

**A DESCRIPTION OF THE MATERNAL DECISION-MAKING
PROCESS REGARDING CIRCUMCISION**

by

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A DISSERTATION

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Mothers, as dependent-care agents for their child, must make multiple decisions concerning the health care of the child. One of the first decisions that must be made by mothers of male children is a decision for or against circumcision. A conceptual framework consisting of Orem's (1988) model of deliberate action during dependent-care and Fishbein and Ajzen's (1975) theory of reasoned action was proposed as an explanation of the maternal decision-making process.

A qualitative study was conducted to determine if the proposed conceptual framework could provide an accurate description of the maternal decision-making process regarding circumcision. Interviews were conducted with 20 mothers of male infants less than 72 hours of age and a content analysis was performed on the transcripts of the interviews.

The phases of decision-making in the model of deliberate action during dependent-care and the components of the theory of reasoned action were identified from the

transcripts. Therefore, the conceptual framework was supported by the findings. Recommendations for future research included further development and testing of the conceptual framework.

Abstract Approved by: Committee Chairman _____
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CHAPTER I

Introduction

At the birth of an infant, a mother as a dependent-care agent for her infant, begins a series of decisions about her infant's health care. Decisions must be made early in the life of the infant on feeding methods, a health care provider for the infant, and, if the infant is male, on circumcision. As the child grows, the mother must make decisions on preventive health care and treatment of childhood injuries such as scrapes and cuts. If the child becomes ill, decisions must be made to seek the assistance of health care providers and to determine treatment for the child. These maternal decisions have the potential to alter a child's entire life and are of particular interest for maternal-child nurses, yet rarely have been studied by nurse researchers. If maternal decisions about the health care of their infants and children are to be understood, the maternal decision-making process first must be described.

For health care professionals to understand maternal decisions, a theoretical framework is needed to describe the maternal decision-making process. Although many theories of personal decision-making are in the literature (Brinkers, 1972; Corcoran, 1986a; Fishbein & Ajzen, 1975; Grier, 1976; Porter, Lawler, & Hackman, 1975; Triandis, 1964), few of

these decision-making theories have been utilized to describe and study maternal decisions about the health care of children. To explain the motivation for self-care and dependent-care, Orem (1985, 1988) described the phases of the decision-making process in the model of deliberate action. However, little research has been conducted on this component of Orem's conceptual framework.

Although the model of deliberate action during dependent-care describes the phases of decision-making, the judgment process during decision-making is not addressed. The theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) delineates a theoretical description of the judgment process during decision-making and, when integrated into Orem's (1985, 1988) model of deliberate action during dependent-care, a comprehensive description of the maternal decision-making process is provided. The purpose of this study was to determine if this proposed conceptual framework of the model of deliberate action during dependent-care and the theory of reasoned action was an accurate description of the maternal decision-making process.

Circumcision of a male infant is an example of one of the first decisions that new mothers must make. According to Harris (1985, 1986), this decision can have a lasting effect on the cultural acceptance of a male child or adult in American society. Maternal decisions to circumcise their infants have presented an enigma for health care professionals for the past 14 years (Grimes, 1980; King,

1982; Lincoln, 1986; Thompson, 1983; Wallerstein, 1985). Despite controversy among health care professionals about the medical benefits of circumcision (American Academy of Pediatrics, 1975, 1989), circumcision rates in the United States remain at 80% to 97% of all male infants born each year and present an annual cost of over \$60 million (Wallerstein; Warner & Strashim, 1981). How mothers make their decision for or against circumcision has not been studied or described from a theoretical framework by health care professionals. This study provided a qualitative examination of the proposed conceptual framework for the maternal decision-making process within the context of the maternal decision regarding circumcision.

Purpose

The purpose of this study was to determine if the phases of decision-making in the model of deliberate action during dependent-care (Orem, 1985, 1988) and the components of the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) could be identified from the descriptions by mothers about their decision-making process regarding circumcision.

Conceptual Framework

Decision-Making

A general consensus among authors on decision-making is that decision-making is a process that must be viewed from the whole rather than as individual variables (Callahan, 1988; Corcoran, 1986b; Drucker, 1967; Emory & Niland, 1968; Gore & Silander, 1969; Kessler & Levine, 1987; Mancuso &

Rose, 1987; Marson, McGovern, & Pomp, 1988; Ortez & Nuttall, 1987; Tauer, 1984). As a process, decision-making is dynamic and cyclic in nature, incorporating change as an integral component (Schaefer, 1974).

Another area of agreement in the literature is the definition of decision-making as the systematic process of choosing between two or more alternatives. This process of choosing between the alternatives involves judgment and deliberation (del Bueno, 1983; Drucker, 1967; Emory & Niland, 1968; Gore & Silander, 1969; Schaefer, 1974). Tauer (1974) gave purpose to decision-making by defining it as the process of developing a plan of action to reach a goal. In examining decision-making in the health care setting, Caniano and Kanoti (1988) defined clinical decision-making as the process of making a choice between what can be done for a patient and what should be done for that patient.

Despite agreement on the definition of decision-making, few authors agree on the description of the actual process of making decisions. The process of decision-making has been described in the literature of the disciplines of mathematics, psychology, sociology, economics, medicine, and nursing (Wilson & Alexis, 1969). The simplest explanation of the decision-making process is that of the decision tree. Examples of decision trees can be found in the literature to describe adolescent contraceptive decisions, engineering decisions, business decisions, medical diagnosis and treatment decisions, career decisions, and marriage decisions (Brinkers, 1972; Emory & Niland, 1968; Hayes,

1987; Pauker & Kassirer, 1988; Riggs, 1968). A more formal type of decision tree is an algorithm that gives detailed steps and alternatives in the decision-making process (Chatburn, Carlo, & Lough, 1983; Shaw, 1988; Wilson & Alexis).

However, the process of decision-making is not as simple as delineating the alternatives in a decision tree. Many models and theories have been proposed to explain the complicated process of making decisions. The expectancy-value theory (Porter et al., 1975), conflict model of decision-making (Janis & Mann, 1977a, 1977b), decision theory (Brinkers, 1972; Drucker, 1967; Grier, 1976), and theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) are only a few of the decision-making theories in the literature. In the health care literature, the theory of reasoned action has been utilized to describe the personal decision-making process of clients (Austin, 1989; Bagozzi, 1981a, 1981b, 1982; Ewald & Roberts, 1985; Jaccard & Davidson, 1972, 1975; Jorgensen & Sonstegard, 1984; Manstead, Proffitt, & Smart, 1983; Pagel & Davidson, 1984; Pender & Pender, 1986) while decision theory has been utilized to describe the decisions of health care professionals regarding the care of the client (Clancy, Cebul, & Williams, 1988; Grier, 1976; Johnson, Elkins, Strong, & Phelan, 1986; Mancuso & Rose, 1987).

For health care professionals and clients, one major difficulty in making decisions is the uncertainty of outcomes of alternatives in health care situations. If the

probability of the outcome of an alternative course of action cannot be assigned, decision-making of health care professionals, clients, and their families becomes more unpredictable (Cohen, 1964). Uncertainty of outcomes is a major aspect of decision-making that makes decision-making more difficult and unpredictable for both the client and health care provider in health care situations (Caniano & Kanoti, 1988; Evans et al., 1988; Fischer & Stevenson, 1987; Fleischman & Rhoden, 1988; Lantos, Miles, Silverstein, & Stocking, 1988; Marchwinski, 1988; Walters, 1988). Despite the difficulties with uncertainty of outcomes, an accurate description of the decision-making process is necessary to understand maternal dependent-care actions for their children.

The Model of Deliberate Action During Dependent-Care

Orem's (1985) conceptual framework of self-care and dependent-care provides a description of the model of deliberate action during dependent-care. Orem defined the dependent-care agent as "the provider of infant care, child care, or dependent adult care" (p. 84). Newborn infants have limited self-care agency and are reliant upon dependent care agents to meet most of their needs (Facteau, 1980). While many people may serve as a dependent-care agent, traditionally mothers have been the primary dependent-care agent for children in the first weeks of life. This tradition is illustrated by the policy in many hospitals in the United States of requesting maternal written consent for

circumcision (Lovell & Cox, 1979; Rand, Emmons, & Johnson, 1983).

In the process of caring for another person, the dependent-care agent performs activities referred to as deliberate actions. Deliberate action is the process of performing simple and complex actions to achieve a goal. During the process of providing dependent-care for her infant, a mother performs both simple and complex actions that meet what she perceives as the needs of the infant.

Deliberate action was described by Orem (1988) as having three phases. The first phase is estimative and through information-seeking behaviors and reflection, the product of knowledge is obtained. In the estimative phase, investigation is made into the factors involved in the need for dependent-care, the meaning of these factors, and possible alternatives that can alter or regulate these factors (Concept Development Conference Group, 1979).

The second phase is transitional and includes the operations of judgment and decision-making. The product of the transitional phase is the decision. In the transitional phase, the individual evaluates the potential effects of the alternatives for action found in the estimative phase. The values of the individual motivate the individual to decide what will be done during dependent-care. The third and final phase is the productive phase. In this final phase, the actual activities of dependent-care occur (Concept Development Conference Group, 1979). Illustrated in Figure

1 is the model of deliberate action by the dependent-care agent.

Orem (1985) did not elaborate on the second phase of deliberate action, except to describe it as reflection and judgment resulting in a decision. The theory of reasoned action can be incorporated into the model of deliberate action to provide a description of the judgment process in the transitional phase of deliberate action during dependent-care.

The Theory of Reasoned Action

The theory of reasoned action is based on the assumption that individuals are rational and use knowledge to make decisions. Another assumption is that most behaviors are voluntary in nature and can be controlled by the individual. Therefore, it is assumed in the theory of reasoned action that individuals rationally utilize knowledge when deciding to engage in a behavior (Ajzen & Fishbein, 1980; Fishbein, 1980; Fishbein & Ajzen, 1975).

Ajzen and Fishbein (1980) stated that the goal of the theory of reasoned action is to understand and predict behavior. They further suggested that in the future their theory may be utilized to change behavior.

The first concept described by Fishbein and Ajzen (1975) in the theory of reasoned action is behavior. Behavior is defined as a single act by an individual. Behavior is differentiated from sets of action (behavioral categories) and behavioral outcomes. For example, losing weight is a behavioral outcome, dieting is a behavioral

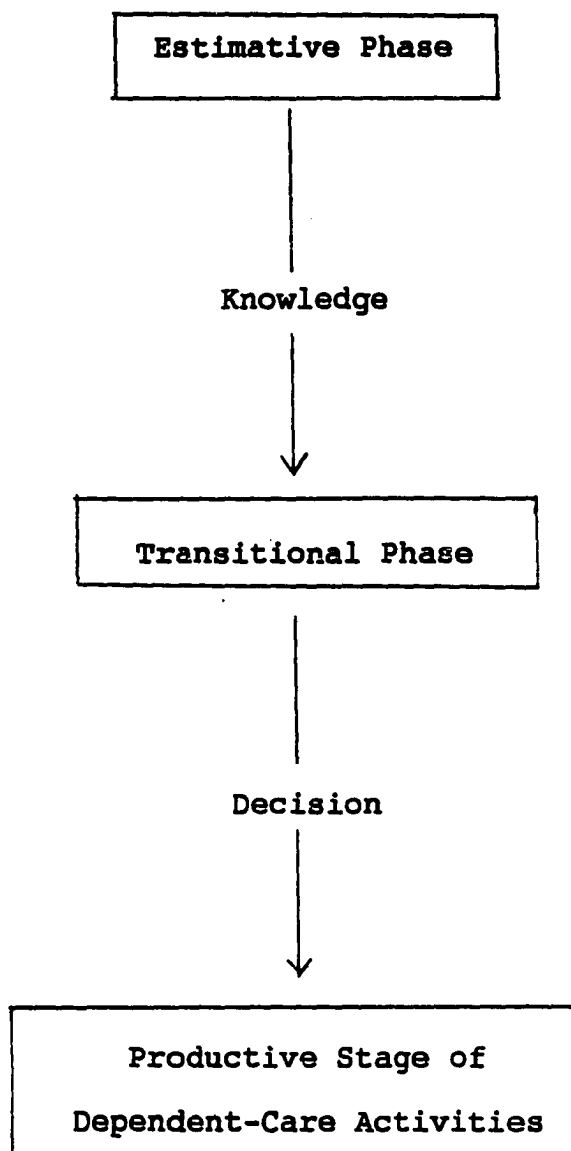


Figure 1. The Model of Deliberate Action During Dependent-Care

category, and a behavior is drinking a diet drink (Ajzen & Fishbein, 1980).

The second concept described in the theory of reasoned action is intentions. Intentions are an individual's report that they plan to perform or not perform a behavior. Intentions can be determined by asking the individual the probability that they will perform a specific behavior.

The third concept is attitude. Attitude is defined as a learned predisposition to a behavior. Included in the attitude is the individual's positive or negative evaluation of performing the behavior. An individual may view the behavior as good/bad or favorable/unfavorable (Ajzen & Fishbein, 1980; Fishbein & Coombs, 1974).

Concepts related to attitudes are behavioral beliefs and outcome evaluations. Behavioral beliefs are an individual's beliefs about the consequences or outcomes of performing a behavior. Outcome evaluations are the individual's determination that each possible behavioral consequence is good or bad.

The subjective norm is another major concept in the theory of reasoned action. The subjective norm is the individual's perception of social pressure to perform or not perform the behavior. Related concepts are normative beliefs and motivation to comply. Normative beliefs are an individual's beliefs that specific people want the individual to perform or not perform the behavior. The desire to conform to the perceived expectations of other people constitutes the motivation to comply.

The final concept is external variables. External variables are any factors that may influence behavioral or normative beliefs. Some suggested external variables are sex, personality, previously performing the behavior, religion, socioeconomic status, and occupation (Ajzen & Fishbein, 1980).

The propositions in the theory of reasoned action are:

1. Intentions are the immediate determinants of behavior.
2. Attitude and the subjective norm are the determinants of intentions.
3. The relative weight of the attitude and subjective norm in predicting behavioral intention varies with each individual and behavior.
4. Behavioral beliefs and outcome evaluations are the determinants of attitudes.
5. Normative beliefs and the motivation to comply are the determinants of the subjective norm.
6. External variables affect the behavioral and normative beliefs, but do not directly affect the attitude, subjective norm, or intention.

In summary, according to the theory of reasoned action, intentions are the determinants of behavior. Behavioral intentions are determined by the attitude and subjective norm for that behavior. Attitudes are formed by the behavioral beliefs and outcome evaluations. Subjective norms are formed by the normative beliefs and the individual's motivation to comply. Variables that affect

normative and behavioral beliefs are labeled as external variables. Illustrated in Figure 2 is the theory of reasoned action.

The Interrelationships of the Model of Deliberate Action During Dependent-Care and the Theory of Reasoned Action

Integration of the theory of reasoned action into the model of deliberate action during dependent care provides a comprehensive description of the maternal decision-making process. This integration served as the conceptual framework for this study.

As dependent-care agents, mothers make decisions regarding the daily care of their child as well as the health care of their child. The decision-making process of mothers can be described as occurring in three phases. In the first phase, the mother perceives that a decision must be made and seeks information on the available alternatives and their possible outcomes. The result of this first phase is knowledge.

In the second phase of decision-making, the mother evaluates and make judgments regarding the alternatives. This judgment process is viewed from the perspective of the theory of reasoned action. The mother evaluates her behavioral beliefs and outcome evaluations leading to the formation of an attitude toward the behavior. She further evaluates her normative beliefs and her motivation to comply forming the subjective norm. The subjective norm and attitude are the primary determinants in her decision about the care of her child. The result of this process of

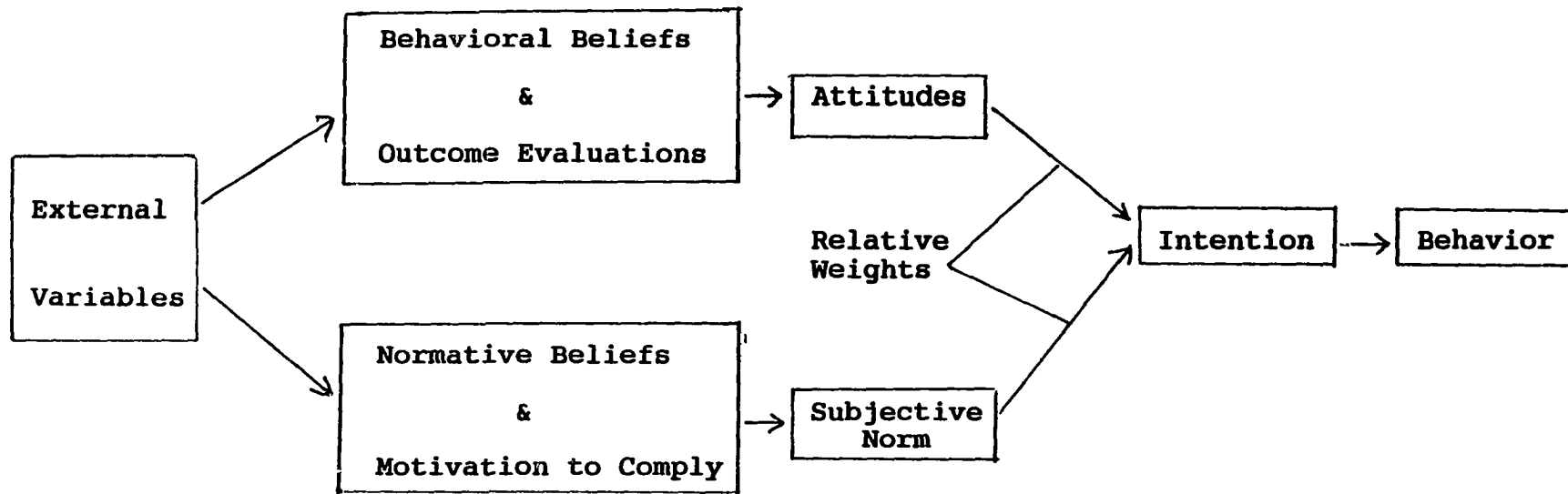


Figure 2. The Theory of Reasoned Action

Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice-Hall, Inc., p. 100.

evaluation is a decision or intention to perform or not perform a dependent-care action.

In the third and final phase of decision-making, the mother performs the activities of dependent-care. Dependent-care activities include performing the daily care of the child, seeking health care, and performing actions such as signing surgical consent permits to ensure that the desired health care is obtained. Illustrated in Figure 3 is the conceptual framework for this study.

Background of Circumcision

Circumcision is an example of a decision that mothers of male children in the United States make early in the life of their child. The history of circumcision furnishes a description of the environment of controversy and uncertainty of outcomes in which mothers make a decision on circumcision.

Circumcision, the removal of the foreskin of the penis, is one of the oldest surgical procedures recorded in history. Evidence of circumcision dates to Egyptian culture over 6,000 years ago (Grossman & Posner, 1994; Wallerstein, 1983, 1985). Jewish ritual circumcision began as a covenant between God and Abraham (Genesis 17). Throughout history and on all continents, circumcision continued to be a ritual in many cultures.

Until the 1870s, circumcision was only a religious ceremony and rite of passage. In the late 19th century, masturbation was considered a cause of many illnesses, including venereal disease. Following an influx into the

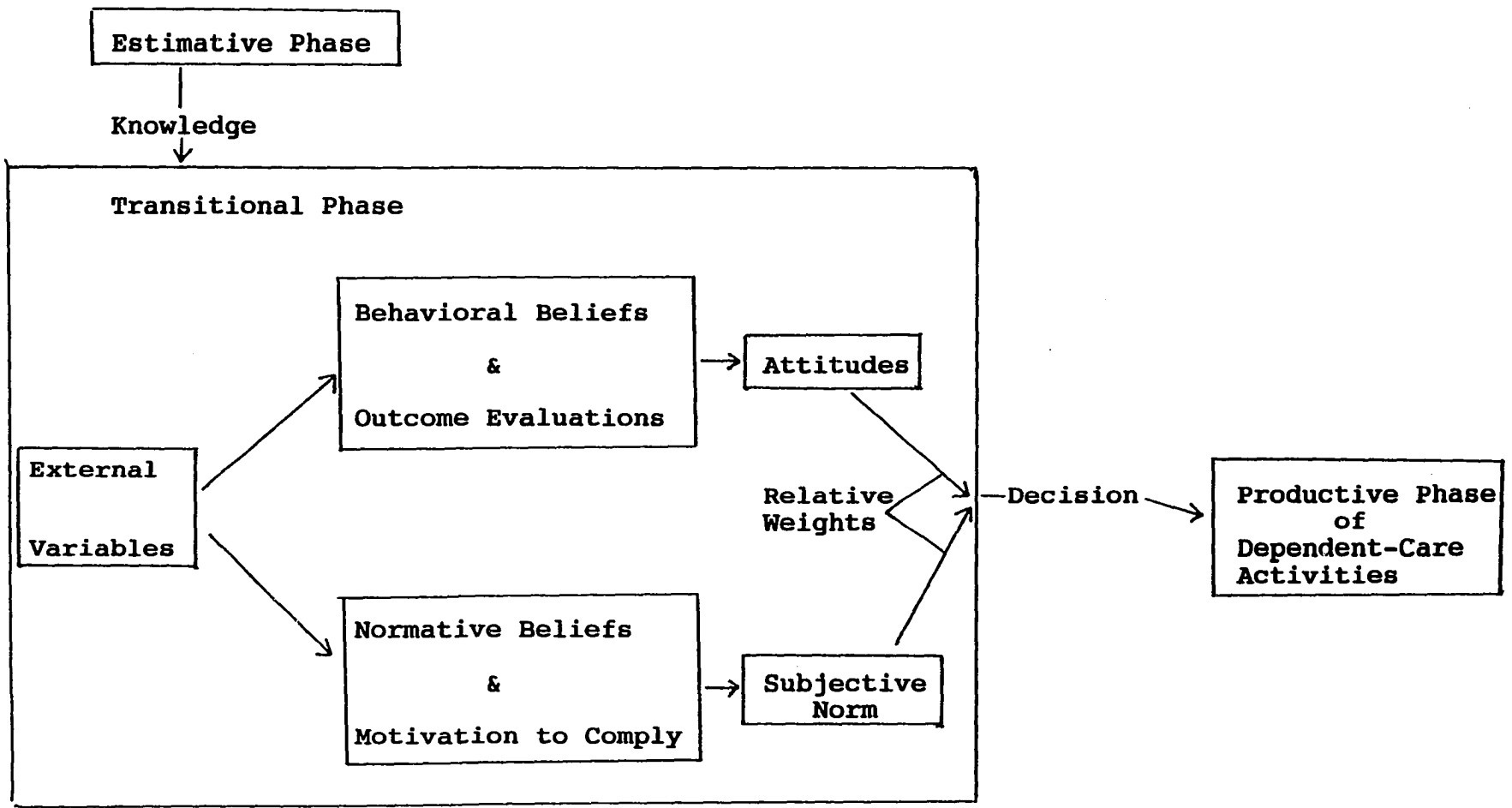


Figure 3. The Conceptual Framework for Maternal Decision-Making

United States of Jewish immigrants who were circumcised and had low rates of venereal disease, American physicians began advocating circumcision to prevent masturbation and therefore, venereal disease. Circumcision was considered a quick and easy method of preventing many emotional and physical illnesses (Wallerstein, 1983). Remondino, in 1891, claimed that circumcision cured or prevented various problems such as alcoholism, asthma, epilepsy, enuresis, gout, assaults on young girls, and other emotional and physical illnesses. Remondino's rationale for circumcision continued to be quoted in a 1934 textbook on circumcision (Bryk, 1934). Astonishingly his book was reprinted in 1974.

As physicians and nurses have continued to debate the benefits and risks of circumcision (Gibbons, 1979; Grimes, 1978; Grimes, 1980; Grossman & Posner, 1984; King, 1982; Lincoln, 1986; Lubchenco, 1980; Poole, 1979; Prucha, 1980; Roberts, 1986; Thompson, 1983; Weiss, 1985; Zimmer, 1977). American parents have continued to have their male infants circumcised. In 1870, approximately 5% of male infants born in the United States were circumcised. Circumcision rates gradually increased with 25% and 70% of male infants circumcised in 1900 and 1950, respectively (Wallerstein, 1983). Although no national data exist on circumcision frequency rates in the past decade, individual hospital rates are reported in the literature. Bennett and Weissman (1981) reported a circumcision rate of 81% in one East coast hospital, while Osborn (1981) reported a circumcision rate of 93% in a Western hospital in 1979. In 1985, Wallerstein

reported circumcision rates of 80% to 97% of all male infants born in the United States.

While circumcision rates were rising in the United States, circumcision rates rose and then fell to less than 1% of all male infants born in England. Wallerstein (1983) hypothesized that circumcision rates in England fell for two reasons: the lack of empirical support for the proposed benefits of circumcision and the termination of payment for circumcision by the British Health Service. Without payment for services, British physicians simply stopped performing circumcisions.

A monetary stimulus affected circumcision rates in the United States to a lesser degree than in England. In the early 1970s, technological improvements provided the stimulus for the development of neonatal intensive care units. In the United States, private insurance reimbursed physicians for circumcision, but did not reimburse physicians and hospitals for the care of sick infants. Thompson (1983) reported this "obvious injustice" as an impetus for American Academy of Pediatrics in 1971 to form a task force to determine an "objective answer" to the questionable value of circumcision.

In 1975, the American Academy of Pediatrics concluded that based on the lack of empirical evidence of the benefits of circumcision and on anecdotal reports of the risks of circumcision, there were "no absolute" medical reasons for routine circumcision (American Academy of Pediatrics, 1975). The controversy over circumcision continued as the American

Academy of Pediatrics changed their opinion in March 1989 when new studies began to document potential benefits of circumcision. The report of the Task Force on Circumcision stated that "newborn circumcision has potential medical benefits and advantages" (American Academy of Pediatrics, 1989, p. 10).

Despite the monetary stimulus behind the circumcision debate, few estimates of the cost of circumcision are reported in the literature. Cunningham (1983) estimated the cost in the United States of circumcision at \$50 million a year. Warner and Strashim (1981) reported annual costs of \$60 million in the United States and \$2 million in Canada. Without national data on circumcision rates and procedure rates, estimates of the current cost of circumcision are difficult to calculate.

In addition to the monetary cost of circumcision, the "cost" of the pain endured by the infant continues to be an issue in the circumcision debate. Despite the documentation of the physiologic responses to pain during circumcision and the availability of local and regional anesthesia, newborn male infants continue to be circumcised without anesthesia. Research has not addressed why this phenomenon continues.

In a climate of controversy among health care professionals about circumcision, parents clearly have continued to have their male infants circumcised at a large monetary cost and apparently without regard to the pain endured by the infant during the surgery. While several studies have addressed the question of why mothers have

their male infants circumcised, few studies have addressed how mothers make their decisions for or against circumcision. This study addressed the question of how mothers make a decision regarding circumcision based on Orem's (1985, 1988) model of deliberate action during dependent-care and Fishbein and Ajzen's (1975) theory of reasoned action.

Assumptions

The assumptions for this study were:

1. Individuals are rational and have the ability to reason, reflect, understand information, and use knowledge to make decisions (Fishbein & Ajzen, 1975; Orem, 1985).
2. Individuals are capable of self-determined actions (Fishbein & Ajzen, 1975; Orem, 1985).
3. Mothers are dependent-care agents for their newborn children.

The Problem

The research questions for this study were:

1. Can the estimative, transitional, and productive phases of the decision-making process in the model of deliberate action during dependent-care be identified from the descriptions by mothers about their decision-making process regarding circumcision?
2. Can the following components of the theory of reasoned action be identified from the descriptions by mothers about their decision-making process regarding circumcision: behavioral beliefs, outcome evaluations,

attitudes, normative beliefs, motivation to comply, and subjective norm?

Definition of Terms

The definition of terms were:

Mother - the female parent of a child. The operational definition of mother was the female parent of a male infant less than 1 week of age.

Decision-Making Process - the complex operation of choosing between two or more alternatives through reflection and judgment in order to specify a course of action to reach a goal. The operational definition of the decision-making process was the description of a mother about how she decided for or against circumcision for her male infant.

Circumcision - the surgical removal of the foreskin of the penis of a male infant. The operational definition of circumcision was the nonritual surgical removal of the foreskin of the penis by a physician during the first week of life.

Description - the outlining or tracing of an event. The operational definition of description was the verbal account by a mother about how she decided for or against circumcision.

Estimative Phase of Decision-Making - the initial phase of decision-making in which information is sought. The operational definition of the estimative phase of decision-making was the verbal account by a mother of information seeking behaviors during the process of deciding for or against circumcision.

Transitional Phase of Decision-Making - the second phase of decision-making in which the information found in the estimative phase is evaluated and judged. The transitional phase includes the concepts of the theory of reasoned action. The operational definition of the transitional phase of decision-making was the verbal account by a mother about the process of evaluating the information she found on circumcision and included the concepts of the theory of reasoned action.

Productive Phase of Decision-Making - the final phase of decision-making in which the behavior is actually performed. The operational definition of the productive phase of decision-making was the verbal account by a mother of signing or refusing to sign the consent form for the circumcision of her male infant.

Behavioral Beliefs - an individual's beliefs about the consequences or outcomes of performing a behavior. The operational definition of behavioral beliefs was the verbal description by a mother about the consequences of signing or refusing to sign a circumcision permit and included beliefs about the procedure of circumcision and the consequences of circumcision or the absence of circumcision.

Outcome Evaluations - the individual's determination that each possible behavioral consequence is desirable or undesirable. The operational definition of outcome evaluation was the verbal description by a mother of the desirability of the possible consequences of signing or refusing to sign a circumcision permit and included

responses to the value clarification question of "What was the most important influence on your decision?"

Attitude - a learned predisposition to a behavior, including the individual's positive or negative evaluation of performing the behavior. The operational definition of attitude was the verbal description by a mother of her positive or negative evaluation of circumcision or the absence of circumcision.

Normative Belief - an individual's beliefs that specific people want the individual to perform or not perform a behavior. The operational definition of normative belief was the verbal description by a mother that specific people were neutral or did/did not want her to have her infant circumcised.

Motivation to Comply - the desire to conform to the perceived expectations of other people. The operational definition of motivation to comply was the verbal description by a mother of her desire to conform to the perceived expectations of other people about circumcision.

Subjective Norm - the individual's perception of social pressure to perform or not perform a behavior. The operational definition of subjective norm was the verbal statement by a mother regarding her perception of social pressure to have or not have her infant circumcised.

Significance of the Study

A major concern in nursing practice is client health care behaviors and an understanding of how clients decide on a course of action in their health care. By understanding

how individuals make decisions, nurses can develop strategies to provide more informed consent and to assist the client in forming a better understanding of the consequences of selected behaviors. Understanding client decision-making would allow nurses to identify clients at risk for noncompliance and other behaviors that can potentially alter client health. This information on client decision-making also would allow nurses to foster those behaviors that improve the health of clients. However, few nurse researchers have studied the client decision-making process and even fewer studies have been conducted on the maternal decision-making process. The significance of this study is in its qualitative approach to generating nursing knowledge in an area of concern to nursing that has received little attention by nurse researchers.

One need for this research is evidenced by the findings of Harris (1985, 1986) and Wallerstein (1985) that mothers and children regret later in life the mother's decision for or against circumcision. Currently, over 1 million circumcisions are performed each year in the United States, yet there is a paucity of research on how mothers make decisions about the procedure (Wallerstein, 1985). If this decision-making process is to be better understood, further research is needed to identify and describe the maternal decision-making process. Only after this basic research has been conducted can nurses begin developing strategies for more informed maternal consent.

Existing decision-making theories originated in the disciplines of mathematics and psychology with mathematical logic as the primary process used in the development of many of the theories. An example of this strong mathematical focus is the decision "calculus" of decision analysis in decision theory. In the past, health care professionals often have adopted these theories without questioning their applicability in medicine and nursing. To build a knowledge base of client decision-making within nursing, Benoliel (1984) proposed that qualitative research on client decision-making processes should be a top priority for future nursing research.

This study provided a qualitative approach to the examination of a conceptual framework consisting of a decision-making theory integrated within a nursing conceptual framework. The qualitative approach adds validity to the conceptual framework by providing data from the respondents' own descriptions of their decision-making process.

A gap in previous research on decision-making regarding circumcision is the lack of utilization of an explicit theoretical or conceptual framework. Previous research has centered on simply listing why mothers have their male infants circumcised. This study provided a different perspective of how the decision is made and was guided by a conceptual framework that integrated a decision-making theory into a nursing conceptual framework.

Summary

At the birth of an infant, mothers begin making decisions about their child's health care. For the mothers of male children, one of the first decisions that must be made is the decision for or against circumcision. This decision-making process can be viewed within the context of Orem's (1985) model of deliberate action during dependent-care and the theory of reasoned action. Through qualitative study, the process of maternal decision-making can be described and can provide basic knowledge upon which nursing strategies can be based. The purpose of this study was to describe the maternal decision-making process regarding circumcision within the context of the model of deliberate action during dependent-care and the theory of reasoned action.

CHAPTER II

Review of Research

Introduction

The review of research focuses on the conceptual framework and circumcision. The research on the model of deliberate action and dependent-care is explored, followed by the theory of reasoned action and maternal decision-making.

The review of research on circumcision includes research on current issues in the health care professions surrounding circumcision. These issues are the benefits of circumcision, adverse physiological and behavioral effects and risks of circumcision, and advances in anesthesia for circumcision. These studies are reviewed to document information that the American Academy of Pediatrics (1989) recommended should be shared with all parents who are considering circumcision. The final section explores maternal decision-making regarding circumcision.

The Model of Deliberate Action and Dependent-Care

Research on dependent-care and the model of deliberate action is scant. Moore and Gaffney (1989) developed an instrument to measure the performance of dependent-care activities by mothers. A 39-item questionnaire was developed with content validity established by nurse

educators. Following administration to 475 mothers, factor analysis was performed with the 39 items loading onto 12 factors. The reliability coefficient for the instrument was .91. The Dependent-Care Agent instrument is in the early stages of development with further assessment of reliability and validity needed.

Research conducted on the model of deliberate action was not found. However, one factor in Denyes' (1982) instrument to measure self-care agency is health decision-making capability. Kearney and Fleischer's (1979) Exercise of Self-Care Agency Scale contains a factor labelled as knowledge and information-seeking (Kearney & Fleischer; Riesch & Hauck, 1988). Information seeking is the activity in the first phase of decision-making in the model of deliberate action. Neither Denyes nor Kearney and Fleischer support that their instrument measures the decision-making process as delineated by Orem (1985, 1988) in the model of deliberate action. The paucity of research on the model of deliberate action and dependent-care provides a fertile field for opening new areas of research on Orem's (1985) conceptual framework.

The Theory of Reasoned Action

The theory of reasoned action has been studied as the decision-making process for many behaviors. The decision-making process within the context of the theory of reasoned action on contraception, blood donation, exercise, weight control, and stress management are discussed in this section.

Contraceptive Behaviors

Jaccard and Davidson (1972, 1975) conducted a study to compare the theory of reasoned action (Fishbein & Ajzen, 1975) and a similar theory by Triandis (1964, 1977). In a pilot study with 73 female college freshmen, the Fishbein model was predictive of birth control use. Although the instrument was described, no report of validity and reliability was given. In the second study, 270 randomly selected women in a midwestern city were interviewed. The theory of reasoned action accounted for 65% of the variance in intentions to use birth control while the Triandis model accounted for 63% of the variance. As in the previous study, validity and reliability of the instrument were not addressed.

Pagel and Davidson (1984) compared three decision-making models, including the theory of reasoned action. Questionnaires on attitudes and beliefs concerning birth control, normative beliefs, and motivation to comply was completed by 70 college students. The theory of reasoned action components accurately predicted 84% of birth control intentions. Replication of this study would be difficult because little information was given on the questionnaire.

In contrast, when Jorgensen and Sonstegard (1984) studied the sexual behavior and contraceptive behavior of 224 female adolescents, the theory of reasoned action was predictive of contraceptive behavior, but did not predict sexual behavior. However, Jorgensen and Sonstegard did not measure normative beliefs as recommended by Fishbein and

Ajzen (1975). Another possible explanation for this finding is that for adolescents, contraceptive behavior involves rational decisions, but sexual behavior may not involve only rational decisions.

A final study on contraceptive behavior was conducted by Ewald and Roberts (1985) with 54 males, ages 18 to 20 years. The theory of reasoned action was the conceptual framework for the study. Beliefs correlated with attitudes, attitudes correlated with intentions and intentions correlated with behavior. However, support for the theory of reasoned action cannot be determined because the normative component of the theory was not measured.

Blood Donation

Bagozzi (1981a, 1981b, 1982) studied the blood donation behaviors of 284 university faculty, staff, and students within the context of the theory of reasoned action. After establishing the reliability and validity of the instrument (Bagozzi, 1981a), attitudes were predictive of blood donation behaviors. However, previous behavior also became an important predictor variable. This finding is inconsistent with the theory of reasoned action in which previous behavior is an external variable that has no direct effect on intentions or future behavior.

Weight Control, Exercise, and Stress Management

Pender and Pender (1986) used the theory of reasoned action as a conceptual framework to study three health behaviors of 337 residents of two communities in Illinois. Attitudes, subjective norms, and weight predicted 13% of the

variance in intentions to exercise. Attitudes, weight, and perceived health status explained 18% of variance in intentions to control weight. Only attitudes correlated with the intention to manage stress.

Maternal Decision-Making

Manstead, Proffitt, and Smart (1983) used the theory of reasoned action as a conceptual framework to study the infant feeding method decisions of 250 women in England. Approximately 60% of the variance in maternal feeding method intentions was explained by the attitude and subjective norm. When previous experience was included in the regression equation for multiparous women, the explained variance increased to 65%. In addition, behavioral intentions correlated with behavior.

Kaufman and Hall (1989) reported that mothers who breastfed their preterm infants perceived that significant others wanted them to breastfeed. The subjective norm (Influence of Specific Referents score) was a significant predictor of the choice of infant feeding method. However, support for the theory of reasoned action cannot be determined because Kaufman and Hall did not utilize the attitudinal component of the theory of reasoned action in their study.

Austin (1989) studied parental anticonvulsant medication compliance using the theory of reasoned action. Attitudes and subjective norms correlated positively with behavioral intentions and intentions correlated with

behavior. However, a small sample size of 29 was a major weakness of this study.

Circumcision

Benefits of Circumcision

In recent years, study of the benefits of circumcision has centered on urinary tract infections, sexually transmitted diseases, penile problems, and cancer of the penis in the uncircumcised male. Ginsberg and McCracken (1982) reported on 100 infants admitted to the hospital with urinary tract infections. Seventy-five percent of those infants admitted with a urinary tract infection in the first 3 months of life were male. After age 3 months, 11% of the infants with urinary tract infections were male. A total of 95% of all male infants with urinary tract infections were uncircumcised. A strength of this study was that the diagnosis of urinary tract infection was made on the basis of urine collected by suprapubic aspiration, thereby decreasing contamination rates. However, only hospitalized infants were included in the sample. The characteristics of infants with urinary tract infections who were not hospitalized are unknown.

In a retrospective study, Wiswell, Smith, and Bass (1985) examined the records of over 5,000 infants born at a military base in the United States. Approximately 41 of these infants developed a confirmed urinary tract infection in the first year of life. The incidence of urinary tract infections was greater in male infants than female infants with uncircumcised male infants having a significantly

greater risk for infection than circumcised male infants. A major problem with this study as with the study by Ginsburg and McCracken (1982), is that only the records of infants hospitalized for a urinary tract infection were included in the sample.

In 1986, Wiswell and Roscelli examined the frequency of urinary tract infections of 3,900 infants born in a 4-year period and 422,000 infants born in a 10-year period in all U.S. Army hospitals worldwide. Findings were similar to the other previous studies. During the 10-year period, the number of circumcisions decreased from 85% to 74% with a concomitant increase in the number of urinary tract infections. A strength of this study is the large number of infants in the sample. However, the use of only military hospitals raises the question of a systematic bias in sampling. In 1987, Wiswell, Enzenauer, Holton, Cornish, and Hankins extended the above sample to 427,000 infants with similar findings reported.

In an attempt to explain the increase in urinary tract infections in uncircumcised versus circumcised male infants, Wiswell, Miller, Geltson, Jones, and Clemmings (1988) collected periurethral cultures on 25 circumcised and 25 uncircumcised male infants. Uncircumcised infants had a significantly higher total colony count than circumcised infants, except at 12 months of age. A weakness in this study, as well as all studies on the benefits of circumcision, is that circumcision cannot be randomly assigned to infants as a control for systematic bias.

A final question posed by Wiswell and Geschke (1989) was if the benefits of circumcision outweigh the risks of circumcision. Complications as a result of circumcision were reported for .19% of the 100,000 circumcised male infants. Local infection and hemorrhage were the most common complications. There were no deaths or loss of the glands or penis. In contrast, .24% of 36,000 uncircumcised male infants had urinary tract infections with three cases leading to meningitis, two cases leading to renal failure, and two infants died. It was the conclusion of these investigators that the benefits of neonatal circumcision outweigh the risks. Again a criticism of this study is the nonrandom assignment of circumcision.

In addition to urinary tract infections, investigators have studied other penile problems in circumcised and uncircumcised male infants. Herzog and Alvarez (1986) compared penile complications such as balanitis, phimosis, and irritation in 272 uncircumcised males and 273 circumcised males. A significant increase in complications was found in uncircumcised (14.3%) versus circumcised children (5.9%) ages 2 months to 12 years. Fergusson, Lawton, and Shannon (1988) had similar findings in the study of 500 male children in New Zealand. A confounding variable in both studies is the unknown hygiene practice of the sample.

Circumcision status and sexually transmitted diseases have been examined by health care researchers. Parker, Stewart, Wren, Gollow, and Stratton (1983) found that in

1,350 men who attended a public health clinic for sexually transmitted diseases, uncircumcised men were at greater risk of developing herpes genitalis, candidiasis, gonorrhea, and syphilis. Taylor and Rodin (1975) also found a greater incidence of Herpes Simplex Type 2 Virus in uncircumcised men than in circumcised men. While Human Papilloma Virus and Herpes Simplex Type 2 Virus have been reported as possible causative agents in penile and cervical cancer, no correlation has been documented between circumcision status, viral infection, and penile or cervical cancer (Baird, 1985; Kaufman & Adam, 1986; McCance, 1986). Simonsen et al. (1988) reported that uncircumcised men were more likely to have Human Immunodeficiency Virus (HIV) infection than circumcised men in an African population where HIV transmission is primarily heterosexual. Numerous confounding variables are present in all of these studies, although the investigators attempted to control for some of the extraneous variables.

A final benefit of circumcision frequently discussed in the literature is the decreased risk of penile cancer in the circumcised male. Kochen and McCurdy (1980) reported the life time risk of penile cancer in uncircumcised American males as 1 out of 600. Swafford (1985) reported the lifetime risk of penile cancer in uncircumcised Danish men as 1 out of 900. A major critique of both studies is that circumcision status was not determined and all males with penile cancer were assumed to be uncircumcised.

Adverse Physiological and Behavioral Effects
of Circumcision

The 1975 statement by the American Academy of Pediatrics against routine circumcision was reported to be based on the lack of documented benefits of circumcision and on the risks of circumcision. However, reports of adverse physiologic consequences of circumcision are primarily anecdotal. Mor, Eshel, Aladjem, and Mundel (1987) reported four cases of heart failure following the liberal use of topical epinephrine following ritual circumcision. Redman (1988) reported two cases of structural anomalies as a result of circumcision. Woodside (1980) reported a case of severe necrotizing fasciitis following neonatal circumcision. Patel (1966) found that 35 out of 100 infants had minor bleeding following circumcision. None of the 100 infants had major complications from circumcision.

In an attempt to determine the frequency of complications following circumcision, Kaplan (1983) reviewed previous research and anecdotal reports. Although the exact incidence of complications is difficult to determine, Kaplan estimated the incidence of complications as 1.5% to 5%. Complications included bleeding, removal of too much or too little tissue, infection, urinary retention, meatitis, chordee, cysts, lymphedema, fistulas, necrosis, hypospadias, and epispadias.

Investigators have studied the physiologic and behavioral effects of circumcision on infants in an attempt to demonstrate that infants experience pain during and after

circumcision. Gunnar, Fisch, Korsvik, and Donhowe (1981) reported increased serum cortisol levels 30 minutes following the circumcision of an infant. Major weaknesses in this study include the small sample size and lack of a comparison group. The pain of venipuncture may have contributed to the increase in serum cortisol as well as the circumcision. Rawlings, Miller, and Engel (1980) reported that transcutaneous PO₂ decreased, heart rate increased, and respiratory rate increased in a sample of 10 infants during circumcision. Small sample size limits the generalizability of this study also.

Emde, Harmon, Metcalf, Koenig, and Wagonfeld (1971) randomly assigned 20 infants to early circumcision and control groups. The circumcised infants had more nonrapid eye movement sleep than the control group. Marshall, Stratton, Moore, and Boreman (1980) randomly assigned 26 infants to early and late circumcision groups. Infant behavior changed more frequently in the early circumcision group than in the group that was not circumcised. A weakness in the study is that changes were made in the Brazelton Neonatal Behavioral Assessment Scale without further reliability and validity assessment. Although both of these studies had small sample sizes, they are two rare studies that randomly assigned circumcision.

Circumcision did not have an impact on mother-infant interaction in a group of 59 mother-infant pairs observed by Marshall et al. (1982). In contrast, Karraker (1986) found that circumcised infants were more irritable and received

more adult attention in a newborn nursery than other infants. Further research is needed to clarify how circumcision affects infant-caretaker interactions.

Circumcision Anesthesia

The final area of research on circumcision to be discussed is anesthesia during newborn circumcision. Neonatal circumcision traditionally has been conducted without anesthesia. Recent research has been conducted on the safety and efficacy of anesthesia during circumcision. Holve et al. (1983), in a double-blind experimental study, found that infants who received lidocaine in a dorsal penile block, demonstrated less agitation, less crying, and lower heart rate increases than infants who received saline injection or no treatment. In a similar study, Dixon, Snyder, Holve, and Bromberger (1984) found anesthetized infants were more attentive and were better able to quiet themselves when disturbed than unanesthetized infants.

Williamson and Williamson (1983) reported similar findings including smaller decreases in transcutaneous PO_2 in the anesthesia group than in the control group. Maxwell, Yaster, Wetzel, and Niebyl (1987) documented the behavioral and physiological benefits of anesthesia and low plasma concentrations of lidocaine following anesthesia. No systemic or local complications were reported in any of the studies. However, sample sizes were small in all of the above studies on anesthesia during circumcision.

Maternal Decision-Making on Circumcision

Following the 1975 American Academy of Pediatrics statement against routine neonatal circumcision, several studies were conducted on the effects of education on the maternal decision-making process on circumcision. Herrera, Hsu, Salcedo, and Ruiz (1982) found no differences in circumcision rates of experimental and control groups with a sample of 174 couples. Herrera, Cochran, Herrera, and Wallace (1983) reported similar findings with a sample of 181 couples in which 66% of the mothers had a college education. Maisels, Hayes, Conrad, and Chez (1983) gave written information on circumcision to a randomly assigned experimental group of pregnant women. The control group received no written information. There were no significant differences in circumcision rates between the two groups. In addition, 26% of the experimental group who had male infants did not know what circumcision was at the conclusion of the study.

In contrast, Rand, Emmons, and Johnson (1983) found lower circumcision rates in a clinic group that received education on circumcision than in a control group. A weakness of this study is that the control group of patients included concurrent patients and charts matched for age and source of funding. Systematic bias in chart selection was a potential confounding variable in this study. Enzenhauer, Powell, Wiswell, and Bass (1986) utilized a videotape educational program with the parents of 831 male infants. The circumcision frequency for this group was

70.5%. A circumcision rate of 90% was calculated for the institution for the 6 months before the counseling was conducted and a circumcision rate of 76% was calculated for the 6 months after the cessation of the counseling (the control group).

Shaw and Robertson (1963) surveyed 80 mothers of male infants. Mothers' reasons for neonatal circumcision were to avoid circumcision later in life, a "tight foreskin," cleanliness, prevention of cancer and infection, father's preference, religious beliefs, appearance, and the perception that it was mandatory hospital practice. Reasons given for not having sons circumcised were that it was unnecessary, physician's advice, and father's preference. In this sample, 72% of the mothers reported that a physician had never discussed circumcision with them. Patel (1966) reported similar findings following interviews with the parents of 100 Canadian male infants.

In more recent years, Herrera and Trouern-Trend (1979) gave questionnaires to the parents of 100 Canadian male infants. Reasons for circumcision given by the parents were cleanliness, prevention of circumcision later in life, prevention of infections, suggestions of a physician or friends, other children were circumcised, prevention of cancer, and the belief that it was mandatory. Approximately 16% of the parents did not know why they had their infants circumcised and 3% did not know that they had signed a permit for circumcision. Sixty-three percent of the parents

reported that they did not discuss circumcision with any health care professional.

Lovell and Cox (1979) found similar reasons for circumcision given by 200 women who were patients in a family practice clinic. The sons of these women were ages birth to 44 years, with 69% between the ages of 1 and 14 years. Eighty-seven percent of these women were aware of risks associated with circumcision. Brown and Brown (1987) gave questionnaires to 121 mothers and 896 fathers of male infants. Reasons given for circumcision were similar to those reported in the previous studies. However, bleeding, pain, and infection were given as reasons by those parents who decided against circumcision.

Bean and Engelhoff (1984) reported that 78% of 277 mothers of male infants were in favor of circumcision before getting pregnant with 56% having made their decisions before pregnancy. As in the study by Brown and Brown (1987), there was a high correlation between the father's circumcision status and the son's circumcision. When examined by race, this relationship was only significant for white families. In addition, 81% of the women reported discussing circumcision with the infant's father.

Harris (1985, 1986) conducted the only study on circumcision decision-making that utilized a qualitative approach. The purpose of the study was to address the research questions of "What variables influence parents' decisions to circumcise or not circumcise their newborn?"

(Harris, 1986, p. 98). Harris did not identify her sample, except to state that:

The sources of the data were new parents, nursery nurses and pediatricians. As the processes of the theory emerged, theoretical sampling included pregnant women and couples, parents of older children, urologists, obstetricians, general practitioners, pediatric nurse practitioners, community health nurses, certified nurse midwives, and men and women of various ages (Harris, 1986, p. 100).

From the data, Harris (1985, 1986) constructed a model of circumcision reasoning based on the position of parents in their culture. A parent who was a cultural renegade or expatriot would decide on circumcision differently than a cultural carrier. The decision on circumcision led to cultural enfranchising or disenfranchising which was reported as lifelong.

The reasons given for circumcision by the sample were that circumcision was a sign of manhood, culturally induced unconsciousness, no pain, worries about future sexual problems, cleanliness, religious beliefs, playing it safe, sentimental reasons, and medical advice. The reasons for not circumcising were that the foreskin was a sign of manhood, culturally induced unconsciousness, risks of circumcision, worries about future sexual problems, hygiene, religious beliefs, playing it safe, sentimental reasons, and medical advice. As in other previous studies, the reasons for and against circumcision are similar and in conflict.

Harris (1985, 1986) did not report trustworthiness procedures to ensure rigor within the study. The lack of further description of the sample does not allow the reader

to decide if the findings of this study are applicable in other settings. Another weakness in this study is that Harris appears to have studied the role of circumcision within a cultural group rather than the actual influences on parents' decision on circumcision.

Summary

Personal health care decisions that have been studied include contraceptive behaviors, blood donation behaviors, weight control behaviors, exercise, and stress management. The theory of reasoned action has accounted for much of the variance in intentions to perform these behaviors. Further research is needed with other health care behaviors to determine if the theory can be useful and significant in nursing. The few studies that have been conducted on maternal decision-making have utilized the theory of reasoned action. Recent issues surrounding circumcision have been studied by health care professionals. The benefits and risks of circumcision have been investigated. Recent research also has documented the efficacy of anesthesia during circumcision.

Studies on the decision for or against circumcision have been primarily checklist surveys. One qualitative study has been conducted on parental decision-making on circumcision. However, the purpose of this research appears to have changed to that of the role of circumcision within a given culture.

CHAPTER III

Methodology

Design of the Study

The design for this study was descriptive, using a qualitative approach. Data were collected through semistructured interviews and was analyzed through content analysis. This qualitative approach allowed the respondents to describe their experience in their own words rather than in the researcher's words. A qualitative approach utilizing interviews and content analysis is appropriate for research on attitudes, beliefs, and processes occurring in a phenomenon (Marshall & Rossman, 1989). Waltz, Strickland, and Lenz (1984) concluded that interviews should be utilized "to determine the reasons for or influences on particular actions, attitudes or beliefs" (p. 263). Interviews and content analysis are appropriate methods for testing hypotheses and studying relationships among variables in complex processes such as decision-making (Kerlinger, 1986; Marshall & Rossman, 1989). The final rationale for utilizing a qualitative approach was practical in nature. Marshall and Rossman identified practical and ethical reasons for not performing quantitative research as valid rationale for utilizing a qualitative approach. In the population utilized in this study, an average of one mother

per month chooses not to have her infant circumcised. Quantitative data collection would have taken years to have an adequate sample size for comparison of mothers who have or do not have their infants circumcised.

Instrumentation

Data were collected using a semistructured interview guide (Appendix A). Comments by the respondents were followed up as necessary by the interviewer. Therefore, the interviewer became the primary data collection instrument in the study. Field notes were taken during the interviews and interviews were tape recorded to ensure accuracy in recording the data.

Setting

A regional hospital in the Southeastern United States was the setting for this study. This hospital has the regional obstetric unit for a nine county area with approximately 1,400 infants delivered each year.

The hospital is located in a community that, until recent years, has been primarily a rural community with some chemical industry. A major manufacturer has built a large plant in the area and in the process there has been a large influx of people from areas throughout the United States. The local population is in the process of changing from a homogeneous group to a more culturally diverse population.

Sample

Potential respondents for this study were identified by the hospital's nursing staff. Selection criteria included: mother of a male infant less than 1 week of age, decision

for or against circumcision had been communicated to the nursing staff, and written permission had been given to the investigator indicating agreement to participate in the study. The average hospital stay for postpartum women in this hospital was 36 to 72 hours after delivery of the infants.

The sample size was 20 mothers, the number recommended by Stern (1985) for doctoral dissertations. The theoretical sampling method was used to select the sample (Lincoln & Guba, 1985; Marshall & Rossman, 1989; Morse, 1986). The sample of 20 mothers were selected from a population of approximately 30 mothers of male infants to include at least one caucasian mother, one Black mother, one married mother, one single mother, one primiparous mother, and one multiparous mother.

Procedure

Following identification of potential respondents by the nursing staff, the researcher described the study to the respondents, read the consent form, and asked for written consent for taped interviews. After written consent had been obtained (Appendix B), the researcher conducted the interview in the respondent's hospital room (Appendix A).

Demographic data were collected for each respondent at the conclusion of the interview (Appendix C). Field notes were written during and immediately following the interviews and included verbatim responses by the respondents and observations by the interviewer. All tapes were transcribed the day of the interview with data analysis following

transcription. To determine the reliability of tape transcriptions, the first two interview tapes were transcribed twice and the transcriptions were compared to determine intrarater reliability. There were no differences in themes between the transcriptions. In addition, a transcription was completed by a second transcriptionist and compared to the original transcription by another nurse researcher. No differences were found in the themes between these two transcriptions.

Protection of Human Rights

Approval to conduct the study was granted by the Institutional Review Board at the University of Alabama at Birmingham (Appendix D). Each respondent received a verbal and written explanation of the study and written consent was obtained. To ensure confidentiality, all tapes were destroyed after all data analysis was completed. No identifying information or names were included in the written transcriptions or any written report of this study.

Pilot Study

Permission was granted by the Chairpersons of Obstetrics and Gynecology and Pediatrics at the hospital where the data were collected for a pilot study of six women. Data were analyzed using content analysis. Findings from the pilot study were used to refine the research questions, procedure, and interview guide.

Analysis

Content analysis, as described by Waltz, Strickland, and Lenz (1984) and Marshall and Rossman (1989), was

utilized for data analysis. The universe of data to be analyzed was the transcriptions of the interviews with the respondents. Categories were the estimative, transitional, and productive phases of decision-making in the model of deliberate action during dependent-care and the following components of the theory of reasoned action: behavioral beliefs, outcome evaluations, attitudes, normative beliefs, motivation to comply, and subjective norm. The primary unit of data analysis was the theme which was defined by Waltz et al. as "sentences or propositions about something" (p. 259). The operational definitions of the categories which were included in the definition of terms served as the coding or classification system for categorizing the content of the interviews. Classification of content was indicated by marginal notes and color coding. The following are examples of themes and their categories from the pilot study:

Behavioral beliefs - "I know they say that they don't feel that much pain but when the kids turn blue from here down . . ." "It's easier to keep clean." "It really looks better when its circumcised."

Attitudes - "It seems so barbaric." "It is the right thing to do." "It would be a good idea to have it done."

Motivation to comply - "Well, my mother and them are old fashioned and they didn't want it done. I decided on my own."

Subjective norm - "Society puts a lot of pressure to have it done." "I just went along with standard practice."

Following classification of data into categories, themes not classified were compared to determine if new concepts were present in the transcriptions of the interviews. Any new concepts identified were examined further to determine their relationship to the conceptual framework.

Statistical analysis consisted of frequencies (Marshall & Rossman, 1989; Waltz, Strickland, & Lenz, 1984). All frequencies were hand calculated or calculated using LOTUS 1-2-3.

Data analysis was conducted following each day of interviews. To prevent fatigue from influencing data collection and analysis, no more than two interviews were conducted and analyzed per day. Further trustworthiness procedures to ensure credibility, transferability, dependability, and confirmability will be described in the next section.

Trustworthiness Procedures

The trustworthiness procedures utilized were those recommended by Lincoln and Guba (1985) and Marshall and Rossman (1989). The qualitative research process can be affected by four threats to trustworthiness. The first threat is factor patterning in which the investigator cannot interpret what he/she sees. Procedures taken to prevent factor patterning lead to credibility and plausible findings. The trustworthiness procedures that were conducted in this study are peer debriefing and member checks at the conclusion of each interview and after data

analysis. The member checks consisted of the investigator repeating salient comments by the respondent and asking if the investigator's interpretations were correct. In addition, selected respondents were asked for comments on the report of the findings.

The second threat to trustworthiness is situational uniqueness that leads to noncomparability with other samples and settings. Trustworthiness procedures to prevent situational uniqueness lead to transferability and findings that are context relevant. In this study, the trustworthiness procedures that were utilized are thick descriptive data (detailed descriptions of the setting and sample) and theoretical sampling.

The third threat to trustworthiness is instrumental changes that lead to instability. Trustworthiness procedures to prevent instrumental changes lead to dependability and findings that are stable. Procedures that were utilized in this study include leaving an audit trail that consists of all transcriptions, codes, categories, definitions, and memos. Following the completion of the study, a dependability (process) audit was conducted by a nurse researcher.

The fourth threat to trustworthiness is investigator predilections leading to bias. Trustworthiness procedures to prevent bias lead to confirmability and findings that are free of investigator bias. The trustworthiness procedure that was utilized in this study was a confirmability (product) audit by a nurse researcher.

All transcriptions, codes, categories, definitions, and memos were reviewed by the auditor. Following the review, the investigator and the auditor discussed agreements and disagreements in coding. Final coding was negotiated and definitions were clarified during the discussion.

Limitations

The limitation to this study was:

1. The findings of this study are generalizable only to the sample.

Summary

A qualitative study utilizing interviews and content analysis was conducted to determine if the phases of decision-making in the model of deliberate action during dependent-care and the components of the theory of reasoned action could be identified from the descriptions of mothers about their decision-making process regarding circumcision. Theoretical sampling occurred in a regional obstetric unit in the Southeastern United States. Data was analyzed utilizing content analysis. Trustworthiness procedures were conducted to ensure the credibility, transferability, dependability, and confirmability of the findings.

CHAPTER IV

Findings

A qualitative study was conducted to answer the following research questions:

1. Can the estimative, transitional, and productive phases of the decision-making process in the model of deliberate action during dependent-care be identified from the descriptions of mothers about their decision-making process regarding circumcision?

2. Can the following components of the theory of reasoned action be identified from the descriptions of mothers about their decision-making process regarding circumcision: behavioral beliefs, outcome evaluations, attitudes, normative beliefs, motivation to comply, and subjective norm?

Description of the Sample

The sample for this study consisted of 20 mothers of sons less than 72 hours of age. The age of the respondents ranged from 19 to 43 years with a mean age of 26.95 years, a mode of 22 years, and a median of 26 years. The race of 2 (10%) of the respondents was Black and 18 (90%) were Caucasian. Most (90%) of the respondents were married, one (5%) was divorced, and one (5%) was single.

The majority (85%) of the respondents had at least a high school education with one respondent having an eighth grade education, one a ninth grade education, and one an eleventh grade education. One respondent was a Licensed Practical Nurse, one was a Registered Nurse, and one had a MEd. A total of five (25%) of the respondents had completed at least 1 year of college.

This infant was the first living child for seven (35%) of the women in this sample, the second child for six (30%) of the women, third child for three (15%) of the women, fourth child for two (10%) of the women, and the fifth child for two (10%) of the women. Nine of the 13 women who had had previous children had at least one older son. Twin boys were delivered by one respondent and the other 19 respondents had singleton births. Of the 21 infants, 18 (86%) were circumcised and 3 (14%) were not circumcised.

Presentation of the Findings

Research Question 1

Estimative Phase. The estimative phase of decision-making in the model of deliberate action during dependent-care was identified from the descriptions given by the respondents. Information seeking behaviors included reading books and magazines, talking with family and friends, and talking with health care professionals. An additional source of information was the experiences of the respondent, the infant's father, and acquaintances.

The most frequent method of seeking information was talking with family and friends. The infant's father was

the most frequent source of information. The respondent's mother and mother-in-law were another source of information. A respondent who did not have her infant circumcised described talking with her mother and mother-in-law as follows:

I talked to his mother and I talked to my mom. And, I asked them what they thought about it and they said basically the same thing he did. That some babies don't have to have it done and some do. I just, you know, wait a while. And, if you have problems, you can always take them back and have it done.

Friends were another source of information for many of the respondents:

Well, we talked to several people. We have several people that have had baby boys recently. And, you know, it was real weird because one of my friends had a baby in March. She didn't have her baby circumcised. One had one in January and she did. So, it really didn't, you know, I thought it would help, but it really didn't help that much. But, we got to thinking about it and she had told us some of the statistics on how so many percentage did get their babies circumcised and of the percentage that didn't like 10% had to have it done later on anyway.

An additional source of information utilized by the respondents was health care professionals. Physicians and nurses were a source of information for nine respondents with three respondents who talked with nurses, five respondents who talked with physicians, and one respondent talked with both physicians and nurses.

Well, the pediatrician just came in before we had it done and explained the details. You know, what they do and what they put the little bell thing on and that it would come off by itself. You know, the care for it . . . And, a nurse had talked to us about it too in our room.

However, health care professionals were not always helpful as described by the respondent who commented:

I asked everybody. I said, "What do you recommend? What do you think about it?" And, everybody said, "I'm not allowed to give you any decisions or anything. I'm not allowed to give you any kind of influence or anything." So, I said OK.

Childbirth classes were described as a source of information by two respondents. A respondent commented on the information given in class by saying, "You know, when I went in there and started talking about all the health reasons and why you shouldn't have it done but it was up to you."

Finally, one respondent did not find circumcision as a socially accepted topic to discuss with family, friends, or health care professionals. When asked who she had talked with other than her husband, she commented, "I don't talk to nobody but my husband. Why would I talk to anybody else? You don't get personal about confidential matters with anybody else, just ourselves."

Reading books and magazines was described by several respondents with comments such as: "I read some books too. I got some books from the library." "She got me some literature at the _____ Health Department. I read up on it, you know, before we made the final decision to have it done."

About the only thing I got out and actually read was a medical book. A medical dictionary thing . . . I read what they had in it. Of course that's where they explain about doing it now versus having it done later, so. That's about the only thing I read.

Another source of information utilized by the respondents was the experiences of the respondent, the

infant's father, and acquaintances. A respondent vividly described the circumcision of her brother:

Well, my brother was circumcised at 6 weeks, and I remember going to the doctor's office when that was done. I was only 5 years old. But, I remember sitting in the waiting room while Daddy held him down in the back. And, I guess back then I wished that if I had one done, it'd be done in the hospital. I'd never come and try to hold one of mine down for something like that.

She then described her experiences as a Registered Nurse in the Recovery Room:

And, working in the recovery room, seeing these little boys come in 4 and 5 years old and their pencils get sharpened and they wonder what in the world happened to them. You know, I think it's pitiful. I feel so sorry for them. And, then even the older men, you know, that I've seen come back wish their mom had done it when they were born.

Another respondent described her experience with the circumcision of her older son:

Well, I wasn't going to have him done and he had to be done. Something about the skin didn't come back right. So, they had to do him.

Evidence to indicate the addition and processing of new information was offered by five of the nine respondents who had previous sons. One respondent did not have her first son circumcised, but did have this son circumcised. She said,

Well, I wish I'd went ahead with my first son and done it. See, I didn't know nothing about all this, their giving infection to their wives and stuff. . . ., but now I wish I had of.

The other four respondents made comments such as "his older brother was already circumcised so I thought it would be easier." Another respondent described her first son's

circumcision and how it affected her decision-making process.

He was 3 weeks old. When he was born, his pediatrician was sick and we had to go back in 3 weeks and have it done. It was a little rougher on him than I think it will be on this one. . . . So, I'd rather see it done now than wait.

The four respondents who did not give evidence of further information processing did not express that their previous behavior was an influence on their decision-making process. Often it was not known by the interviewer that the respondent had other sons until the demographic questionnaire was completed.

The experiences of the infant's father were also sources of information. A respondent who did not have her son circumcised commented, "My husband's not circumcised so, and he's done fine. He hadn't ever had no trouble." The circumcision status of 14 of the fathers was reported by the respondents. For the three infants who were not circumcised, one father was not circumcised and two fathers were circumcised. The majority (8) of the fathers of the remaining 11 infants were circumcised, while 3 of these fathers were not circumcised. The experience of a father who was circumcised at the age of 41 years was described as a source of information for their decision to have their son circumcised.

The late circumcision of an acquaintance was described by 10 of the respondents. Comments on late circumcision included:

Cause I know a friend of hers waited until he got real old and he was real sore and stuff. He was like 20 years old when he got circumcised. And, he had lots of problems. He stayed sore and he bled for a while.

Cause I know he had a lot of trouble with his He had been circumcised, but they didn't cut all the skin off. And, as he got older, it grewed back so they had to go back when he was 29. He had a lot of trouble with it.

And, my husband's little boy, they didn't have him done while he was little, and when he got about 2 1/2, they had to have it done. And, it was really, you know, hard on him.

Respondents had differing levels of information seeking ability. A respondent who had read books and talked with friends and family commented:

It was easy for me to make it because I already knew more about it than some mothers If you know a nurse and you read about it a lot or something, you can pretty well make the decision pretty fast, but if you don't know nothing about it, it's a big (decision).

While another respondent whose only source of information was her husband commented:

That might not have been too good of a decision Like I said, I don't understand all that stuff. I don't know that much about it.

Transitional Phase. The transitional phase of decision-making in the model of deliberate action during dependent-care was present in the descriptions by the respondents about their decision-making process regarding circumcision. All the respondents' descriptions fit into components of the theory of reasoned action which will be reported in later sections of this chapter.

The judgment process during the transitional phase of decision-making was described further by two respondents:

. . . in the article that said that there was one hospital that would use anesthetic. . . . then, I started thinking about that. I said, well, if only one hospital does it out of the whole United States or whatever, well then maybe that hospital is doing something wrong. Cause, there has got to be a reason why they don't Of course, the only doubts I had was, I read one article that kind of scared me cause it had to do with the trauma of it We batted back and forth articles that were for it, reading articles that were against it, and then. The only thing that really solved it was just for us to sit down and talk about it.

We looked at both sides of what would happen if maybe we didn't have it done and let him decide on his own. And, then were looked at the other side of yes, getting it done so he don't have to worry about it.

The transitional phase of decision-making was completed by eight (40%) of the respondents before their pregnancy or soon after their pregnancy was confirmed. A decision was made by four (20%) of the respondents following an ultrasound in which the infant's sex was predicted and by eight (40%) of the respondents following the birth of the infant.

Productive Phase. The productive phase of decision-making in the model of deliberate action during dependent-care was completed by all the respondents prior to the interview. Circumcision was requested by 17 (85%) of the respondents who signed circumcision permits. Only three (15%) of the respondents refused to sign circumcision permits and their sons were not circumcised.

Research Question 2

Behavioral Beliefs. Behavioral beliefs were expressed by 17 of the respondents. The three respondents who did not have their infants circumcised voiced behavioral beliefs

that included pain during and after the circumcision, the cost of the procedure, and the lack of problems in later life necessitating circumcision. One respondent vividly described her beliefs about the process of circumcision.

They tie the baby down and then they have a machine that pulls the skin apart and then just pulls it off . . . See, they don't put the babies to sleep or give them any anesthesia or anything. They just tie them down. This machine . . .

Negative beliefs about not having their infants circumcised were expressed by two of these respondents.

It's a lot harder when they do get older. I know that. I'll just have to take care of him real good.

Cause if he has trouble later on down the line, and he's older and has to have it done, it's going to kill him. And, he'll hate you forever for that.

The most common behavioral beliefs expressed by the respondents who had their infants circumcised included prevention of infection in the son and his future wife, prevention of problems in later life, and the pain of circumcision in later life. Comments made by the respondents included:

Because when the skin goes up when it uses the bathroom it stays wet. That can cause infection. Then, you have to go back and get medicine. And, it's uncomfortable for them, I feel like.

I think it would be better now to have him circumcised while he's small because when he gets bigger, if he's not circumcised, he might have infections. It'd just be better on him in the long run.

Most women that are married to men that aren't circumcised, they keeps an infection like a yeast infection. It's like the germs just bag up in the penis.

Having the newborn circumcised was viewed by several respondents as decreasing the potential for problems later in life.

And, I didn't think it would hurt him as bad now as it would 40 years from now.

I didn't want him to have a hard time in life after he got older. I wanted to get it done now and then you don't have to worry about getting it done anymore.

Another common behavioral belief expressed by the respondents who had their infants circumcised was the belief that circumcision promoted cleanliness and better health. "It's easier to take care of and clean" was a common comment. Additional behavioral beliefs were that it was cheaper to have the infant circumcised as a newborn, fewer circumcised men have penile cancer than uncircumcised men, the infant should look like his father and peers, and the appearance of the circumcised penis. Beliefs expressed by two of the respondents were as follows:

It looks kind of, I guess when you get in the shower after you get older. The ones who have it done and the ones who don't have it done, you know, there's a difference in it. Looks and everything. It looks better circumcised.

And then, I always thought, well you know, that if the daddy is the baby should be, you know, so he's not any different. And, then my husband had this idea where he said it was because, one of the things was because when he was a kid and you know, when they got older and started showering together, you know, at school. He wanted him to be as much like all the rest of them as possible.

A negative behavioral belief about circumcision voiced by the respondents who had their infant circumcised was pain. Some respondents believed the infant suffered pain during circumcision: "They say it doesn't hurt them as bad.

But, I know it hurts them when they're little." Another respondent did not believe that the infant remembered the pain and another respondent was unsure.

Going to do it while they were a newborn, cause they say they don't feel it. They don't have any feeling right now. There (pointed to perineum). I don't know if that's true or not. It's got to hurt.

Outcome Evaluations. Outcome evaluations were expressed explicitly by 12 of the respondents. The undesirability of pain during neonatal circumcision was expressed by two of the respondents who did not have their infant circumcised, "I just can't stand the thought of it." The cost of the procedure, "money's important," was undesirable to another respondent.

The respondents who had their infants circumcised expressed the desirability of doing what's "best for the baby," the infant looking like other males, the prevention of infection, the promotion of health, the infant not remembering the pain, and the prevention of circumcision in later life.

Attitudes. Attitudes were expressed explicitly by 11 of the respondents. The most common attitude expressed by the respondents was that circumcision was better for the infant. Other attitudes voiced included that circumcision is good, healthier, and easier. One respondent commented: "I believe in circumcision. I believe in the Bible, the Holy Bible. And, boy babies should be circumcised. I just believe in it." A final attitude was that circumcision was not necessary.

Normative Beliefs. Normative beliefs were expressed by 18 of the respondents. The person most frequently identified in the normative belief was the infant's father. Several respondents made comments such as "he told me to do what I wanted" or "that's what he wanted me to do." Another respondent gave more detail on her normative belief concerning her husband:

We had really talked about it before I come into the hospital. And, he said that he didn't really want it done. That it wasn't really necessary unless he did have problems.

Normative beliefs were expressed concerning the respondent's mother, mother-in-law, and friends. Physicians and childbirth educators were mentioned also in normative beliefs.

The baby's doctor, Dr. _____ and he agreed that it would be better to do it now.

Like I said when _____ had it done, Dr. _____ circumcised most all. You know that was his, "do it." You know he thought that it was best for the child.

Motivation to Comply. Motivation to comply was expressed explicitly by 13 of the respondents. Several respondents expressed motivation to comply with their perception of the wishes of the infant's father. Statements included "I just went along with what he said" and "especially for how my husband felt about it." Another family member discussed by the respondents was the respondent's mother.

My mother is a nurse and she's worked in pediatrics and stuff up here. And, I kinda went by what she said too.

A lack of motivation to comply with their perception of friends' wishes was voiced by two respondents. One respondent commented:

I said, well, that really didn't help that much. One had a lot of arguments against it and one had a lot of arguments for it.

While two respondents voiced a motivation to comply with the advice of their physician, another respondent replied, "we had already decided that's what we were going to do."

Subjective Norm. Subjective norms were expressed explicitly by six respondents. All six respondents expressed the belief that it was expected in today's society that males are circumcised at birth. Several respondents made comments such as "I don't know of anybody that don't do it anymore" and "everybody that I talked to or heard about always had it done when they were a little child, you know a baby."

Summary

Interviews were conducted with 20 mothers of male infants less than 72 hours of age about their decision-making process regarding circumcision. The average age of the respondents was 26.95 years with 85% of them having at least a high school education. The majority of the respondents were married and had at least one older child. The estimative, transitional, and productive phases of decision-making in the model of deliberate action during dependent-care were identified from the transcriptions of the interviews. The components of the theory of reasoned action also were identified from the transcriptions.

CHAPTER V

Discussion, Conclusions, and Recommendations

Findings and Conclusions

The Model of Deliberate Action During Dependent-Care

The estimative, transitional, and productive phases of the decision-making process in the model of deliberate action during dependent-care were identified from the descriptions of mothers about their decision-making process regarding circumcision. The respondents described various information seeking behaviors and sources of information in the estimative phase. The evaluation of this information in the transitional phase was described as well as the productive phase of signing or refusing to sign a circumcision permit.

While some respondents described reading books to obtain information, the most frequent method of seeking information was talking with family and friends including the infant's father, the respondent's mother, and the respondent's mother-in-law. Health care professionals were consulted by a minority of the respondents. The final sources of information were the experiences of the respondent including previous behavioral performance, the experiences of the infant's father, and the experiences of

acquaintances. These experiences frequently involved the late circumcision of the infant's father or an acquaintance.

The components of the theory of reasoned action in the transitional phase were described by the respondents and will be discussed in the next section of this chapter. The majority of the respondents made their decision about circumcision before the birth of their infant. The productive phase was completed prior to the interview with 85% of the respondents having their infant circumcised and 15% of the respondents not having their infant circumcised.

The estimative, transitional, and productive phases of decision-making in the model of deliberate action during dependent-care were identified from the descriptions by the sample of their decision-making process regarding circumcision. For the information to be utilized by the respondents in the decision-making process, it was obtained in the estimative phase. The information then was evaluated in the transitional phase. For the majority of the sample, the decision was made before hospitalization. Therefore, the information was obtained during or prior to the pregnancy.

The experiences of the respondent, including previous behavioral performance, became part of the information utilized in the decision-making process. Therefore, the productive phase with its dependent care activities became feedback for this sample into the estimative phase for the next infant.

Theory of Reasoned Action

The components of the theory of reasoned action were identified from the descriptions of mothers about their decision-making process regarding circumcision. Behavioral beliefs were described as well as outcome evaluations of those beliefs, resulting in an attitude regarding circumcision. Normative beliefs were described as well as a motivation to comply with those beliefs. Subjective norms also were described.

Behavioral beliefs expressed by the respondents who did not have their infant circumcised included pain during and after circumcision, cost of the procedure, and a lack of problems in later life necessitating circumcision. The possibility of circumcision when the infant was older was a negative behavioral belief described by the respondents who did not have their infant circumcised.

The respondents who had their infant circumcised voiced the following behavioral beliefs about circumcision: prevention of infection in the son and his future wife, prevention of problems and of the pain involved in circumcision in later life, promotion of cleanliness and better health, cost, a decrease in the rate of penile cancer, the infant should look like his father and peers, and the circumcised penis looks better than the uncircumcised penis. The pain of neonatal circumcision was a negative behavioral belief expressed by the respondents who has their infant circumcised.

Outcome evaluations described by the respondents who did not have their infant circumcised included the undesirability of pain during neonatal circumcision and the cost of the procedure. The respondents who had their infants circumcised described the desirability of doing "what's best for the baby," the infant looking like other males, the prevention of infection, the promotion of health, the infant not remembering the pain, and the prevention of circumcision in later life. Attitudes expressed by the respondents included that circumcision was better for the infant, good, healthier, and easier while one respondent commented that circumcision was not necessary.

The normative beliefs most often described by the respondents concerned the infant's father. Other individuals expressed in normative beliefs included the respondent's mother, mother-in-law, friends, physicians, and childbirth educators. Respondents described the motivation to comply with their normative beliefs concerning the infant's father and the respondent's mother. A lack of motivation to comply with the normative beliefs concerning friends was expressed by two respondents. Motivation to comply with normative beliefs concerning physicians was mixed. The subjective norm that was described was that neonatal circumcision was expected in today's society.

The components of the theory of reasoned action were identified from descriptions of the sample about the judgement process in making a decision regarding circumcision. Behavioral beliefs about circumcision were

formed and evaluated with outcome evaluations. For example, both respondents who had their infant circumcised and respondents who did not have their infant circumcised voiced the behavioral belief that the newborn felt pain during circumcision. However, respondents who did not have their son circumcised expressed the undesirability of the infant having pain while the respondents who did have their infant circumcised expressed the undesirability of pain from a late circumcision.

Through the process of placing a value on the behavioral beliefs, attitudes were formed concerning circumcision. Respondents who had their infant circumcised had positive attitudes toward circumcision. However, the sample size and design of this study prevent further conclusions or generalizations concerning the attitudinal component of the theory of reasoned action.

For this sample, normative beliefs were an important component of the decision-making process. The normative beliefs were then evaluated for a motivation to comply with the beliefs. Only one subjective norm was expressed by this sample. However, no further conclusions or generalizations can be made because of the sample size and design of the study.

Discussion

Relationship to the Conceptual Framework

The purpose of this study was to determine if the components of the proposed conceptual framework of the model of deliberate action during dependent-care and the theory of

reasoned action could be identified from the respondents' descriptions of the maternal decision-making process regarding circumcision. The phases of decision-making in the model of deliberate action during dependent-care and the components of the theory of reasoned action were identified from the description of the respondents about their decision-making process regarding circumcision.

According to Orem (1988), the estimative phase of decision-making consists of information seeking behaviors and reflection about the factors involved in the need for dependent care and about the possible alternatives. The respondents in this sample described information seeking behaviors and reflection on the information and the possible alternatives. The transitional phase of decision-making is one in which the individual evaluates the alternatives for action (Concept Development Conference Group, 1979; Orem, 1988). The respondents described in detail the process of evaluating the potential effects of circumcision versus the absence of circumcision. In the productive phase of decision-making, the actual activities of dependent-care are conducted. In this study, all of the respondents had completed the action of signing or refusing to sign a circumcision permit. Therefore, all three phases of the decision-making process were described by the respondents and their descriptions were congruent with Orem's conceptual framework.

According to Fishbein and Ajzen (1975), behavioral beliefs (beliefs about the potential effects of the

alternatives to action) and outcome evaluations result in the individual forming attitudes toward a behavior. In this study, the respondents described behavioral beliefs, outcome evaluations, and attitudes. Although the sample is too small to make further generalizations or conclusions, both the respondents who had their infant circumcised and respondents who did not have their infant circumcised held many of the same behavioral beliefs. However, the outcome evaluations as to the desirability/undesirability of these potential outcomes differed between the two groups of respondents. One attitude identified by both the investigator and the auditor appeared to be formed by a subjective norm from the respondent's religious community. The finding is not consistent with the theory of reasoned action.

Fishbein and Ajzen (1975) also delineated a normative component of decision-making that included normative beliefs, motivation to comply, and the subjective norm. An individual's appraisal of normative beliefs and their motivation to comply form a subjective norm toward the behavior. The respondents in this study described both normative beliefs and motivation to comply as well as subjective norms. Therefore, the components of the theory of reasoned action were described by the respondents and their descriptions, in general, were congruent with Fishbein and Ajzen's delineation of the theory of reasoned action.

The relationship of previous behavioral performance to the decision-making process was not hypothesized in the

conceptual framework. The findings of this study suggest that previous behavioral performance serves as a source of information when the decision to perform the behavior must be made at a later time. Therefore, the productive phase of decision-making becomes feedback into the estimative phase. Further study and clarification is needed on this finding and other relationships between the concepts in the theory of reasoned action.

Relationship to the Review of Research

The lack of research on the model of deliberate action prevents comparison of the findings of this study with previous research. Prior research on the theory of reasoned action has been quantitative in design while this study was qualitative in design. Therefore, the only comparison that can be made is that the quantitative studies on contraceptive behaviors (Ewald & Roberts, 1985; Jaccard & Davidson, 1972, 1975; Jorgensen & Sonstegard, 1984; Pagel & Davidson, 1984); blood donation (Bagozzi, 1981a, 1981b, 1982); weight control, exercise, and stress management (Pender & Pender, 1986); infant feeding method (Kaufman & Hall, 1989; Manstead et al., 1983); and parental anticonvulsant medication compliance (Austin, 1989) in general have supported the theory of reasoned action and the qualitative findings from this study are congruent with the theory of reasoned action.

The qualitative findings from this study provided insight into the role of previous behavioral performance in the decision-making process. In this study, previous

behavioral performance became a source of information for further processing and evaluation. This insight was not possible from the statistical results of previous studies.

The beliefs about circumcision and reasons for and against circumcision were similar for the sample in this study and previous studies (Brown & Brown, 1987; Harris, 1985, 1986; Herrera & Trouern-Trend, 1979; Lovell & Cox, 1979; Patel, 1966; Shaw & Robertson, 1963). However, the findings of this study provided insight into the role of these beliefs in the decision-making process of this sample instead of only providing a list of reasons for and against circumcision as previous studies have done.

Bean and Engelhoff (1984) reported that 56% of their sample had made a decision about circumcision prior to pregnancy. Only 40% of the sample in this study reported that a decision had been made regarding circumcision prior to pregnancy or within the first few months of pregnancy. Comparison of the findings between these two studies cannot be made because of the different designs and the small sample size of this study.

The study by Harris (1985, 1986) was the only previous qualitative research on circumcision decision-making reported in the literature. However, comparison of Harris' study with the findings of this study is difficult because the focus of Harris' study became the role of circumcision in a culture and the sample included many respondents other than the mothers of male infants. This study focused on the maternal decision-making process. Therefore, the only

comparison that can be made is that beliefs concerning circumcision were similar in both studies.

Relationship to the Design of the Study

The purpose of this study was to determine if the concepts in the proposed conceptual framework of the model of deliberate action during dependent-care and the theory of reasoned action could be identified from the descriptions by the mothers about their decision-making process regarding circumcision. The paucity of research in this domain and the theory-building purpose of this study necessitated the qualitative design of the study. The findings of this study were consistent with the purpose and design of the study. The phases of decision-making in the model of deliberate action during dependent-care and the components of the theory of reasoned action were identified from the transcripts of the interviews with the respondents.

While the findings of this study were congruent with the proposed conceptual framework, no generalizations or implications for nursing practice can be derived from these findings. As basic research, the qualitative design and the sample size of the study are inconsistent with inferences to any population other than the sample in this study. It is incumbent upon the reader to determine if the sample and setting in this study are similar to other populations and settings and if the findings of this study are congruent with observations of these populations.

All potential respondents who were approached by the investigator participated in the study. Despite their

willingness to participate in the study, several of the respondents had difficulty communicating thoughts and feelings. One respondent even apologized for her poor communication skills. The poor communication styles of the respondents often made the process of interviewing and of analysis difficult. Identification of concepts was enhanced when the respondent was articulate in her descriptions.

Recommendations for Research

The purpose of this study was to begin development of a conceptual framework to describe the maternal decision-making process through the identification of concepts from the descriptions of mothers about their decision-making process regarding circumcision. Further qualitative research needs to be conducted with a larger sample size and with multiple ethnic and cultural groups. A more varied sample would provide a potential broader base of support for the conceptual framework.

Circumcision was chosen as the maternal decision to examine because of the large population of mothers who make a decision regarding circumcision. Further qualitative research on maternal decision-making is needed with other maternal decisions. The decision to seek preventive health care and to seek health care for an ill child are only two of the many maternal decisions that could be studied. In order to build a maternal decision-making conceptual framework, research must be conducted concerning various material decisions.

A final recommendation for future research and theory development is the inclusion of other dependent-care agents such as the child's father in the research process. As the conceptual framework for maternal decision-making is further developed and clarified, research will be needed to determine if the conceptual framework is an accurate description of the decision-making process for other dependent-care agents.

Summary

A qualitative study was conducted to determine if the proposed conceptual framework of the model of deliberate action during dependent-care and the theory of reasoned action could provide an accurate description of the maternal decision-making process regarding circumcision. The phases of the decision-making process in the model of deliberate action during dependent-care and the components of the theory of reasoned action were identified from the transcripts of the interviews, thereby supporting the conceptual framework. However, the design of the study prevented further conclusions, generalizations comparison with previous quantitative research, and implications for nursing care. Additional qualitative research is needed for further development of the conceptual framework.

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Appendix A
Interview Schedule

Interview Schedule

1. Tell me about how you decided to have your baby circumcised (or not circumcised).
2. What was most important to you in this decision?
3. When did you make your decision?

Appendix B
Consent Form

Consent Form

I consent to a taped interview with Cathy Rozmus, R.N., M.S.N. on how I made a decision on circumcision. I understand that this interview is for her doctoral work at the University of Alabama at Birmingham. I may withdraw from the study at any time before my discharge from the hospital. I also understand that all tapes will be destroyed following transcription and analysis. My name will not be used in any written report of this study.

Signature of Volunteer

Date

Appendix C
Demographic Information

Demographic Information

Age _____

Race _____

Education _____

Number of previous children _____

Male Children _____

Are the male children circumcised? _____

Appendix D
Institutional Review Board Approval Form



The University of Alabama at Birmingham
 Institutional Review Board for Human Use
 205/934-3789
 Telex 888826 UAB BHM

**FORM 4: IDENTIFICATION AND CERTIFICATION OF
 RESEARCH PROJECTS INVOLVING HUMAN SUBJECTS**

THE INSTITUTIONAL REVIEW BOARD (IRB) MUST COMPLETE THIS FORM FOR ALL APPLI-
 CATIONS FOR RESEARCH AND TRAINING GRANTS, PROGRAM PROJECT AND CENTER GRANTS,
 DEMONSTRATION GRANTS, FELLOWSHIPS, TRAINEESHIPS, AWARDS, AND OTHER PROPOSALS
 WHICH MIGHT INVOLVE THE USE OF HUMAN RESEARCH SUBJECTS INDEPENDENT OF SOURCE
 OF FUNDING.

THIS FORM DOES NOT APPLY TO APPLICATIONS FOR GRANTS LIMITED TO THE SUPPORT
 OF CONSTRUCTION, ALTERATIONS AND RENOVATIONS, OR RESEARCH RESOURCES.

PRINCIPAL INVESTIGATOR: CATHY ROZMUS

PROJECT TITLE: A DESCRIPTION OF THE MATERNAL DECISION-MAKING PROCESS REGARDING
 CIRCUMCISION

1. THIS IS A TRAINING GRANT. EACH RESEARCH PROJECT INVOLVING HUMAN
 SUBJECTS PROPOSED BY TRAINEES MUST BE REVIEWED SEPARATELY BY THE
 INSTITUTIONAL REVIEW BOARD (IRB).
- X 2. THIS APPLICATION INCLUDES RESEARCH INVOLVING HUMAN SUBJECTS. THE
 IRB HAS REVIEWED AND APPROVED THIS APPLICATION ON 11-14-89
 IN ACCORDANCE WITH UAB'S ASSURANCE APPROVED BY THE UNITED STATES
 PUBLIC HEALTH SERVICE. THE PROJECT WILL BE SUBJECT TO ANNUAL
 CONTINUING REVIEW AS PROVIDED IN THAT ASSURANCE.
- X THIS PROJECT RECEIVED EXPEDITED REVIEW.
- THIS PROJECT RECEIVED FULL BOARD REVIEW.
3. THIS APPLICATION MAY INCLUDE RESEARCH INVOLVING HUMAN SUBJECTS.
 REVIEW IS PENDING BY THE IRB AS PROVIDED BY UAB'S ASSURANCE.
 COMPLETION OF REVIEW WILL BE CERTIFIED BY ISSUANCE OF ANOTHER
 FORM 4 AS SOON AS POSSIBLE.
4. EXEMPTION IS APPROVED BASED ON NUMBER(S) .

DATE: 11-14-89


 RUSSELL CUNNINGHAM, M.D.
 INTERIM CHAIRMAN OF THE
 INSTITUTIONAL REVIEW BOARD

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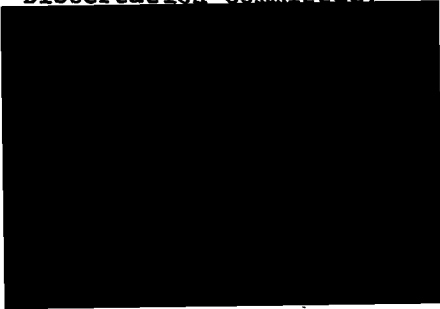
GRADUATE SCHOOL
UNIVERSITY OF ALABAMA AT BIRMINGHAM
DISSERTATION APPROVAL FORM

Name of Candidate Cathy Leffel Rozmus

Major Subject Maternal Child Health Nursing

Title of Dissertation A Description of the Maternal
Decision-Making Process Regarding Circumcision

Dissertation Committee:

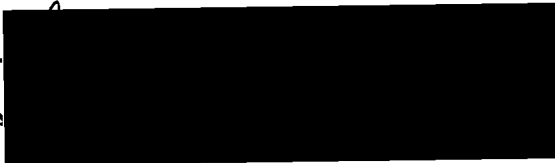


Chairman



Director of Graduate Program _____

Dean, UAB Graduate School _____



Date April 2, 1990