual relationship brings into focus the reality of the relationship and its importance.

“Oh, I’ve been talking to him a lot and stuff. I haven’t really had that much alone time with him, but every chance I get, I do try to hold him. But every time I hold him, I just try to, you know, hold his hand, like let him grip onto my finger or something. I will just play with his little feet and just talk to him and stuff. Something I do a lot is that I’ll rub his cheek or his forehead or something, and that seems to really calm him down.”

“Because maybe she feels like um, you know, she feels close to you when you talk to her. Like trying to communicate with her by...., babies communicate with you with the way they look at you, the sounds they make, even the faces they make. So, I talk, when I, when I talk to her I just, you know, tell her that I love her and I’ll play with her and stuff. She, I think she feels, you know, that I’m trying to communicate good with her and, you know, make a relationship with her”

“I see him, like in his eyes, when he starts to look at me in the light, I don’t know, and he starts to look at me and I start to talk to him and we get together like that.”

“Get to know each other? Well, play together as much as, you know, I can seeing how he is so little and everything. Oh, I play with his toes and with his feet and stuff. Kind of work out his legs a little bit and stretch them. Hmm, little things like that.”

“They love you just because your there and you. Not because of anything you have or anything you don’t have.”

“I already feel loved from the baby, just the way he looks at me and stuff.”

“You don’t just bond overnight. It takes awhile because they have to learn about you and all that and you still have to learn about them....what they like and what they dislike.”

“Well, you know how everybody, they want someone, they need to feel wanted and needed.”

“Take care of her, feed her, change her, love her and show her that I love her.”

“Well, that’s the kind of feeling that it gives me. it gives me pleasure knowing that there is someone out there who truly does need me and wants me to be there.”

“Between me and her it would be forever, because she’s mine forever.”

“I’m getting more used to her.”

“Well once I seen her, if she was, if something was to happen to her, I wouldn’t know what to do. Because she’s my baby. Because I carried her for 9 months, I made her. That’s pretty much about it.”

Are there other things that are building relationship? “Yeah, just spending time with her, you know, rocking her, and playing her lullabies to her and, you know, just letting her know that I love her and just cuddling her and making her feel comfortable. That’s real important when you a baby, especially a small baby. I think, you know, all, all, babies need to feel love, need to feel, you know, need to feel comfortable and I, I think that, you know, rocking her and spending time with her and you know, talking to her and playing her little lullabies and stuff is going to help to build our relationship. Cause, she’s going to know, she’s going to know I love her and that I want her to be comfortable and to know that, you know, I need her, you know, as much as she needs me, you know, making them feel as comfortable as possible, it also helps you to feel more comfortable because you don’t want child to be, you know, uncomfortable, and, you know, you want them to feel loved.”

“Just me holding her, you know, and walking her and talking to her. Every time, you know, she’ll be crying and I’ll talk to her and, you know, I’ll know that she knows me because she quieten down, she knows my voice, but she, you know, she calms down when I talk to her. So I think if you talk to baby, even as young as she is, you know, it’ll help, you know, with calming her down and letter her know who are.”

“The way she looks at me, the, when she lays and looks at me. She don’t cry. She, she’s like, like she knows who I am...”

What made it real? “That I am holding her right now. I don’t know, I think just holding her, making sure, you know, that I, knowing I can take care of her, knowing that she’ll be okay.”

“I think it’s gotten closer cause now she sees me and I see her....”

“That she will always be mine no matter what.”

“He’s, he’s my everything. He’s the only thing I have. There’s not very many people you have, and that’s one person I know I’ll always have.”

“Joy and pride and love and happiness, just because, you know, that him, that’s mine, that’s part of me and that’s part of, you know, my love. And not only its part of me, its part of, you know, people that’s in me going in him. You know, it’s living on.”

“I was like ‘Do you miss baby?’ And I was like ‘I do,’ I miss my baby cause it feels something like, I feel something not like I am alone. Like I have someone like, I don’t know. Yesterday I was feeling sad because I didn’t have a baby with

me.” –mom elected to come home for 1 night instead of rooming in during baby’s phototherapy

“He depends on me. He can’t do it for himself. I’m what he has.”

“She seems to feel secure and safe with me.”

“Um, well, when I talk to her it’s like she seems like she wants to smile. I mean she’s a real lovin’ baby and she; it just feels like we’re real compatible when I hold her and feed her and, you know, anything as in that nature around her, clean her, give her a bath, or just every time I’m around her, it’s like we’re compatible and close.”

“I felt like that she needed to be with me so she could be able to know me, get to know me there, while we was there. Instead of trying, seeing all these different faces and getting confused with everything, I figured she needed to be around me and needed to be near me, where she could get to know me better.”

“I have something that needs me that honestly I couldn’t live without and that depends on me.”

Recognizing a New Segment of Self

“Recognizing a New Segment of Self” represents the adolescent mother’s internal recognition that she is a parent and that the new role, while still not completely understood, is continuing to develop through on-going interaction with her baby. The mother perceives providing care for her newborn as a new opportunity that provides enjoyment and adds purpose to her life. Teen mothers expressed a desire to be recognized only for their self realized role as mother and not their developmental level as an adolescent.

“It makes it really interesting. (To baby) It makes life a little bit interesting, don’t it? Yeah. It’s more interesting. It makes it a little bit better.”

“I’m still getting to know her and, you know, getting the motherly thing, I guess you could say. However, as time goes on though, I’ll know more about her.”

“Well, before Ruthie was born, I, you know, really didn’t have nothing to do all day but sit around and you know, watch TV, and now I get to take care of a baby and have the enjoyment of changing her diaper and feeding her and rocking her to sleep and before she was born, I, didn’t have nobody to know, take with me everywhere I went and let everybody enjoy who she is and, now that she’s here everything’s just changed. We, I feel so much better now.”

“ Knowing that I’m her mom, it’s just hard to leave baby with someone, but I know I am her mom and I’ll take care of her.”

“I used to think that everything was, like, everything didn’t matter. Now it does because I have something to work for like a mom.”

“My mom said it is going to be hard for you, but I feel like I have to take care of my baby, because I don’t miss my teenage life, no. Now I don’t miss nothing. I like this kind of life now.”

“I’m a different person than I was. I’m not the same person, I don’t do the same things I did. You know, people look at you differently after you do that and I want people to look at me different than what they used to. Wow, you know, you actually proved everyone wrong; you can do what you want to do with life instead of just throw it away.”

“I’ve, I’ve wanted her so long, almost a year and when I look, it’s like, it’s a different feeling that you get when you have a baby, like motherhood. : Motherhood is, I mean, you, you don’t, at first motherhood is, kinda...first of all it’s a feeling that you can’t explain, like I said, it’s just a feeling of, between you and baby of security and, you know, love and compassion and stuff like that.”

“It’s just kind of an independence, you know, that I have with my son.”

“The way the nurses here have treated me and stuff, they’ve been so nice to me. They haven’t kind of shunned me or anything because of my age or anything like that. That means a lot; it’s a huge deal to me. I mean, it means a lot to me. Cause that was one of the things I was afraid about, that I wasn’t going to allow myself to stress out over, because, you know, if I would have, then it would’ve been over nothing, because I’m not stressed out. They’re not treating me badly. They just treat me like I’m a regular pregnant person...well, not anymore...but, a regular mother, someone who just had a baby.”

As the “New Segment of Self” is perceived, the adolescent mother begins to realize not only the enjoyment and new purpose added to her life but also develops an

appreciation of the magnitude of the role and what is required in the ongoing development the relationship between her and her baby. Two categories, “Shielding Supplying and Evaluating” and “Jumping off the Adolescent Developmental Milestone” emerge.

Shielding Supplying and Evaluating

The category “Shielding Supplying and Evaluating” represents the adolescent mother’s intent and willingness to protect her baby from people and events, provide needs and continually assess her actions based on her baby’s responses and status. The mothers conveyed feelings of being continually compelled to monitor their babies’ the environment and others and could only feel confident of their babies’ well-being through direct visualization.

“I’ve been trying to figure out what he likes and what he dislikes and all that. I have been trying different things to figure out what he likes and what he dislikes.”

“So far I have figured out the easiest way to put him to sleep is to put him in the little swinging chair or rub his belly and he’ll go to sleep.”

“Whenever I think she, her belly’s hurting or, you know, I think, you know, I wish I could take that pain away from her, you know, and just have it myself because she’s so little and she don’t really understand, you know... and I would put myself in any situation just to keep her safe, you know, to keep her out of harm’s way. I just feel like me being the mom, I have to provide for her.”

“You have to be the one to do everything for them.”

“It includes, um, just making sure that, you know, who, who holds her and stuff that they’re not sick. and who comes around and stuff. Making sure they’re not sick and give her a cold and make sure she’s not out in public too much and might get sick and, you know, making sure she’s eating right and eating healthy, but not too much but not, you know, too less. Trying to keep it on schedule and, just, you know, being there and taking care of her and everything. Making sure that she’s okay and you know everything.”

“I can, you know, I can have her a nice home, I can have her clothes, nice clothes, food to eat, you know, I’ll be able to be here for her and, you know, just _____ a good family life with and her I mean, she won’t be without anything that she needs and she won’t be around, you know, drugs or no alcohol.... She will be, just in a good and happy environment. One that she can feel safe in and happy and, you know, she won’t be in need of anything, I should say.”

“I just sat there and held her and, you know, turned her on her right side and patted her back and tried to make her, you know, tried to make the gas move in her stomach, you know, and tried to make her feel better. You know, kinda, I give her some medicine and stuff, just tried to make her feel better and, you know, hold her and...”

“Nobody trying to take her away, nobody trying to hurt her, be mean to her. I’ll not let her get herself into trouble. Ummm...when she gets bigger, run out into the road, or running off, or anything.”

“Cause, I kinda look at it as in, if I’m not there for him, like in the middle of the night when he needs to be fed or something, who else is going to do it?”

Coupled with this sense of urgency and vigilance toward their baby’s well being, was a feeling of being the only person who could and should meet the baby’s needs, thus no choices were evident but to Shield, Supply, and Evaluate which leads to “Jumping Off the Adolescent Milestone.”

Jumping Off the Adolescent Milestone

As the mother increasingly “Shields, Supplies and Evaluates,” a growing sense that her life has drastically changed emerges as “Jumping off the Adolescent Developmental Milestone.” This category is linked to “Shielding Supplying, and Evaluating” in a feedback loop. The participants’ descriptions of the activities they performed for their babies and the motivation for doing so included the changes they would have to make to include their baby and corresponding responsibilities into their life style. The birth of and assumption of responsibility for their babies alone did not

bring the realization of how life changing having a baby would be to the mothers.

Rather, the mothers conveyed as they spent more time with their babies they became increasingly aware of how they would not be able to resume their teenager lives.

In “Jumping Off the Adolescent Milestone,” the mother conveys a desire to remain an adolescent coupled with the realization that she must move into the adult world. Her movement into the adult world is recognized as having time and interactions with her friends moderated by her new status as mother. A sense of forced compromise emerged as the mothers identified the baby as someone to hang out with and hold the position of a new friend in place of peer activities. At the same time, some mothers expressed a sense of loss of the lifestyle enjoyed before the baby’s birth.

“For my friends, I don’t get to spend as much time with them, you know, as, but they still call me and come and visit Ruthie. So, we still talk and stuff, we just don’t get to go out and hang out like we use to.”

“Well, I mean, I was out having fun and everything before, but now I’ll have to make sure that I’m providing for her and everything that I do revolves around her. I can’t go out and just do anything I want no more.”

“Well, I have somebody new to hang out with.”

“Because sometimes I feel like I know that I am teen age, and that it is hard because I don’t see too much experience about babies and everything that feels, especially it feels that changed everything.”

“Um, doing things? Yeah. It will change everything like now I don’t do a lot stuff I used to do. Everything changed. Going to a friend’s house or anything like that. Going out and doing things that basically a normal teenager would do.”

“I still want to be a kid, but I can’t. I want to go out and hang out with my friends and, you know, but I can’t. My friends could come and hang out with me. But we, we can’t party or do anything like that. And I would prefer not to do anything like that anymore. I have something more important to think about. I have my son. I could take him with me and they wouldn’t do anything. They would, they would try to spoil him. “Oh, look how cute he is, he’s so sweet.” I mean, they would be respectful around him and they would do, you know, the usual things

that they would do, but, you know, it wouldn't be like it used to be. Go out and have fun and, you know, not have to worry about you know, a little baby with you and, you know, driving around crazy and stuff. You can't do that with a little baby. You have to calm down and, you know, realize, you know, who girlfriends are."

"It made me grow up a lot. I don't run around as much and just stay home and do other things to take care of her."

"He can't take care of himself; he's so dependent and everything. It really makes me feel wanted and needed. Even though if things don't work out between me and Kyle, I have something that I know that I don't have to worry about or anything like that; I know that needs me..... I'm not going to sit there and just be all upset about it, because I can't. I have a life that I have to take care of now. I can't just sit there and dwell on Kyle and everything like that, or sit there and try to get things working out between me and him because I can't give him my full attention right now. I have to give that to my baby."

"I think this has really mellowed me out for the good, because now I just kinda, I realize now I can't do that stuff anymore. I've got a child to take care of. I've got to make that decision for him."

The sense of obligation toward the baby acts as the motivator for the jump the mothers take to "Walking the Adult Maternal Road" with their baby.

Walking the Adult Maternal Road

The category "Walking the Adult Maternal Road" encompasses the mothers' incorporation of their babies into their lives and the developmental change in thinking from adolescent to adult. The mothers clearly began to recognize the role of parent is filled with activities which are time intensive and perceive there will be an added level of difficulty due to being an adolescent. The mothers conveyed that they must place the baby's interests over their own needs and relationships with others. However, a strong sense of commitment emerged from the mothers to give their all to meet the needs of their babies and be there for them for the rest of their lives.

"But now I realize that being a mother ain't an easy job."

“I’m fifteen and have a baby. It’s kinda hard.”

“Well, it’ll be hectic.. hard.”

“You got someone to watch 24 hours a day, 7 days a week, for actually the rest of life.

“Oh yeah, big responsibility.”

“It’s hard, being so young.”

“I was saying it was going to be hard to try to watch a baby and have a job to support her and finish school at the same time. But, yeah, that was one of my priorities before was to finish school, and how it’s going to be a little bit harder.”

“You mature whenever you become a mother.”

“Through thick and thin I guess. Through all the good times and the bad, I’ll always be there for her.”

“After you have him, you know, you’ve got the little present, something you can’t never give up. The only thing you can do is just love it and be there for it, regardless of if you have help or not, you’ve got to do it for him, not for self.”

“Yeah (chuckle). A lifetime job. Not just full time, it’s lifetime. Because, you know, at the end of the day, you can’t just lay down and expect nothing to happen cause there will be, you know, you gotta keep on. You’ve got that night and the next day and days after that and years after that, until they’re 18, and even after that. It’s not just a full time job, it’s lifetime. You can’t just give it up.”

“I just want that between me and my son for him to able to know that I’ll be there for him.”

“How I can’t be a kid no more. How I have more important things to do. And I have this innocent life devoted to me, you know, regardless of if he wants to or not, he has to depend on me and I know that I have to help him. I have to feed him and change him and clean him and everything, cause no one else is gonna do that but me. And, I’m sure you know that there’s people that’ll do it, but I’m the one that should do it. That, that’s my responsibility to do it. No one else’s responsibility, it’s not their baby, it’s mine. You don’t just pile it off on someone else. You take care of him, you know. You did what you did and you got self into the situation, now you gotta deal with what comes with this situation. And that’s being a parent. Doing what your supposed to, being there for kids.”

“It’s hard. You have to try and do your best and give 150% because this is a little person. They’re helpless, they can’t do anything and you have to be the one to do

everything for them. You know, whether you still want to be a kid or not, you have to grow up. Not just for self, you have to do it for them.”

“I’ll just do whatever I can for him. Just love him. I am going to try my hardest just to make it, everything the way it’s supposed to be. That’s what I feel in my heart, just do what I can, whenever I can.”

“Um, like own, like taking time for self, taking care of self, as in like, fixing hair and, you know, stuff like that getting all cleaned up and ready to go, or, you know, you stay at home with the baby and you don’t go out and, you know, you can’t just go whenever you want to. Um, you gotta, when she’s hungry you gotta drop what your doing and feed her, no matter what it is.”

Categories

Using the constant comparative method discussed in Chapter 3, eight categories and their relationships emerged from the adolescent participants’ description of the mother infant situation; 1) “Sensing We Know Each Other,” 2) “Sizing up the Newborn,” 3) “Responding to Each Other,” 4) “Forming Emotional Ties,” 5) “Recognizing a New Segment of Self,” 6) “Shielding, Supplying and Evaluating,” 7) “Jumping Off the Adolescent Developmental Milestone,” and 8) “Walking the Adult Maternal Road.” The eight categories are listed, defined and the data units from which they emerged are shown in table 4. 1

Core Concepts

The eight categories listed in table 4.1, were further delimited into three core concepts; 1) Connecting Together, 2) Taking Baby into the Inner Being, and 3) Embarking Together. The three core concepts were derived through the process of reduction in which similarities in the eight categories and their properties were discovered allowing for the theory, Becoming Tied, to emerge with a smaller number of

Table 4.1 Categories

Category	Definition	Data Units
Sensing We Know Each Other	The mother/baby dyad engaging each other in person immediately upon delivery and beginning to become acquainted through visual and physical contact.	Focusing on baby at birth Seeing each other at birth Spending time together at birth Knowing baby at birth Describing infant behaviors at birth Receiving and embracing baby at birth
Sizing up the Newborn	The adolescent mother taking stock of the distinct characteristics of her baby shared with others while recognizing him/her as a separate individual.	Qualifying baby in a positive light Describing baby's physical attributes Describing baby's personality Matching baby to others. Recognizing baby as a person Recognizing infant's likes and dislikes Describing infant behaviors Recognizing infant's consciousness
Responding to Each Other	An ongoing process of multiple verbal, visual, and physical interfaces between the adolescent mother and baby resulting in the mother acclimating to her baby and the dyad becoming well known to each other.	Mom making self known to baby Baby acknowledging mother for who she is Getting to know each other by spending time together Getting to know each other by gazing Getting to know each other by providing verbal stimulation Getting to know each other by holding baby Getting to know each other by holding hands Getting to know each other through play Getting to know each other during feedings Learning and getting use to baby

Table 4.1 continued

Category	Definition	Data Units
Recognizing a New Segment of Self	The mother perceiving she and her baby are developing an intimate relationship characterized by feelings of affection, peace and reliance upon each other.	Feeling ownership of baby Having someone to love Mom showing love to baby Perceiving baby's unconditional love Mother depending on baby Baby depending on mother Feeling reality with physical contact Wanting to be with baby Seeing the new role as a positive change Wanting a new name Trying to understand the motherly thing Wanting to be a regular mom
Shielding, Supplying and Evaluating	A process driven by a sense of duty in which the mother is continually defending her baby from all sources of harm, providing everything her baby demands, and judging and adjusting her actions according to her baby's status and reactions.	Keeping baby safe Meeting baby's needs Trying something and appraising performance
Jumping off the Adolescent Milestone	The adolescent mother reluctantly changing her behaviors and status from that of a teen to an adult while identifying her baby as the motivation dictating her choice.	Changing activities with peers Replacing peers with baby Having existence changed by baby Changing status under duress
Walking the Adult Maternal Road	The adolescent mother beginning to live with her baby as the central focus of her life very much aware of the demands and obstacles that lie ahead.	Taking responsibility for baby Being there and doing all you can Prioritizing baby in everything Realizing being a mom is hard

more abstract concepts (Atwood and Hinds, 1986; Glaser and Strauss, 1967). The three core concepts are listed, defined and the categories from which they emerged are shown in table 4. 2

Core Category

Connecting together, defined as the adolescent mother and her baby developing a unique, close relationship that begins at birth, is founded on getting to know one another and anticipated by the mother to last for a lifetime. This concept encompasses the less abstract categories “Sensing We Know Each Other”, “Sizing up the Newborn”, “Responding to Each Other”, and “Forming Emotional Ties”. “Connecting Together” emerged not only as a core concept but the core category as well.

A core category is any kind of theoretical code that consistently occurs and links other categories together. Said another way, it is the central concept to which all others are linked and are related. Glaser (1978) characterizes core categories as having explanatory power or “grab” and can be carried throughout data analysis. In this study “Connecting Together” emerged as the concept on which all others are predicated as well as the central process that is occurring between adolescent mothers and their newborns in the immediate postpartum period. Core categories can be considered “right there” and are many times identified by intuition or when they just emerge. Core categories are not accepted because they “magically appear” (May, 1994), but must be verified with the data. The core category remained ‘right there’ for the researcher but emerged clearly during 2nd and 3rd level coding when asking of the data, “What is going on here and what is the story the participants are telling me?” The descriptions conveyed by the

Table 4.2: Core Concepts

Core Concepts	Definition	Categories
Connecting Together (Core Category)	The adolescent mother and her baby developing a unique, close relationship that begins at birth, is founded on getting to know one another and anticipated by the mother to last for a lifetime.	Sensing we know each other Sizing up the newborn Responding to each other Forming emotional ties
Taking Baby into the Inner Being	A process driven by physical contact with her baby in which the adolescent mother is desiring to have proximity to and identifying her baby as an eternal part of her existence.	Recognizing a new segment of self
Embarking Together	The adolescent mother incorporating her baby into her life armed with ongoing personal growth and unyielding devotion to their relationship.	Shielding, supplying, and evaluating Jumping off the adolescent developmental milestone Walking the adult maternal road

participants of the interactions and events that had occurred between them and their newborns were not told in chronological order. However, after looking at the big picture presented by the data, a distinct order of events emerged: “Connecting Together” precedes “Taking Baby into the Inner Being” and “Taking Baby into the Inner Being” precedes “Embarking Together.” By recognizing the relationships between the categories, Connecting together emerged as the starting point for the process experienced by the participants and on which all other categories were dependent for development.

Central Organizing Construct

“Becoming Tied” is the central organizing construct for what occurs between adolescent mothers and their newborns in the immediate post partum period. This construct serves to encompass the eight categories and three core concepts that emerged from data analysis and is defined as the adolescent mother and her baby leading a conjoined existence as if without linkages to others. Figure 4.1 is a schematic depiction of the theory.

In the construct Becoming Tied, the word *becoming* shows the ongoing relational processes occurring between the mother and newborn. The word *tied* shows the physical and emotional connections reflected in Connecting Together and Taking Baby into the Inner Being as well as the tying down of the adolescent by the newborn reflected in Embarking Together.

“Becoming Tied” is not just a process but also a state of being in which the mother and baby are together or conjoined as reflected in Connecting Together. An important characteristic of Being Tied, *as without linkages to others*, reflects a surprising finding related to the mothers’ perceptions of others that emerged from the data. In all

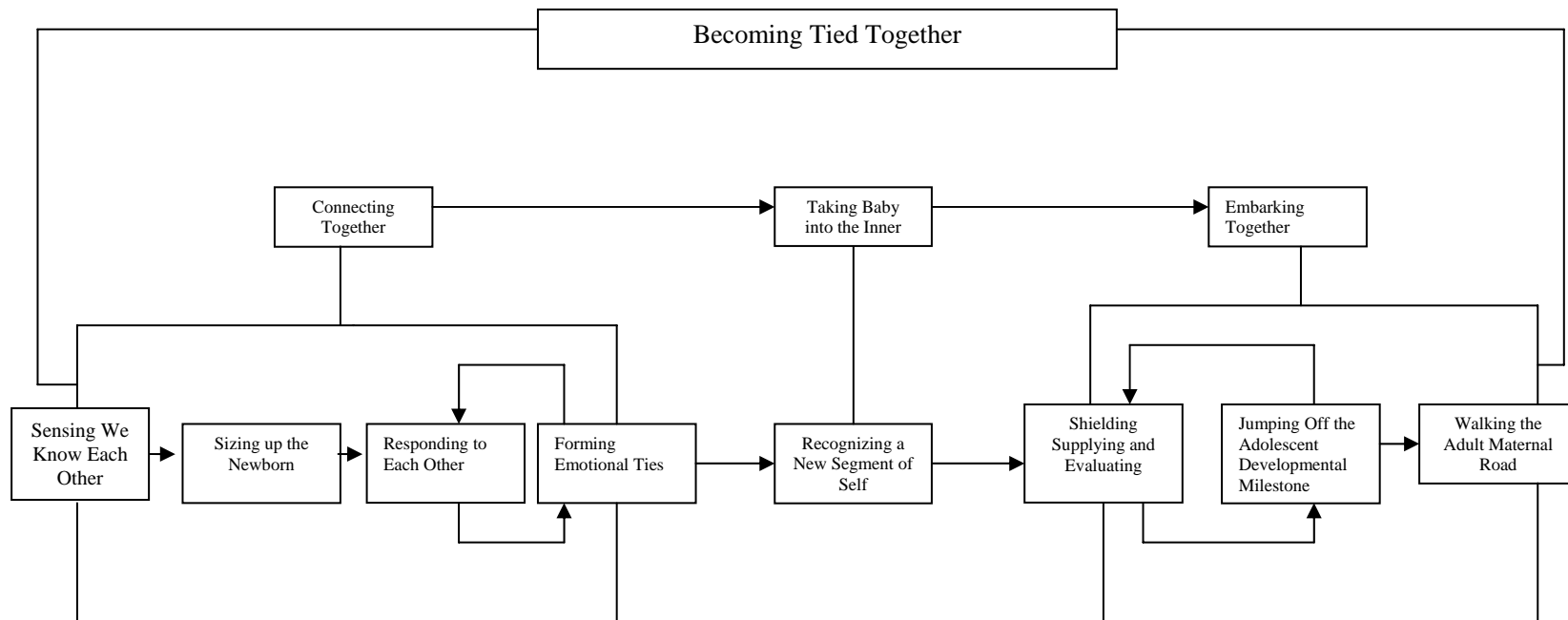


Figure 4.1 Theoretical schema

the interviews, the participants discussed very little and some nothing at all as to the role others were or had played in the relationship they were developing with their newborns. One participant, who was interviewed in her parents home where she lived with her baby and 3 sisters, responded “I see me and Ruthie on our own.” when asked how she saw her and her baby together. Another participant, Sara shared these words when asked if anyone or anything had been particularly influential in her getting to know her baby:

INTERVIEWER: So, it, an outside person, even a family member, or a nurse, or a doctor or anything, you don't feel like it would have, could have made a difference?

SARA: No, I don't. I don't think that it could.

INTERVIEWER: Why not?

SARA: It's just something that you and baby feel together, nobody else can, you know, make her feel a certain way about you or make you feel a certain way about her. It's just something that you gotta feel together. You know, just be comfortable with one another.

The participants and their newborns were all linked to others in many ways. However, the researcher sought to develop a theory based on the adolescents' description of the mother infant situation; thus the words “as if without linkages to other” was included in the definition to encompass the mothers' perceptions of who the actors were and were not in formulating their relationships with their newborns.

Summary

The goal of data analysis utilizing the Grounded Theory Method is “to account for a pattern of behavior which is relevant and problematic for those involved (Glaser, 1978, p. 93)” The theory “Becoming Tied” suggests a pattern of behavior which emerged from

data analysis of 10 adolescent mothers' rich descriptions of the interactive processes between themselves and their newborns during the immediate post-partum period. Becoming Tied is a three step process of "Connecting Together," "Taking Baby into the Inner Being," and "Embarking Together" that emerged from the data and is centered around the core category, "Connecting Together" which represents the adolescent mother infant dyad beginning to formulate a relationship through a process characterized by increasing levels of engagement and acquaintance.

Chapter 5

Conclusions

The purpose of this grounded theory study was to explore the interaction that occurs between adolescent mothers and their neonates while situated together in the immediate postpartum period. Face-to-face interviews were conducted with ten adolescent mothers delivering their first child from a first pregnancy to determine what they had been doing to get to know their newborns. Data analysis following the tenants of Grounded Theory Method as set forth by Glaser and Straus (1967) was utilized to determine what categories emerged from the adolescent's description of the mother infant situation and how these emerging categories related.

The adolescent mothers described a distinct process that begins at the moment of birth and encompassed them forming a relationship with their newborn, recognizing self-change based on that relationship, and moving forward with their baby as the central component of their life. Three core concepts, "Connecting Together," "Taking Baby into the Inner Being," and "Embarking Together" emerged from the rich descriptions provided by the participants to represent the theory "Becoming Tied." The theory provides a new way of viewing the process of how adolescent mothers and their newborns relate in the immediate postpartum period. In this chapter, the findings will be discussed in relation to the research questions asked in this study. The relationship of the findings to previous research and recommendations for further research will also be presented.

Research Questions

Ten adolescent mothers ranging in age from 15 to 17 years were purposively sampled and provided face-to-face interviews to determine: 1) what are the interactive process (es) that occur between adolescent mothers and their infants while situated together in the inpatient postpartum environment? 2) What categories emerge from the adolescent's description of the early mother infant interaction? and 3) how do the emergent categories relate? The interviews took place no sooner than eight hours after delivery and within one week of delivery in either the inpatient setting or the participants' homes. The participant interviews began with the directive "Tell me about your baby" and was followed by "Tell me what you have been doing to get to know your baby." Subsequent questions were based upon emerging concepts and categories from the participants' and the researcher's mutual reflections. Responses from the participants were quite similar and no differences between the richness and depth of responses were noted based on the timing of the interviews or age of the participants.

Adolescent Mother-Infant Interactive Processes and Emerging Categories

Connecting Together

"Connecting Together," defined as the adolescent mother and her baby developing a unique, close relationship that begins at birth, is founded on getting to know one another, and anticipated by the mother to last for a lifetime. This concept encompasses the less abstract categories "Sensing We Know Each Other," "Sizing up the Newborn," "Responding to Each Other," and "Forming Emotional Ties" discussed in

chapter 4. Some adolescent mothers used the term bonding when describing the interactions that comprise “Connecting Together.” Bonding, as described by the participants, is a bi-directional process. The categories emerging from this study serve to describe distinct interactive processes that occur between adolescent mothers and their babies in the immediate post partum period and are foundational to relationship formation between the dyad and internalization of the maternal role by the mother.

In the immediate post-partum period, adolescent mothers and their newborns begin to interact at birth as encompassed in the category “Sensing We Know Each Other.” The mother receives her baby from health care personnel and notes an immediate sense of acquaintance, at which time she gives her full attention to her newborn. During this time of focused attention toward the newborn, the mother engages in reciprocal eye contact and perceives that her newborn knows her by looking at her and making efforts to obtain physical closeness.

When “Sizing up the Newborn,” the mothers note physical and personality traits of their newborns and qualify them in a positive way. Physical traits are linked to the mother and others with a movement to a more in-depth assessment of the newborn’s personality traits that includes the perception the baby exhibits preferences for environmental stimuli and people. The mother also perceives her baby can consciously differentiate between her and other people with whom he or she interacts.

During the process of “Responding to Each Other,” the mother baby dyad encounter each other by being in each other’s presence, looking at one another, as well as having physical and verbal exchanges. The process of “Responding to Each Other” is not just a series of encounters between the dyad as part of being situated together, but is

purposefully initiated by the mother to further solidify her newborn's awareness of her identity as his or her mother. The on-going interfaces between the mother and her newborn increase the level of acquaintance in that the mother learns more about and becomes more comfortable with her baby. Along with the increased level of acquaintance achieved while responding to each other, a distinct expansion and awareness of the affectional components of the relationship of the relationship come to light for the mother.

Taking Baby into the Inner Being

“Taking Baby into the Inner Being,” encompasses the less abstract category “Recognizing a New Segment of Self.” This process is driven by physical contact in which the mother desires to have proximity to and identifies her baby as an eternal part of her existence. “Recognizing a New Segment of Self” represents the adolescent mother's internal recognition that she is a parent and that the new role, while still not completely understood, is continuing to develop through on-going interaction with her baby. The mother perceives providing care for her newborn as a new opportunity that provides enjoyment and adds purpose to her life. Teen mothers expressed a desire to be recognized only for their self-realized role as mother and not their developmental level as an adolescent.

Embarking Together

The concept “Embarking Together” represents the adolescent mother incorporating her baby into her life armed with ongoing personal growth and unyielding devotion to their relationship. This concept encompasses the less abstract categories

“Shielding, Supplying, and Evaluating,” “Jumping off the Adolescent Developmental Milestone,” and “Walking the Adult Maternal Road.”

The category “Shielding Supplying and Evaluating” represents the adolescent mother’s intent and willingness to protect her baby from people and events, provide needs, and continually assess her actions based on her baby’s responses and status. As described in the data in Chapter 4, the mothers depended on direct visualization of their infants as a means of feeling confident regarding the welfare of the infants.

In “Jumping Off the Adolescent Milestone,” the mother conveys a desire to remain an adolescent coupled with the realization that she must move into the adult world. Her movement into the adult world is recognized as having time and interactions with her friends moderated by her new status as mother. A sense of forced compromise emerged as the mothers identified the baby as someone to hang out with and hold the position of a new friend in place of peer activities. Simultaneously, some mothers expressed a sense of loss over the normal teen lifestyle to which they were accustomed.

The category “Walking the Adult Maternal Road” encompasses the mothers’ incorporation of their babies into their lives and the developmental change in thinking from adolescent to adult. The mothers clearly began to recognize the role of parent is filled with activities which are time intensive and perceive there would be an added level of difficulty due to being an adolescent. The mothers conveyed that they must place the baby’s interests over their own needs and relationships with others. However, a strong sense of commitment emerged from the mothers to give their all to meet the needs of their babies and be there for them for the rest of their lives.

Central Organizing Construct

“Becoming Tied” is the central organizing construct for what occurs between adolescent mothers and their newborns in the immediate post partum period. This construct serves to encompass the eight categories and three core concepts that emerged from data analysis and is defined as the adolescent mother and her baby leading a conjoined existence as if without linkages to others.

Relationship of Findings to Previous Research

Rubin’s Taking In and Taking Hold

According to Rubin (1967a), physical and emotional energy of new mothers is turned inward immediately following delivery and then turned toward others in the immediate environment in a process known as puerperal change. Rubin believed that these energies could be observed in behaviors and attitudes of the mother and operationalized them into the "Taking-in phase," seen in the first and second postpartum day, and the "Taking-hold stage", beginning on the third postpartum day. Rubin (1984) revised her work related to the Taking In phase to include the cogitative taking-in of the infant through interactive processes.

The concept “Connecting Together” partially relates to the Taking-In phase where “neomaternal behaviors are begun.. and there is a taking-in cognitively, of the child” (Rubin, 1984, p. 96). In this study, participants clearly were Taking- In their babies through the processes of “Sensing We Know Each Other,” “Sizing Up the Newborn,” and “Responding to Each Other.” However, other aspects of the Taking-In phase where the

mother “accepts what she is given, tries to do what she is told, awaits the actions of others, and initiates very little herself” (Rubin, 1961, p. 754) were not evident in this study population. On the contrary, the mothers conveyed very little awareness of others in their environment and took a very active role in infant care activities. However, Rubin’s early work took place when sedating narcotics and sometimes general anesthesia were standards of obstetrical care, leaving mothers less well equipped to begin immediate interaction with their newborns. Simultaneously, newborns often spent most of their early days in a central nursery.

Building on the work of Rubin (1961, 1967a & 1967b), Martell and Mitchell (1984) attempted to re-evaluate Rubin's concept of puerperal change. Findings from their study were similar to those in this study in that attitudes during the first of two postpartal days did not indicate a strong “Taking-in phase,” and the Taking-hold phase peaked on the second postpartum day, earlier than described by Rubin.

Mercer’s Maternal Role Attainment

The theory developed from this research with adolescent mothers, “Becoming Tied” has similarities and differences with existing nursing research by Mercer (1980, 1981, 1985, & 1986) who implemented studies to determine the process and variables associated with Maternal Role Attainment (MRA). Mercer’s work indicated that mothers proceed during the first four months to eight months post-delivery through three stages of maternal role development; formal, informal and personal identity.

During the formal stage, which begins at birth, mothers begin identifying their infants’ uniqueness and begin caring for their babies by imitating the behaviors of others

(Mercer, 1995 & 2004). The processes described in “Sensing We Know Each Other” and “Sizing Up the Newborn” are congruent with Mercer’s formal stage. However, care taking activities, encompassed in “Shielding, Supplying, and Evaluating” do not correspond with the formal stage. The adolescent mothers in this study conveyed that care-taking activities were provided through trial and error, based on their babies’ responses, and founded on a sense of obligation. The mothers did not report using others as role models for infant care. The processes encompassed within “Shielding, Supplying, and Evaluating” appear more closely related to Mercer’s informal stage in which the mother begins to use her own judgment in regards to infant care.

In Mercer’s personal identity stage, mothers experience satisfaction with their new maternal role and achieve a sense of attachment to their babies. The adolescent mothers in this study clearly conveyed that they were experiencing satisfaction in the maternal role through infant care activities and the sense of purpose and independence they felt from their relationships with their babies as reflected in the category “Recognizing a New Segment of Self.” Mercer (1995) defined attachment as “a developmental process beginning during pregnancy and continuing over the months following birth in which the mother forms an enduring affection for and commitment to the child” (p. 130). The concept and core category “Connecting Together” which emerged in this study is surprisingly similar to Mercer’s definition of attachment.

Additional studies by Mercer (1980, 1990) found that adolescents age 15 to 17 are highly egocentric, idealistic, and do not consistently consider consequences of their behavior. Further, Mercer (1979a) found adolescent mothers’ expectations of the demands of motherhood were unrealistic and they did not have a positive outlook toward

their mother role during postpartum hospitalizations. Findings in this study do not coincide with Mercer's findings. The adolescent mothers in this study population were not found to be egocentric. The mothers conveyed a deep sense of commitment to their infants, recognized their needs, clearly stated that they placed their babies' interest over their own needs and relationships, while at the same time recognized that being a mother is hard as encompassed in "Walking the Adult Maternal Road." The mothers in this study also differed from those in Mercer's work in that they conveyed a sense of duty to provide and care for their infants and found their new role to be one that provided a sense of purpose and autonomy as encompassed in "Shielding, Supplying, and Evaluating," and "Recognizing a New Segment of Self." However, it should be noted that the mothers in Mercer's studies were followed for a longer period of time than those in this study, perhaps allowing for the realities of motherhood to be more fully comprehended.

Adolescent mother-infant interaction

The interactions encompassed in "Responding to Each Other" have a long history as indicators of maternal attachment in the literature. The quantitative nursing literature reveals conflicting findings as to what degree adolescents differ from adult mothers in maternal attachment behaviors. In a study conducted by Bloom (1995), maternal- interactions were measured by administration of the Maternal Attachment Assessment Strategy (MAAS) within 1 week of delivery to compare adolescent and adult mothers. The findings of the study demonstrated the existence of maternal-infant attachment in adolescents without variation among age groups. Conversely, Norr and Roberts (1991)

found adolescent mothers under the age of 18 demonstrated fewer maternal attachment behaviors than older mothers during the first three postpartum days.

In a study comparing adolescent and adult mothers, Kemp, Silbey and Pond (1990) found no significant differences between the groups on measures of maternal sensitivity and responsiveness to the infant using the Maternal-Infant Adaptation Scale (MIAS). Yet in a study utilizing the NCAFS, VonWindeguth and Urbano (1989) found a "statistically significant difference in the groups on the sub-scales of mothers sensitivity to cues, social-emotional growth fostering with total scores favoring older mothers" (p. 519).

Findings in this study revealed that adolescent mothers engaged their newborns at birth through visual and physical contact as encompassed in "Sensing We Know Each Other." Over the first postpartum week, mothers conveyed they engaged in an ongoing process of multiple, verbal, visual, and physical interfaces with their babies represented by "Responding to Each Other."

Limitations

The findings of this study should be considered in light of the following limitations:

1. Theoretical sampling did not allow for generalization of findings to the larger adolescent maternal population.
2. The study did not specifically address the influences of significant others in the maternal infant environment; therefore, their influence on the maternal infant situation, if any, were not incorporated into theory development.

3. One mother was married to and eight mothers were in relationships with the father of their baby which may be attributed to the culture of rural northeast Tennessee and not representative of the father support network of the larger adolescent maternal population.
4. The time of interview of participants varied from eight hours after delivery up to one week postpartum.
5. For those mothers interviewed within 24 hours of delivery, interview data may have been limited related to maternal fatigue and pain.
6. Interaction may have been affected by the presence of the researcher.
7. Because sampling occurred at only one point in time, it is impossible to know how much the theoretical construct was influenced by the “honeymoon” phase of new motherhood for the adolescent mothers.
8. Some mothers discussed prenatal feelings toward their infant and attempts at interaction with their fetus; however, no attempt was made to analyze what happened in the prenatal period.

Questions Raised by this Study

The goal of data analysis utilizing the Grounded Theory Method is “to account for a pattern of behavior which is relevant and problematic for those involved” (Glaser, 1978, p. 93). The theory “Becoming Tied” suggests a pattern of behavior which emerged from data analysis of 10 adolescent mothers’ rich descriptions of the interactive processes between themselves and their newborns during the immediate post-partum period. “Becoming Tied” is a three step process of “Connecting Together,” “Taking Baby into

the Inner Being,” and “Embarking Together” that emerged from the data and is centered around the core category, “Connecting Together.” The core category represents the adolescent mother infant dyad beginning to formulate a relationship through a process characterized by increasing levels of engagement and acquaintance. The pattern of behavior that emerged in “Becoming Tied” demonstrated the deep level of intimacy that was experienced by the mothers. The process of data analysis lead to the identification of several questions which require further attention:

1. What role if any does the father of the baby play in the interactive processes occurring between the adolescent mother and her baby?
2. What are the interactive processes that occur between adolescent fathers and their newborns in the immediate postpartum period?
3. Do adolescent mothers who experience Caesarian section delivery describe the same interactive processes as those in this study sample? Does the process occur later?
4. What are the interactive processes that occur between adolescent mothers with babies who have a congenital defect?
5. What are the interactive processes that occur between adolescent mothers and their babies who are born premature and require neonatal intensive care admission?
6. To what extent do adolescent mothers’ babies continue to be the central focus of their lives after the immediate post-partum period?

Recommendations

1. Adolescent mothers and their newborns should be afforded ample time for physical contact and positioned to maximize eye contact immediately upon delivery.
2. Health care providers should not assume that adolescent mothers do not engage their newborns as a function of their developmental level but should assess the level of engagement and encourage ongoing interactions as individual assessment findings dictate.
3. Health care providers and family members should explicitly make known to the adolescent mother that they are available for emotional support and to provide assistance with the baby.
4. Health care providers and family members should brainstorm with adolescent mothers regarding ways that they can incorporate their newborns into their social lives and peer groups.
5. Health care organizations should consider ways to develop adolescent mother/father support groups to provide ongoing support, education, and encourage peer interaction.

Implications for Future Research

Nursing research to date is largely quantitative and depicts a less than positive view of adolescent mothers. In a meta-synthesis of qualitative studies related to adolescent motherhood, Clemmons (2003) found the “emergence of qualitative research has uncovered the complexities inherent in these adolescents’ lives” (p. 93). However,

the qualitative studies related to adolescent motherhood were not conducted in the immediate postpartum period, and none focused on the interactive processes occurring between adolescent mothers and their newborns in the immediate postpartum period.

The findings of this study suggest the need for:

1. Replication of this study in an ethnically diverse adolescent population.
2. Replication of this study in larger health care environments in urban settings.
3. Replication of this study with adolescent populations experiencing obstetrical complications.
4. Qualitative, longitudinal studies to learn more about the process of maternal infant interaction in adolescent populations beyond the immediate postpartum period.

Summary

Mercer (2004) asserts that “theory building is a continual process as research findings provide evidence for clarification of concepts, additions, or deletions” (p. 230). This study has provided a beginning understanding from the perspective of the adolescent mother of the interactive processes that occur between her and her newborn in the immediate postpartum period. It is hoped that the substantive theory “Becoming Tied” will be a starting point for continued exploration of the relationship between of adolescent mothers and their newborns.

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Appendices

Appendix A

Assent Form: Adolescent Mother Participant

Assent Form
Adolescent Mother Participant
From the Ground Up: A Theory of Adolescent Maternal-Infant Interaction

You are being asked to participate in a research study. This form explains what the research is about and what you will do if you decide to be in the study. parent (s) or guardian said that it is okay with them if you want to be in the study. Please read all the information below carefully and feel free to ask any questions. If you decide to be in the study, you will need to sign the last page of this form. If you do not want to take part in the research, you do not have to do anything but say you do not want to participate.

Purpose

This study has two purposes. The first is to find out from teenage mothers what it is like for them getting to know their babies right after delivery. The second purpose is to develop a theory of how teenage mothers interact with their babies from what child and other adolescent mothers say in their interviews. The theory will allow more research to be done and may help nurses learn how to better care for teenage mothers after delivery.

Duration

If you are part of the study you will be interviewed about how it is for you getting to know baby. You will be interviewed no sooner than 8 hours after you deliver baby. You will talk to the researcher, Melinda Collins, about 30 to 60 minutes while in the hospital after having baby or within a week after you leave the hospital at a time and place choose. She may want to talk to you a few weeks after the first interview at a time and place that you choose.

Procedures

If you agree to participate in the study before you deliver, you will be asked to tell Ms. Collins due date and allow her to call the hospital around that time to see if you have delivered baby. This will keep you from having to remember to call her when you go to the hospital. However, you may call Ms. Collins when you have baby if you prefer.

You will be contacted by Ms. Collins to set up a time for interview. To start the interview, you will be asked to tell Ms. Collins about baby and how it is for you getting to know him or her. The questions you will be asked after that will depend on what you say and what you want to talk about. As part of understanding how it is for you getting to know baby, Ms. Collins will be observing how you and baby interact during the interview.

You may be contacted for a second interview after all the adolescent mothers in the study have been interviewed. This interview will take place at a time and place of choosing. During the second interview Ms. Collins will show the results of her research findings and ask you verify that she understood what you said in first interview.

name, baby's name, the baby's father's name, or family's name will not be used, and no one will be able to tell that you were part of this study from what the researcher writes. Melinda Collins is the only person who will know by name who said what. interview (s) will be tape recorded but you will use a fake name on the tape so the person who types the conversations will not know who you are. You may have a typed copy of the interview if you wish.

interview will be private wherever it happens. If interview is done in the hospital the door will be closed. Ms. Collins will tell the hospital staff not to come into room during the interview unless you need them. The hospital staff will be told to knock on the door and wait to be asked to come in if they must come in during the interview. During the interview a sign will be on the door that says, "Please do not disturb" so no one will accidentally come in and hear what you are saying. If interview is done after you leave the hospital, you will pick the time and place where you will meet with Ms. Collins. No matter where the interview takes place, you will do it with baby in the room as well as anyone else you want to be there. Or, you can do it with no one but Ms. Collins and baby in the room.

You do not have to take part in this research, but if you do, you don't have to talk about anything you don't want to talk about and you can stop being in the study at anytime. Being or not being in the study will not change anything about the care that you or baby get while in the hospital or after you go home. Being or not being in the study will not change how long you stay in the hospital.

Possible Risks/Discomforts

There is no cost to participate in the research study. Right after having a baby is an emotional time and talking about experiences may make you feel overwhelmed. If you start to feel emotional and overwhelmed about having baby you will be given help by nurses at the hospital no matter if the interview is done in the hospital or after you go home. There may be risks or discomforts that no one knows about right now, but you will receive immediate help if something makes you uncomfortable that was not planned for or expected.

Possible Benefits and Compensation

Talking about what it is like for you getting to know baby may help you understand feelings about baby and make birth experience better. You will not be paid to be part of this study, but you will receive a \$25.00 Wal-Mart gift card at the end of the first interview as a way for Ms. Collins to say thank you for being in her study, which may include a second interview a few weeks later.

Contact for Questions

If you have any questions, problems or research-related medical problems at any time you may call Ms. Collins at 423-360-1504 or Dr. Johnnie Mozingo, PhD, RN at 1-865-974-7623. You may call the Chairman of the Institutional Review Board of East Tennessee State University at 423-439-6055 or the Compliance Section of the Office of Research for the University of Tennessee at 865-974-3466 for any questions you may have about rights as a research participant.

Confidentiality

Every attempt will be made to see that study results are kept confidential. A copy of the records from this study will be locked in a filing cabinet in Ms. Collins' office for at least 3 years after the end of this research. The results of this study may be published and/or presented at meetings but you will not be identified. Although rights and privacy will be maintained, the Secretary of the Department of Health and Human Services, ETSU IRB, University of Tennessee IRB and Ms. Collins' faculty committee at the University of Tennessee will have access to the study records. If Ms. Collins witness behavior by anyone in contact with baby that could cause harm to him or her she is required by law to report this situation to the proper authorities. records will be kept completely confidential according to current legal requirements. They will not be revealed unless required by law, or as noted above.

Compensation for Medical Treatment

If you sustain injury as a result of participating in this study, treatment will be provided. Ms. Collins will be responsible for any harm, injury, or other adverse consequences that you may experience as a result of voluntary participation in this study. You may contact Ms. Collins at 423-230-7077.

Mountain States Health Alliance is cooperating in this study, but has not control over the study or Ms. Collins. Therefore, by signing this Informed Consent Document, you hereby and forever release and indemnify and hold harmless Mountain States Health Alliance and its employees, agents, and affiliates, from any liability, claim, cause of action, damages, or judgment which might arise from any result or consequence to trail, anticipated or unanticipated, by virtue of participation in this research project as a volunteer.

Voluntary Participation

The purpose, demands, risks, and benefits of the study have been explained to me as well as are known and available. I understand what I will do in the study. Furthermore, I understand that I am free to ask questions and stop being in the study at any time without penalty. I have read, or have had read to me, and understand the informed consent form. I sign it freely and voluntarily. A signed copy has been given to me.

My study record will be kept in strictest confidence according to current legal requirements and will not be revealed unless required by law or as noted above.

I consent to participate.

Signature of Volunteer

Date

Signature of Investigator

Date

Appendix B
Informed Consent Document
Adolescent Mother Participant

Informed Consent Document
Adolescent Mother Participant
From the Ground Up: A Theory of Adolescent Maternal-Infant Interaction

You are being asked to participate in a research study. This document explains what the research is about and what you will do if you decide to be in the study. Please read all the information below carefully and feel free to ask any questions. You are the only person that can decide if you want to take part in this study. If you decide to participate, you will need to sign the last page of this form. If you do not want to take part in the research, you do not have to do anything but say you do not want to participate.

Purpose

This study has two purposes. The first is to find out from teenage mothers what it is like for them getting to know their babies right after delivery. The second purpose is to develop a theory of how teenage mothers interact with their babies from what child and other adolescent mothers say in their interviews. The theory will allow more research to be done and may help nurses learn how to better care for teenage mothers after delivery.

Duration

If you are part of the study you will be interviewed about how it is for you getting to know baby. You will be interviewed no sooner than 8 hours after you deliver baby. You will talk to the researcher, Melinda Collins, about 30 to 60 minutes while in the hospital after having baby or within a week after you leave the hospital at a time and place you choose. She may want to talk to you a few weeks after the first interview at a time and place that you choose.

Procedures

If you agree to participate in the study before you deliver, you will be asked to tell Ms. Collins due date and allow her to call the hospital around that time to see if you have delivered baby. This will keep you from having to remember to call her when you go to the hospital. However, you may call Ms. Collins when you have baby if you prefer.

You will be contacted by Ms. Collins to set up a time for interview. To start the interview, you will be asked to tell Ms. Collins about baby and how it is for getting to know him or her. The questions you will be asked after that will depend on what you say and what you want to talk about. As part of understanding how it is for you getting to know baby, Ms. Collins will be observing how you and baby interact during the interview.

You may be contacted for a second interview after all the adolescent mothers in the study have been interviewed. This interview will take place at a time and place of choosing. During the second interview Ms. Collins will show the results of her research findings and ask you verify that she understood what you said in first interview.

name, baby's name, the baby's father's name, or family's name will not be used, and no one will be able to tell that you were part of this study from what the researcher writes. Melinda Collins is the only person who will know by name who said what. interview (s) will be tape recorded but you will use a fake name on the tape so the person who types the conversations will not know who you are. You may have a typed copy of the interview if you wish.

interview will be private wherever it happens. If interview is done in the hospital the door will be closed. Ms. Collins will tell the hospital staff not to come into room during the interview unless you need them. The hospital staff will be told to knock on the door and wait to be asked to come in if they must come in during the interview. During the interview a sign will be on the door that says, "Please do not disturb" so no one will accidentally come in and hear what you are saying. If interview is done after you leave the hospital, you will pick the time and place where you will meet with Ms. Collins. No matter where the interview takes place, you will do it with baby in the room as well as anyone else you want to be there. Or, you can do it with no one but Ms. Collins and baby in the room.

You do not have to take part in this research, but if you do, you don't have to talk about anything you don't want to talk about and you can stop being in the study at anytime. Being or not being in the study will not change anything about the care that you or baby get while in the hospital or after you go home. Being or not being in the study will not change how long you stay in the hospital.

Possible Risks/Discomforts

There is no cost to participate in the research study. Right after having a baby is an emotional time, and talking about experiences may make you feel overwhelmed. If you start to feel emotional and overwhelmed about having baby you will be given help by nurses at the hospital no matter if the interview is done in the hospital or after you go home. There may be risks or discomforts that no one knows about right now, but you will receive immediate help if something makes you uncomfortable that was not planned for or expected.

Possible Benefits and Compensation

Talking about what it is like for you getting to know baby may help you understand feelings about baby and make birth experience better. You will not be paid to be part of this study, but you will receive a \$25.00 Wal-Mart gift card at the end of the first interview as a way for Ms. Collins to say thank you for being in her study, which may include a second interview a few weeks later.

Contact for Questions

If you have any questions, problems or research-related medical problems at any time you may call Ms. Collins at 423-360-1504 or Dr. Johnie Mazingo, PhD, RN at 1-865-974-7623. You may call the Chairman of the Institutional Review Board at East Tennessee State University at 423-439-6055 or the Compliance Section of the Office of

Research for the University of Tennessee at 865-974-3466 for any questions you may have about rights as a research participant.

Confidentiality

Every attempt will be made to see that study results are kept confidential. A copy of the records from this study will be locked in a filing cabinet in Ms. Collins' office for at least 3 years after the end of this research. The results of this study may be published and/or presented at meetings but you will not be identified. Although rights and privacy will be maintained, the Secretary of the Department of Health and Human Services, ETSU IRB, University of Tennessee IRB and Ms. Collins' faculty committee at the University of Tennessee will have access to the study records. If Ms. Collins witness behavior by anyone in contact with baby that could cause harm to him or her she is required by law to report this situation to the proper authorities. records will be kept completely confidential according to current legal requirements. They will not be revealed unless required by law, or as noted above.

Compensation for Medical Treatment

If you sustain injury as a result of participating in this study, treatment will be provided. Ms. Collins will be responsible for any harm, injury, or other adverse consequences that you may experience as a result of voluntary participation in this study.

Mountain States Health Alliance is cooperating in this study, but has not control over the study or Ms. Collins. Therefore, by signing this Informed Consent Document, you hereby and forever release and indemnify and hold harmless Mountain States Health Alliance and its employees, agents, and affiliates, from any liability, claim, cause of action, damages, or judgment which might arise from any result or consequence to trail, anticipated or unanticipated, by virtue of participation in this research project as a volunteer.

Voluntary Participation

The purpose, demands, risks, and benefits of the study have been explained to me as well as are known and available. I understand what I will do in the study. Furthermore, I understand that I am free to ask questions and stop being in the study at any time without penalty. I have read, or have had read to me, and understand the informed consent form. I sign it freely and voluntarily. A signed copy has been given to me.

My study record will be kept in strictest confidence according to current legal requirements and will not be revealed unless required by law or as noted above.

I consent to participate.

Signature of Volunteer

Date

Signature of Investigator

Date

Appendix C

Parental Informed Consent Document

for

Adolescent Mother Participant

Parental Informed Consent Document
for
Adolescent Mother Participant
From the Ground Up: A Theory of Adolescent Maternal-Infant Interaction

You are being asked for consent to allow the adolescent mother for whom you are guardian, referred to as child, to participate in a research study. This document explains what the research is about and what child will do if you decide to allow her to be in the study. Please read all the information below carefully and feel free to ask any questions. You are the only person that can give consent for child to take part in this study. If you decide to allow her to participate, you will need to sign the last page of this form. If you do not want her to take part in the research, you do not have to do anything but say you do not want her to participate.

Purpose

This study has two purposes: the first is to find out from teenage mothers what it is like for them getting to know their babies right after delivery. Second, to take what child and other adolescent mothers say and develop a theory of how teenage mothers interact with their babies. The theory will allow more research to be done and may help nurses learn how to better care for teenage mothers after delivery.

Duration

If child is part of the study she will be interviewed about how it is for her getting to know her baby. She will be interviewed no sooner than 8 hours after delivery. She will talk to the researcher, Melinda Collins, about 30 to 60 minutes while in the hospital after having her baby or within a week after she leaves the hospital at a time and place she chooses. Ms. Collins may want to talk to child a few weeks after the first interview at a time and place that child chooses.

Procedures

If you agree for child to participate in the study before she delivers, child will be asked to tell the researcher her due date and allow Ms. Collins to call the hospital around that time to see if she has delivered her baby. This will keep child from having to remember to call Ms. Collins when she goes to the hospital. However, child may call Ms. Collins when she has her baby if she prefers.

You child will be contacted by Ms. Collins to set up a time for the interview. To start the interview, child will be asked to tell Ms. Collins about her baby and how it is for them getting to know each other. The questions Ms. Collins will ask after that will depend on what child says and wants to talk about.

child's name, name, the baby's name, the baby's father's name or family's name will not be used, and no one will be able to tell that child was part of this study from what the researcher writes. Ms. Collins is the only person who will know by name who said what. child's interview (s) will be tape recorded but she will use a fake name on the tape so the

person who types up the conversations will not know who she is. child may have a typed copy of the interview if she wishes.

child's interview will be private wherever it happens. If the interview is done in the hospital the door will be closed. Ms. Collins will tell the hospital staff not to come into child's room during the interview unless she needs them. The hospital staff will be told to knock on the door and wait to be asked to come in if they must come in during the interview. During the interview a sign will be on the door that says, "please do not disturb" so no one will accidentally come in and hear what child is saying. If the interview is done after child leaves the hospital, she will pick the time and place where she will meet with Ms. Collins. No matter where the interview takes place, child will do it with her baby in the room as well as anyone else she wants to be there. Or, she can do the interview with no one but Ms. Collins and her baby in the room.

child does not have to take part in this research, but if she does, she does not have to talk about anything she does not want to talk about and she can stop being in the study at anytime. Being or not being in the study will not change anything about the medical or nursing care that child or her baby gets while in the hospital or after they go home. Being or not being in the study will not change how long child stays in the hospital after she delivers.

Possible Risks/Discomforts

There is no cost to participate in the research study. Right after having a baby is an emotional time. Talking about her experiences may make child feel overwhelmed. If she starts to feel emotional and overwhelmed about having her baby she be helped by her nurses at the hospital no matter if the interview is done in the hospital or after she goes home. There may be risks or discomforts that no one knows about right now, but child will receive immediate help if something makes her uncomfortable that was not planned for or expected.

Possible Benefits and Compensation

Talking about what it is like for her getting to know baby may help child understand her feelings about her baby and make her birth experience better. You and child will not be paid to be part of this study, but child will receive a \$25.00 Wal-Mart gift card at the end of the first interview as a way for Ms. Collins to say thank you for being in the study; which may include a second interview a few weeks later.

Contact for Questions

If child has any questions, problems or research-related medical problems at any time you or child may call Ms. Collins at 423- 230-7077 or Dr. Johnie Mzingo, PhD, RN at 1-865-974-7623. You or child may call the Chairman of the Institutional Review Board of East Tennessee State University at 423-439-6134 or the Compliance Section of the Office of Research at the University of Tennessee at 865-974-3466 for any questions you may have about child's rights as a research participant.

Confidentiality

Every attempt will be made to see that child's study results are kept confidential. A copy of the records from this study will be locked in a filing cabinet in Ms. Collins' office for at least 10 years after the end of this research. The results of this study may be published and/or presented at meetings but child will not be identified. Although child's rights and privacy will be maintained, the Secretary of the Department of Health and Human Services, ETSU IRB, University of Tennessee IRB and Ms. Collins' faculty committee at the University of Tennessee will have access to the study records. child's records will be kept completely confidential according to current legal requirements. They will not be revealed unless required by law, or as noted above.

Compensation for Medical Treatment

If child sustains injury as a result of participating in this study, treatment will be provided. Ms. Collins will be responsible for any harm, injury, or other adverse consequences that may experience as a result of child's voluntary participation in this study.

You will hereby and forever release, indemnify and hold harmless Mountain States Health Alliance, its employees, agents and affiliates, from any liability, claim, cause of action, damages or judgments which might arise from any result or consequence to child, anticipated or unanticipated, by virtue of child's participation in this research project as a volunteer. Melinda Collins will be responsible for any harm, injury, or other adverse consequences you may experience as a result of child's voluntary participation in this study.

Voluntary Participation Consent

The purpose, demands, risks, and benefits of the study have been explained to me as well as are known and available. I understand what my child will do in the study. Furthermore, I understand that I and my child are free to ask questions and my child can stop being in the study at any time without penalty. I have read, or have had read to me, and understand the informed consent form. I sign it freely and voluntarily. A signed copy has been given to me.

My child's study record will be kept in strictest confidence according to current legal requirements and will not be revealed unless required by law or as noted above.

Name of Minor Child

Signature of Parent or Guardian

Date

Signature of Investigator

Date

Appendix D
Demographic Data Sheet

Data Face Sheet

Research Pseudonym: _____

Participant Number: _____

Interview Number: _____

Interview Date: _____ Interview time: _____

Date to Transcription: _____ Date Returned: _____

Name: _____

Address: _____

Phone: _____ email: _____

Research Pseudonym: _____

Participant Number: _____

Interview Number: _____

Interview Date: _____ Interview time: _____

Date to Transcription: _____ Date Returned: _____

Due Date: _____ Date of Delivery: _____ Infant gender:

Method of Delivery: Vag. _____ C-Section: _____

Length of Labor: _____ Epidural: _____, IV pain medications

Feeding Method: Breast: _____ Bottle: _____

Experience with Infants: Yes: _____ Type:

No: _____

Prenatal Classes: Yes: _____ Did anyone attend with you, if so, who?

No: _____

Prenatal Care: _____ Weeks gestation at initiation of prenatal care:

Age: _____ Race: _____ Highest Grade Completed: _____

Plan to return to school: _____ Employment: _____

Relationship to father of baby:

Married: _____

Not married but together as a couple: _____

Not in a relationship with father of baby: _____

Will father visit the baby? _____

Will father provide money for the baby? _____

Where will you and baby live when you go home from the hospital?

Vita

Melinda K. Collins was born at the Little Rock United States Air Force Base in Little Rock, Arkansas in 1966. She grew up in Kingsport, Tennessee and attended Kingsport City Schools, graduating from Dobyys-Bennett High School in 1984. She is a graduate of Vanderbilt University School of Nursing, Nashville, Tennessee, with a program of studies focusing on the care of critically ill newborns.

Her professional experiences include working as a staff nurse, clinical nurse manager, consultant, and faculty member. She is an Associate Professor and Area Chair of Nursing at Milligan College. She has received the honor of induction to Sigma Theta Tau, International Honor Society of Nursing and Phi Kappa Phi. She is also a member of the Association for Women's Health, Obstetric, and Neonatal Nurses, Tennessee Deans and Directors Association, and the Tennessee Nurses' Association.

She is married and the proud mother of two children.