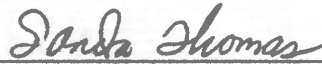


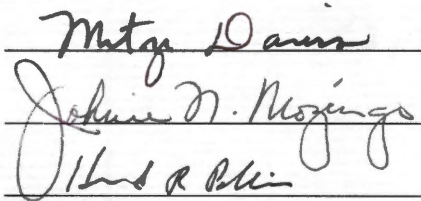
To the Graduate Council:

I am submitting herewith a dissertation written by Jenny Blair Short entitled "Breast Milk or Formula: An Existential Phenomenological Study of Infant Feeding Decisions Made by WIC Recipients in East Tennessee." I have examined the final paper copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Nursing.



Sandra Thomas, Major Professor

We have read this dissertation
and recommend its acceptance:



Accepted for the Council:



Vice Chancellor and Dean of
Graduate Studies

**Breast Milk or Formula: An Existential Phenomenological Study of Infant Feeding
Decisions**

Made by WIC Recipients in East Tennessee

A Dissertation

Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Jenny Blair Short

May, 2005

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2005b
.S54

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DEDICATION

This dissertation is dedicated to my husband and my children whose unfailing support and encouragement enabled me to persevere and achieve my goals.

ACKNOWLEDGEMENTS

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ABSTRACT

Research indicates that breast milk is superior to formula as a source of infant nutrition. Research also indicates that infants born to impoverished women and women who are nutritionally at risk are at increased risk of a host of neonatal complications. Despite this evidence, women enrolled in the USDA's Special Supplemental Food Program for Women, Infants and Children (WIC) are less likely to initiate and continue to breastfeed their infants than women in the general population.

This existential phenomenological research study was performed to explore the experience of making infant nutrition decisions for infants 6 months of age and younger by women enrolled in the WIC program in East Tennessee. Thirteen participants were recruited from the Knox County Health Department's WIC program. After consenting to participate in the study women were interviewed by the researcher. The interviews were audiotaped, and opened with the question: "What was it like for you deciding how to feed you baby?" The audiotapes were listened to and transcribed by the researcher. Transcripts were analyzed individually and as a group for meaning units which were then grouped into themes. An inter-disciplinary phenomenology group at the University of Tennessee assisted in this process and validated the researcher's findings.

The initial decision, entitled *Deciding and the Influence of Others*, was made by participants before or during pregnancy. The themes "Breast is best" versus "They can make formula so good it doesn't really matter." Participants' perceptions of cultural approval/disapproval of formula feeding and breastfeeding strongly influenced this initial decision.

The women experienced the implications and reality of their decisions during the second phase, entitled, *“Living with One’s decision.”* This phase involved the following sub themes: *“I can’t do this!”*; *“I’m in it for the long haul!”*; and *“Whatever [formula] the child likes is what he should get”*: Changing Formula Brands. During this phase women who were breastfeeding decided to continue or to stop, and women who were formula feeding their infants decided whether or not to continue using the formula approved by WIC.

The third stage of the decision-making process is entitled, *Coming to Terms with One’s Decision: Freedom versus Guilt*. The findings indicate that there are numerous opportunities for nurses and health care professionals to support this vulnerable population of women as they make their infant nutrition decisions.

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CHAPTER I

INTRODUCTION

Introduction

Unlike other mammals, we as humans have a choice when it comes to deciding what to feed our infants, breast milk or infant formula. Research indicates that breast milk is superior to formula as a source of infant nutrition. Research also indicates that infants born to impoverished women and women who are nutritionally at risk are at increased risk of a host of neonatal complications. The intent of this dissertation is to explore the lived experience of women enrolled in the United States Department of Agriculture's Special Supplemental Food Program for Women, Infants, and Children (WIC) as they decide what to feed their infants. WIC provides low-income women, infants and children up to the age of five years with nutrition education, supplemental food and health care referrals. Women enrolled in WIC are less likely to initiate and continue to breastfeed their infants than women in the general population.

This existential phenomenological research study was performed to explore the experience of infant nutrition decision-making for women in East Tennessee enrolled in the WIC program. This chapter serves to identify the phenomenon of interest and explain the purpose and significance of this study. A list of definitions and abbreviations used throughout this document is also provided.

Identification and Scope of the Problem

Optimal infant nutrition is extremely important, as this period is marked by accelerated growth and development. Breast milk is acknowledged as the best source of infant nutrition (AAP, 2005), yet breastfeeding rates among the poor lag behind those of the general population.

Until the early twentieth century, breastfeeding had been the primary mode of infant feeding in the United States. During this time, infants who were unable to drink breast milk were fed goat's milk or a semi-solid mixture of cereal and goat's milk (American Academy of Pediatrics [AAP], 1997).

During the 1940s, many women entered the workforce and were required to be away from their infants for significant time periods. Therefore, the need for alternative infant feeding methods arose, and cow's milk, goat's milk, and evaporated milk, were employed as sources of infant nutrition (Hammer, Bryson, & Agras, 1999). Increasing scientific knowledge of infant nutritional needs led to the manufacture of infant formula, which was marketed as a healthier alternative to cow's milk or evaporated milk (Hammer, et al, 1999). The large-scale manufacturing and marketing of infant formula as a replacement for breast milk began after World War II (Walker, 2001). The promotion of infant formula was supported by the medical community which believed that formula feeding enabled mothers to be sure of adequate intake and the nutrient content of the milk could be ensured (Walker, 2001).

As more women chose to feed their infants formula, breastfeeding rates declined. In 1958, the American Academy of Pediatrics stressed the importance of breastfeeding for the infant (American Academy of Pediatrics, 1958). Despite this recommendation,

breastfeeding rates continued to decline, reaching a nadir in the early 1970s. During this decade, research indicated that infants born to impoverished women were smaller and had a higher prevalence of anemia than the general population (Owen, & Owen, 1997); these discrepancies were attributed to poor maternal and infant nutrition.

In response to this problem, legislation was passed in 1972 to create the Special Supplemental Nutritional Program for Women, Infants and Children (WIC). WIC provides nutritional education and healthful supplemental food to pregnant and postpartum women and free iron-fortified formula for eligible infants. By the mid-1980's over half the eligible infants born in the U.S. were participating in WIC, and 75% of these infants were formula fed (Owen & Owen, 1997). The incidence of low birth-weight as well as maternal, infant and childhood anemia decreased, and WIC was deemed a success by political and medical communities (Owen & Owen, 1997).

Over the past thirty years, research findings indicate that breastfed infants had decreased incidences of numerous illnesses and diseases; a brief review of this literature is presented in chapter II. These results were linked to protective factors present in breast milk and absent in formula, and have led the American Academy of Pediatrics to formally declare that "human milk is species-specific, and all substitute feeding preparations differ markedly from it, making human milk uniquely superior for infant feeding" (American Academy of Pediatrics (AAP), 2005, p. 497). Maternal benefits and economic benefits associated with breastfeeding are supported by research as well; a brief review of this literature is presented in chapter II. Based on these findings, the U.S. federal government set as a goal to "increase to at least 75% the proportion of mothers who breastfeed their babies in the early postpartum period and to at least 50% the

proportion who continue breastfeeding until their babies are 5 to 6 months old” (United States Public Health Service [USPHS], 1999).

Purpose and Significance of the Study

Breast milk is strongly recommended for infants in the lower socioeconomic strata, because these infants are at greater risk for malnutrition and infectious diseases (American Academy of Pediatrics, 1989). Unfortunately, women participating in the WIC program are less apt to breastfeed than women in the general population (Bentley et al., 1999; Besharov & Germanis, 2000; Gross et al, 1998; Ryan, Pratt, Wysong, Lewandowski, McNally, & Krieger, 1991).

The WIC program provides federal grant money to state governments for the provision of supplemental food, general health care and health related referrals, and nutritional counseling for women, infants, and children who meet the enrollment criteria. The program provides vouchers for food and infant formula, dietary education and counseling, and referrals for health and social services to women and children who meet the inclusion criteria (low-income and nutritionally at risk). The total national enrollment for 2004 is 7,733,000 at a cost of \$399,100,000 (<http://www.fns.usda.gov/pd/currentsum.htm>); \$285,700,000 of this total cost was spent on food, including infant formula (<http://www.fns.usda.gov/pd/currentsum.htm>).

Since 1992, the WIC program has adopted a promotional campaign to increase breastfeeding initiation and duration among WIC participants. Breastfeeding women comprise only 5.7% of the total number of individuals enrolled in the program. Tennessee is included in the list of eight states that demonstrate the lowest levels of

breastfeeding (Breastfeeding Trends: 2002 Mother's Survey). WIC is actively striving to improve the rates of breastfeeding initiation and duration among its enrollees (Besharov et al, 2000). To achieve this goal, many methods have been employed. An enhanced food package is available for breastfeeding mothers for up to one year. WIC also provides breast pumps to breastfeeding enrollees. Other methods employed to promote breastfeeding include the use of peer counselors (Arlotti, Cottrell, & Curtin, 1998; Raisler, 2000), audiovisual aids (Gross et al, 1998), prenatal breastfeeding classes (Reifsnider & Eckhart, 1997; Tuttle & Dewey, 1995), and marketing campaigns. Despite these efforts, however, breastfeeding initiation rates and breastfeeding duration are significantly lower among women enrolled in WIC than rates found in the general U.S. population.

The purpose of this existential phenomenological study was to provide insight into the lived experience of women enrolled in the USDA's Special Supplemental Nutrition Program for Women, Infants and Children (WIC) in East Tennessee, focusing specifically upon how participants arrived at their infant feeding decisions. By shedding light on this phenomenon, the findings of this study will enable nurses and other health care professionals to identify relevant interventions aimed at increasing breastfeeding initiation and duration rates among this vulnerable population of women and their infants.

Research Question

The researcher was interested in investigating the experience of infant nutrition decision making for women enrolled in the WIC program in East Tennessee. Therefore,

research participants were asked, "What was your experience like deciding what to feed your baby?"

Definitions and Abbreviations

For the purposes of this study, key terms will be defined as follows:

WIC is an abbreviation used in reference to the USDA's Special Supplemental Food Program for Women, Infants and Children. WIC enrollees are defined as those women, infants and children who meet the enrollment criteria of falling within 185% of the poverty level and who are determined to be nutritionally at risk.

In accordance with the breastfeeding definitions set forth by Labbok and Krasovec (1990), breastfeeding will be categorized as full, partial and token (Labbok, M. & Krasovec, K., 1990). Full breastfeeding is divided into two categories: exclusive and almost exclusive. Exclusive breastfeeding occurs when no other solid or liquid other than breast milk is offered to the infant. Almost exclusive breastfeeding occurs when infants are offered vitamins, water or occasional juice in addition to breast milk. Partial breastfeeding is further categorized as high, medium and low. High partial breastfeeding occurs when 80% or more of feeds are breast milk. Medium partial breastfeeding occurs when 20 to 80 percent of feedings are breast milk. Low partial breastfeeding occurs when less than 20 percent of feedings are breastfeedings. Token breastfeeding is defined as the act of irregularly providing occasional breastfeeds.

Breastfeeding initiation is defined as the act of breastfeeding within 24 hours of the infant's birth. Breastfeeding duration is defined as the length of time a woman has breastfed an infant since its birth.

Formula feeding is defined as the act of providing 50% or more of infant nutrition through formula. Solid supplementation is defined as the act of supplementing (20% or less of the infant's total nutrition) with solid foods such as cereal, vegetables, fruit, etc.

Delimitations

1. Participants were selected by convenience from a city in East Tennessee.
2. Participants were 21 years of age or older and English speaking.
3. Participants volunteered to participate in the study, were cognitively able to participate in an interview, and were not in significant emotional distress at the time of the interview.
4. Participants were currently enrolled in the USDA's WIC program and were up to six months postpartum.

Summary

This study sought to contribute to nursing knowledge regarding the process of infant nutrition decision-making by East Tennessee women enrolled in WIC. The holistic perspective of the existential phenomenological method enabled the participants to describe their perceived experiences, and thereby provided a comprehensive understanding of their experience of this phenomenon. This chapter provided information which supports the need for the study and provides an overview of the research project. Chapter II will provide a review of the relevant current literature.

Chapter II

REVIEW OF THE LITERATURE

Introduction

Despite the known benefits of breastfeeding, a large portion of women enrolled in WIC choose to feed their infants formula, or begin breastfeeding but stop prior to the recommended duration of one year. Infants born to women of low socioeconomic status are at increased risk for illnesses related to poor nutrition. This chapter will compare and contrast formula and breast milk, discuss the current infant nutrition trends among the general population and women enrolled in WIC, describe public promotional policies that support breastfeeding, describe the WIC program and services and the breastfeeding, and review the literature pertaining to infant feeding decision-making. Next, an explanation of how this study addresses current gaps in the literature will be discussed.

Breast Milk or Formula: Current Trends

Optimal nutrition during infancy is essential for proper growth and development. The healthy, term neonate requires approximately 80 to 150 ml/kg/day of fluid, and 85-100 kcal/kg/day (Gregory, 2005). In addition, adequate amounts of protein (1.5 g/kg/day), carbohydrates (60 g/day), fats (30 - 40% of total intake), vitamins (A, D, E, and K) and minerals (Calcium, phosphorous and Iron) must be present to ensure normal growth (Gregory, 2005).

Human breast milk is considered to be the most complete and beneficial form of infant nutrition for human infants. Unlike cow's milk, breast milk contains low levels of

casein and total protein, making it easy to digest decreasing stress on an infant's immature renal system (Picciano, 1998). Moreover, the presence of long-chain fatty polyunsaturated fatty acids enable rapid brain and neurological development (Hamosh & Salem, 1998). An additional benefit is that breastfed infants tend to gain less weight and have more lean body mass at one year of age than formula fed infants, a factor which may provide protection against obesity in later years (Dewey, 1998).

One of the most compelling arguments for breast feeding is the correlation between breastfeeding and a decrease in the frequency of infection during the infant's first year of life. Breastfed infants display decreased rates of diarrhea, respiratory tract infection, otitis media, pneumonia, urinary tract infection, necrotizing enterocolitis and invasive bacterial infection (Beaudry, Dufour & Marcoux, 1995; Duncan et al., 1993; Levine, Farley & Harrison, 1999; Piscane, Graziano, Mazzarella, Scarpellino & Zona, 1992; Lucas & Cole, 1990). Protection against these illnesses is attributed to the presence of secretory IgA, leukocytes and carbohydrates in breast milk which enhance the infant's defense against viruses, bacteria and parasites (Goldman, 1993). The longer an infant is breastfed, the greater the protection against illness (Duncan et al., 1993).

Breastfeeding benefits the mother as well. The act of breastfeeding stimulates the production of oxytocin by the mother which stimulates the uterus to involute, thereby decreasing the duration and amount of postpartum bleeding (Heinig & Dewey, 1997). A woman who is exclusively breastfeeding produces hormonal inhibitors which prevent ovulation, allowing her breasts and ovaries a respite from high estrogen levels. This effect is believed to protect a woman from breast cancer (Brinton, Potoschman & Swanson, 1995) and ovarian cancer (Gwinn, Lee, Rhodes, Layde & Rubin, 1990). In

addition, breastfeeding has been shown to facilitate maternal-infant bonding and results in a high level of maternal self-confidence regarding maternal skills and ability (Virden, 1988).

Several research studies indicate that there is tremendous health care cost savings for infants who are exclusively breastfed up until six months of age. By negating the need for formula, breastfeeding saves a family approximately \$808.00 per year (Tuttle & Dewey, 1996; Montgomery & Splett, 1997). If the added benefit of improved infant health is taken into account, there is a cost savings for the family, employers, and society. Research indicates that there is an estimated 20% cost savings in healthcare expenditures for breastfed infants compared to those who are formula fed (Hoey & Ware, 1997). The employers of mothers who breastfeed benefit from decreased levels of maternal absenteeism, decreased healthcare insurance premiums and increased production (Cohen, Mrtek & Mrtek, 1995).

For women who cannot or choose not to breastfeed, the use of a commercially prepared infant formula is recommended. These formulas are regulated by the Food and Drug Administration, and manufacturers strive to make infant formula as close in composition to breast milk as possible. Currently, the WIC approved formula is Carnation Good Start and Carnation Good Start Supreme.

The Ross Laboratories Mothers Survey has been performed periodically since 1954 and is the largest, most comprehensive survey of infant feeding practices in the U.S. Statistics from this survey indicate that breastfeeding initiation rates have steadily climbed since reaching a nadir in 1971. In 1990 the breastfeeding initiation rate was 51.5%. In 2002 that rate had climbed to 70.1% and the breastfeeding rate at 6 months was

33.2%. Exclusive breastfeeding rates for 2002 are 56.3% at delivery and 22.7% at 6 months. Breastfeeding initiation rates among Black women (53.9%), Hispanic women (70.7%), and women below the age of 24 (66%) increased in 2002 (Breastfeeding Trends, 2002). The lowest breastfeeding rates occurred among women who were Black, under 20 years of age, possessed low levels of education, and who lived in the South East. Fifty-eight point eight percent of women enrolled in WIC breastfed in the hospital (33.4% exclusively), and 22% of these women were breastfeeding at 6 months postpartum (11.1% exclusively) (Breastfeeding Trends, 2002).

Fifty-eight point eight percent of the national WIC population initiated breastfeeding and 22.1% of these mothers were still breastfeeding at 6 months postpartum.

Breastfeeding is defined as the act of providing human milk or human milk and formula. Exclusive breastfeeding rates for the national WIC population were 33.4% at birth and 11.1% at 6 months postpartum. The WIC population as a whole demonstrated lower rates of breastfeeding initiation and duration than did women in the general population (Breastfeeding Trends, 2002). It is evident from these statistics that despite increases in breastfeeding initiation, there is a significant early drop out rate, and a substantial gap exists between rates displayed by women enrolled in WIC and women not enrolled in WIC.

Promotional Policies in Support of Breastfeeding

International Code of Marketing Breast Milk Substitutes

The promotion of breastfeeding has been a goal of the World Health Organization and the United Nations Children's Fund (WHO/UNICEF) since 1979 when an

international WHO-UNICEF convention was held to discuss the need for the development of an international code to monitor and restrict the marketing practices of manufacturers of formula and other products used as breast milk substitutes (Walker, 2001). Despite opposition from the United States, the Code was adopted on May 21, 1981 as a recommendation to all governments around the world. In 1994 the U.S. tacitly approved the Code by withdrawing its oppositional amendments.

The Code recognizes breast milk as beneficial and superior (in most circumstances) to breast milk substitutes, and cites the widespread international use of formula to be a health issue and, therefore, an appropriate concern of the WHO. The purpose of the recommendation is to “ limit the unethical marketing practices, false and misleading advertising, and complicity by health care professionals, health care systems, and governments that combine to influence a mother to replace her breast milk with a commercial substitute either completely or partially” (Walker, 2001, p.13). The Code lists ten provisions aimed at restricting marketing methods used by manufacturers of infant formula and recommends collaboration between the formula industry, non-governmental institutions, and governments in the monitoring of compliance.

The Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding

The Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding was developed in 1990 by participants at the WHO/UNICEF policymakers’ meeting on “Breastfeeding in the 90’s: A Global Initiative”. The document proclaims breast milk as the ideal source of infant nutrition and recommends exclusive breastfeeding for infants worldwide for the first six months of life; after six months,

breastfeeding should be continued with solid food supplementation until children are two years of age.

The document stresses the importance of a supportive breastfeeding culture which empowers women in their breastfeeding efforts; the importance of adequate maternal nutrition and access to family planning information and services to ensure that breastfeeding can be sustained are emphasized. The document stresses the importance of integrating breastfeeding policies with overall national health policies and recommends that all governments implement national strategies and policies to support and encourage breastfeeding and develop a monitoring system to determine the effectiveness of these programs (www.cdc.gov/breastfeeding/policy-innocenti.htm, 11/1/04). Several goals were outlined in the document, including the enactment of legislation to improve the rights and support of breastfeeding women in the work force.

Currently, in the United States, breastfeeding is supported by a wide array of healthcare and governmental agencies including the U.S Surgeon General, the American College of Obstetrics and Gynecology, the American Academy of Pediatrics, American Academy of Nursing, American College of Nurse Midwives, the American Academy of Family Physicians, Association of Women's Health, Obstetric and Neonatal Nurses, National Association of Pediatric Nurse Practitioners, and the American Dietetic Association, to name a few (www.cdc.gov/breastfeeding/policies.htm, Oct. 29, 2004).

In 1984 the Office of the Surgeon General sponsored its first workshop on breastfeeding and human lactation. The aims of the workshop were to increase support for breastfeeding in the health care system, improve breastfeeding education for health care professionals, develop public education and promotion campaigns, develop

community support systems for breastfeeding mothers, increase research in the area of human lactation, and improve support for breastfeeding in the work force (www.cdc.gov/breastfeeding/policy-SGR84.htm, 11/1/04). Follow-up reports were generated in 1985 and 1991 to review the progress made in these.

In 2000, the U.S. Department of Health and Human Services published the *Blueprint for Action on Breastfeeding* (DHHS, 2000). In this document, the then U.S. Surgeon General, David Satcher, states that, “the overriding guiding principle is to make breastfeeding as easy as possible for the mother rather than to discourage her from breastfeeding, whether intentionally or unintentionally” (DHHS Blueprint for Action on Breastfeeding, p.14). The document lists formula company marketing practices as a deterrent to breastfeeding, and endorses the International Code of Marketing for Breast Milk Substitutes recommendations. The Blueprint calls for the development of social support in the form of help hotlines, peer counselor programs, and the formation of breastfeeding mother support groups. The mandate calls for marketing campaigns to increase awareness of the benefits of breastfeeding and portrayal of breastfeeding as normal and desirable for all women. The Blueprint also encourages fathers and family members to be actively involved in breastfeeding support. As a result, the U.S. Breastfeeding Committee released the *Strategic Plan for Protecting, Promoting, and Supporting Breastfeeding in the United States: A national Agenda*. The goal of the committee is to reduce barriers to breastfeeding through education, implementation and monitoring of the International Code of Marketing for Breast Milk substitutes.

Healthy People 2000 established a goal of achieving a 75% breastfeeding initiation rate in this country by the year 2000 (Department of Health and Human Services

(DHHS), 1990). Unfortunately, statistics from 1998 reveal that we fell short of this goal. The national incidence of breastfeeding initiation in the early postpartum period was found to be 64% and it was estimated that only 29% of these women were still breastfeeding at six months (DHHS, 2000). While maintaining the goals listed in *Healthy People 2000*, *Healthy People 2010* sets forth the new goals of improving breastfeeding rates among racial and ethnic minority groups, increasing the number of women breastfeeding at 6 months postpartum to 50%, and increasing the total number of women breastfeeding at one year postpartum to 25% (DHHS, 2000).

The USDA's Special Supplemental Nutrition Program

For Women, Infants, and Children (WIC)

WIC was begun in 1972 as a two year pilot program aimed at reducing the incidence of diseases and medical conditions associated with malnutrition in pregnant and postpartum women, infants and children. The program was permanently instituted in 1974. WIC operates in all fifty states, 33 Indian reservations, the District of Columbia, Guam, the US Virgin Islands, American Samoa, and the Commonwealth of Puerto Rico (Walker, 2002). Federal grants are provided to state agencies, primarily health departments, to fund WIC services. Currently, 46% of the infants born in the US are enrolled in WIC.

The program provides vouchers for infant formula and food to women and children who meet the inclusion criteria. Approximately fifty percent of the formula sold in the U.S. is purchased by states for their WIC enrollees (Walker, 2001). Formula companies competitively bid for these state contracts, and offer rebates to the states; the more

formula that is purchased by the government, the higher the rebate from formula companies. It is estimated that these rebates help to reduce the total amount spent by the federal government on food costs by approximately 28% (Walker, 2002). Money saved by the states is to be spent on increasing enrollment in state WIC programs.

In addition to the supplemental food packages, WIC provides at least two nutritional counseling sessions for each enrollee every six months. Enrollee participation in these sessions is not required for the receipt of food packages, however. The rate of participation among postpartum women is between 5 and 59% depending on the site (Fox, Burstein, Golay, & Price, 1999).

The most recent participation data are from October, 2004. Enrollment in Tennessee for 2004 was 159,331 (<http://www.fns.usda.gov/pd/wifypart.htm>). The national enrollment total for 2004 was 8,057,546 (<http://www.fns.usda.gov/pd/wifypart.htm>). Of the total enrollment, infants account for roughly 26% and women account for roughly 24% (<http://www.fns.usda.gov/oane/MENU/Published/WIC/FILES/PC2002.htm>).

Breastfeeding women constitute roughly 6% of the total of enrollees (<http://www.fns.usda.gov/oane/MENU/Published/WIC/FILES/PC2002.htm>). Hispanics make up the largest segment of the WIC population (38.1%), followed by Whites (35.9%), and Blacks (20.2%) (<http://www.fns.usda.gov/oane/MENU/Published/WIC/FILES/PC2002.htm>).

The total budgeted cost nationally for the program was \$4,977,064,857 (<http://www.fns.usda.gov/wic/fundingandprogramdata/grants2004.htm>). Of this amount, \$3,676,119,084 was spent on food, including infant formula. (<http://www.fns.usda.gov/wic/fundingandprogramdata/grants2004.htm>).

The State of Tennessee received \$100,126,526 in total funds for 2004; of this amount, \$75,660,948 was allocated for food, including infant formula.

(<http://www.fns.usda.gov/wic/fundingandprogramdata/grants2004.htm>).

WIC Policies and Interventions to Promote Breastfeeding

According to WIC regulations, breastfeeding is defined as, “the practice of feeding a mother’s breast milk to her infant(s) on the average of at least once a day” (Baydar, et al, 1997). Applying this loose definition, approximately 56% of WIC enrollees initiate breastfeeding; this rate drops to 45% once women leave the hospital (Baydar, et al, 1997).

In an effort to increase breastfeeding rates in the WIC population, the Child Nutrition and WIC Reauthorization Act of 1989 (Public Law 101-147) was passed which required the Nutrition Services and Administration to allocate a minimum of \$8 million dollars for breastfeeding promotion and support; a portion of this funding was authorized for the purchase of breastfeeding aids (breast pumps, breast shells, nursing supplementers, nursing bras and pads) (Walker, 2002). The law also required each state agency to employ a breastfeeding promotion coordinator to ensure that the following standards of breastfeeding promotion and support are met: 1) a policy specifically stating that breast milk is the preferred method of infant nutrition, 2) coordination of breastfeeding promotional activities, 3) provide training in breastfeeding support and promotion to all staff employed by local agencies, 4) implement a plan to ensure access to all WIC enrollees to breastfeeding promotion and support activities (Walker, 2002).

In 1994, the Healthy Meals for Healthy Americans Act (Public Law 103-448) was passed by Congress which increased the federal spending for breastfeeding promotion from \$8 million to \$21 million (Walker, 2002); in 1995 the annual expenditure for breastfeeding support and promotion was \$21 million (Walker, 2002). In 1998 Public Law 105-336 was passed which authorized state agencies to use WIC food grant funds to purchase or rent breast pumps (Walker, 2002). Since 1998, WIC agencies have been required to submit data on breastfeeding initiation and duration rates among enrollees (<http://www.fns.usda.gov/oane/MENU/Published/WIC/FILES/PC2002.htm>).

WIC practitioners are actively striving to increase breastfeeding initiation and duration rates through the implementation of a wide-array of interventions, including the use of peer counselors (Arlotti, Cottrell, & Curtin, 1998; Raisler, 2000), audiovisual aids (Gross et al, 1998), prenatal breastfeeding classes (Reifsnider & Eckhart, 1997; Tuttle & Dewey, 1995), and marketing tactics (Lindenberger & Bryant, 2000).

In 1997 WIC contracted with Best Start Social Marketing and initiated the “Loving Support Makes Breastfeeding Work” Campaign as a part of the WIC National Breastfeeding Promotion Project with the goal of increasing breastfeeding initiation and duration rates among WIC enrollees and improving public support and acceptance of breastfeeding. (Walker, 2002). The campaign includes the use of mass media (bill boards, television advertisements, and news paper advertisements), client education, WIC staff training, and community outreach to increase breastfeeding support for WIC enrollees. The campaign emphasizes benefits of breastfeeding, such as bonding, enjoyment, and optimal health. The need for familial and social support, especially during the first few

weeks, the time-consuming nature of breastfeeding and the embarrassment some women feel when breastfeeding in public are also addressed in the campaign.

Despite the initiation of breastfeeding promotion campaigns, there is evidence that WIC vouchers for infant formula dissuade women from breastfeeding (Houghton & Graybeal, 2001; Misra & James, 2000; Sable & Patton, 1998). The vouchers are worth approximately \$80/month which may be viewed as a financial incentive and sanctioning of formula feeding (Besharov et al., 2000). In one study a woman stated, “they give you a mixed message. They tell you breastfeeding is best and yet at the health department – WIC makes it where it’s so easy to go out and get the formula. I mean it’s free” (Trado & Hughes, 1996, p.37). WIC enrollees in all states continue to demonstrate significantly lower rates of breastfeeding initiation and duration than women who are not enrolled in WIC (Breastfeeding Trends, 2002).

Infant Feeding Decisions

Several determinants have been identified which influence women’s infant feeding decisions. These determinants can be divided into the following three categories: demographic factors, attitudinal factors, and factors associated with structural support. With regard to demographic factors, among WIC participants, as in the general population, the rate of breastfeeding tends to increase with an increase in the mother’s age (Ryan, 1997; Ryan, Zhou & Acosta, 2002), socioeconomic status (Ryan, 1997; Ryan 2002), and education (Ryan, 1997; Ryan, et al., 2002); married women are more apt to breastfeed than women who are not married (Bick, MacArthur & Lancashire, 1998). White women display higher rates of breastfeeding than non-white women (Kum-Nji,

Mangrem, Wells, White, & Herrod, 1999; Ryan, 1997). Rates of breastfeeding vary depending upon where a woman lives. Women who live in the western U.S. are more apt to breastfeed, while women residing in the South are the least likely to breastfeed (Bentley et al., 1999; Ryan, 1997; Ryan, et al, 2002).

Attitudinal determinants have also been shown to influence a woman's feeding decisions. Positive attitudes regarding breastfeeding include the belief that breastfeeding is healthier for the baby than formula feeding (Freed, Fraley, & Schandler, 1992), and that women who breastfeed are respected (Kessler, Gielen, Diener-West, & Paige, 1995). Libbus and Kolostov (1994) found that women who intended to breastfeed viewed breastfeeding as more convenient, and more conducive to freedom than did women who intended to formula feed (Libbus et al., 1994). Negative attitudes regarding breastfeeding include the belief that breastfeeding is less attractive (Freed et al., 1992), is bad for the breasts and makes them ugly (Kessler et al., 1995), that formula feeding is easier (Robinson, Hunt, Pope, & Garner, 1993), and that infants grow better with artificial feeding (Freed et al., 1992).

Women are more likely to choose the method of infant feeding that their friends and families have chosen. The attitudes of a woman's mother regarding infant feeding methods are influential; women breastfed as infants are more likely to breastfeed their own infants. Lastly, if a woman has successfully breastfed, she is more likely to breastfeed subsequent infants (Humenick, Hill, & Spiegelberg, 1998).

The attitudes of a woman's partner or significant other have been strongly correlated with her infant feeding decision (Sharma & Petosa, 1997). Many studies indicate that women discuss their infant feeding plan with their husband or significant other (Freed &

Fraley, 1993). Furthermore, the attitudes held by these partners have been found to influence a woman's infant feeding decisions (Black, Blair, Jones and DuRant, (1990; Freed, Jones, & Schandler, 1992). Some men fear that breastfeeding will make a woman's breasts ugly, that it will interfere with sex, and that breastfeeding will interfere with the development of the paternal/infant bond (Jordan & Wall, 1990).

The Decision to Breastfeed versus the Decision to Formula Feed

In their qualitative study, Matthews, Webber, McKim, Banoub-Baddour and Laryea (1998) investigated the reasons for and influences on Canadian participants' infant nutrition decisions over a six month period. The researchers found that the main reasons women chose not to breastfeed were embarrassment and discomfort with the concept of breastfeeding. Women who initiated breastfeeding but then stopped stated that difficulties with breastfeeding and the need to return to work were strong influences upon this decision. These researchers found that a woman's social network has a stronger influence over her infant feeding decisions than do health care providers. (Matthews et al., 1998).

Ertem, Votto and Leventhal (2001) examined infant feeding decision for 64 New England women enrolled in WIC. All participants initiated breastfeeding and gave the following reasons for this decision: benefits for the infant, best food, best nutrition, and no artificial products (92.2%); bonding (3.1%) and maternal benefits (4.7%) were also cited.

Cricco-Lizza (2004; 2005) conducted an 18 month-long ethnographic inquiry into the infant feeding beliefs and experiences of eleven Black women in New York enrolled in WIC. Study participants stated that formula feeding was the method with which they were most familiar and they viewed breastfeeding as difficult and stressful; the

participants perceived their lives to be stressful enough without the additional stresses brought on through breastfeeding. Many participants in the study expressed the concern that breastfeeding encourages dependency in an infant, while formula feeding is thought to foster independence, an important factor for most participants since the need for the women to return to work was a strong influence upon their infant feeding decisions.

Forste, Weiss, and Lippincott (2001) quantitatively evaluated the influence of race upon infant nutrition decisions made by women who participated in the National Survey of Family Growth in 1995. The likelihood that a woman would breastfeed increased with a rise in income levels. Women cited the following reasons for choosing not to breastfeed: employment conflicts (10%), medical or physical problems that prevented breastfeeding (14%), and preference for bottle feeding (76%). After controlling for socioeconomic status and characteristics of the births, race remained a strong predictor of breastfeeding. Black women were less likely to breastfeed their infants (30%) than non-Black women (65%); Eighty-three percent of the Black women who chose not to breastfeed cited formula feeding as the preferred method of infant feeding (Forste, et al, 2001). Unfortunately, given the confines of the survey, the researchers were unable to explore the meaning of “preferred method” for these participants.

A woman’s perception of structural support strongly influences her infant feeding decision. Research indicates that infant feeding decisions are most often made during a woman’s pregnancy, and the decision is influenced by the woman’s partner, family members and friends. The emotional support of the woman’s immediate family and family members’ perceptions and attitudes of breastfeeding or formula feeding strongly influence a woman’s infant feeding decisions. Perception of familial support affects not

only a woman's decision to initiate breastfeeding but also determines breastfeeding duration (Bentley et al., 1999; Houghton & Graybeal, 2001; Trado & Hughes, 1996). Approval of breastfeeding by the woman's partner or significant other was found to be the most significant predictor of her choice of infant feeding method in several studies (Bentley et al., 1999; Raisler, 2000; Sable & Patton, 1998).

Women who work often have difficulty garnering managerial and/or peer support for breastfeeding or pumping. Breastfeeding initiation and duration are directly linked to a woman's plans to return to school or work; women who will be returning to work or school shortly after the birth of their infant are less likely to initiate breastfeeding than those women who do not have such plans (Houghton & Graybeal, 2001; Trado & Hughes, 1996). Women state that short maternity-leaves and lack of appropriate accommodations at work or school deter them from continued breastfeeding. A woman returning to work or school must be well organized and have the strong support of those around her if she is to continue breastfeeding.

Women who receive advice and support from health care providers are more likely to choose to breastfeed than women who do not (DiGirolamo, Gummer-Strawn, & Fein, 2003; Sable & Patton, 1998). Riordan (1997) states that prior to delivery, "health care providers hesitate to inform parents about the hazards of not breastfeeding because they do not want parents, especially the bottle feeding mothers, to feel guilty" (Riordan, 1997, p. 96). The lack of health care provider education and encouragement for breastfeeding has been cited as a reason many women choose to formula feed their infants (Di Girolamo, and Gummer-Strawn, 2003; Sable and Patton, 1998). Sable and Gummer-Strawn (1998) found that women who were encouraged by their health care provider to

breastfeed were more likely to do so (61.1%) than were women who did not receive such encouragement (34.7%) (Sable & Gummer-Strawn, 1998). Health provider neutrality with regard to infant feeding methods is associated with early breastfeeding cessation (DiGirolamo, et al, 2003).

At the time of delivery, women facing the difficulties associated with the initiation of breastfeeding, many women do not find nurses helpful or encouraging (Mozingo, Davis, Droppleman, & Meredith, 2000). Women state that nursing staff provide conflicting advice and insensitive care (Mozingo, et al, 2000). WIC participants describe professional support as important but inconsistent. A woman who feels encouraged and supported by healthcare providers is more likely to breastfeed than a woman who does not perceive the presence of adequate support (Bentley et al., 1999; Trado & Hughes, 1996).

The Decision to Stop Breastfeeding

Ertem et al., (2001) performed a longitudinal qualitative study involving semi-structured interviews to examine the timing and predictors of early termination of breastfeeding for 64 New England women enrolled in WIC. Breastfeeding cessation rates were 27%, 37%, 70%, and 89% by postpartum week one, week 2, 2 months and 4 months, respectively. Problems cited for breastfeeding cessation included problems with nursing (26.6%), infant problems such as spitting up, crankiness and fussing (35.9%), perceived lack of breast milk (28.1%), inconvenience for the mother (28%), and problems requiring medical management (jaundice, maternal illness) (10.9%). The researchers found that a woman's level of confidence in her ability to breastfeed and her

perception of the infant's satisfaction or dissatisfaction with the feeding method were strong predictors of continued breastfeeding.

Kirkland and Fein (2003) quantitatively analyzed reasons for breastfeeding cessation given by women participating in the national Infant Feeding Practices Study (IFPS). The researchers found that the reasons for breastfeeding cessation varied depending upon the age of the infant. During the first 2 months postpartum, the most common reasons cited were concerns about milk supply and wanting to leave the infant for several hours or wanting someone else to be able to feed the infant. During this period concerns about breast milk involved worry that the infant had difficulty nursing, wasn't satisfied and/or that there was insufficient milk supply (Kirkland et al, 2003). During postpartum months 3-5 all the above stated reasons persisted except for difficulties nursing; additional reasons cited during this period were that the "infant weaned self" and that the "mother could not feed infant because of work". From 6 months postpartum and later, the most frequently cited reasons for breastfeeding cessation were that the "infant weaned self" and that the "infant was old enough" to stop (Kirkland et al, 2003). Unfortunately, this study does not explain how breastfeeding is defined in the IFPS and the homogeneous white, middle-class nature of the respondents limits the generalizability of the findings.

Avery, Duckett, Dodgson, Savik, & Henley (1998) found that women who stopped breastfeeding earlier than they had intended during pregnancy were younger, had fewer years of education, held more positive attitudes toward formula feeding, had higher perceived insufficient milk scores, and were more likely to work outside the home than women who breastfed for their intended duration. The authors also found that the greater

a woman's perception of control with regard to breastfeeding the more likely she was to breastfeed for the intended duration (Avery et al., 1998).

In their phenomenological study, Mozingo, et al. (2000) interviewed nine women to gain a better understanding of the meaning of short-term breastfeeding. The findings revealed that the women often had unrealistic expectations of breastfeeding and the reality of breastfeeding, which involved physical discomfort and a lack of support, was very different from their prenatal expectations. For these participants, breastfeeding was difficult and painful. To make matters worse, health care workers offered conflicting advice and were insensitive to the women's privacy needs. Due to the difficulties of breastfeeding initiation, all participants stopped breastfeeding much earlier than they had initially intended, and many felt a strong sense of guilt and shame for being unable to successfully breastfeed (Mozingo, et al, 2000)

In their qualitative study, Hewat and Ellis (1984) found that women who were unable to give up a tightly controlled feeding routine or, in contrast, those women who completely gave up all routine were more likely to stop breastfeeding than women who were able to remain flexible with regard to feedings (Hewat & Ellis, 1984).

Summary

Breastfeeding is the recommended method of infant feeding, yet the majority of women enrolled in WIC continue to choose formula feeding over breastfeeding. Nationally, Tennessee is ranked among the eight states demonstrating the lowest breastfeeding rates, and women enrolled in the WIC program are less likely to breastfeed than women in the general population. This phenomenological study was conducted in

order to better understand what it is like for women enrolled in the WIC program in East Tennessee to decide how they will feed their infants.

CHAPTER III

DESIGN AND METHODOLOGY

Introduction

Today, women have a choice regarding what to feed their infants. The physiological fact that women lactate after the delivery of an infant does not mandate that they will breastfeed. Obviously, there are other factors which influence a mother's infant nutrition decision-making. This study involves the use of the existential phenomenological method to shed light on participants' experiences associated with the often taken for granted infant nutrition decision-making process.

Phenomenology is described as the documentation of "an experience from the perspective of the person who has lived the experience, to put into words how an experience is lived and how it feels (Brink, 1998, p.311). Based on the existential theory of perception presented by Merleau-Ponty, phenomenology as a research method attempts to get at the essence of an experience. The holistic approach of the existential phenomenological method sheds light on the historical, cultural and social attitudes, and beliefs that influence this decision-making process. A more restrictive methodology would not have captured the rich human experience.

This chapter provides an overview of the existential phenomenological method and then describes in detail the characteristics of the sample and the participant recruitment process, data collection and recording methods, data analysis, measures to ensure validity and reliability, and protective measures employed to safeguard the rights of the participants.

The Existential Phenomenological Method of Research

The existential phenomenological method was developed to validate experience as a legitimate source of scientific inquiry. The method is based upon the philosophical writings of Heidegger, Husserl, and Merleau-Ponty and is based upon the primary principle that our subjective selves are inseparable from the “outside” world. This belief of the intertwining of experience is based upon Heidegger’s concept of *dasein*, “being in the world”. We are not islands unto ourselves – we affect the world and it affects us. Furthermore, the individual is “thrown” into the world with a given cultural and historical context. One cannot escape the influence of this context upon his or her perceptions.

The existentialists believe in the concept of free-will. For Sartre, man is “condemned to be free” – this freedom is viewed as an overwhelming responsibility which is defeating and immobilizing. Merleau-Ponty, on the other hand, believes that there is free will in the sense that we may choose how to act and react, but that this choice is naturally limited by one’s situational context, or thrown-ness. Free will assumes the presence of choices. An individual, therefore, is responsible to choose within the constraints of his or her contextual boundaries.

Our body is our interface with the world around us. Therefore, our perceptions and reflections about these perceptions help us to interpret our relation to the world. Each individual experiences a private self-world, or *umwelt* or *eigenwelt*, which is uniquely his or hers. Merleau-Ponty states that perception “is the background from which all acts stand out, and is presupposed by them” (Merleau-Ponty, 1962, Preface). The phenomenological method seeks to uncover the meaning of an experience for an

individual and then seeks to look for commonalities and dissimilarities of experience among a group of participants.

The meaning of an experience is known only to the individual who has had the experience. The phenomenological method asks participants to reflect upon the personal meaning a particular experience had for them. This self-reflection usually includes a description of one's perceptions of the experience and seeks to find the overarching meaning of the experience for the individual. Therefore, the participants are the experts who teach the researchers through their descriptions and insights. Merleau-Ponty states, phenomenology "offers an account of space, time and the world as we 'live' them" (Merleau-Ponty, 1962, Preface); therefore, the researcher identifies themes from the participant responses based upon the broad categories of time, body, others, and world.

Bracketing

Because the phenomenological method involves the personal involvement of the researcher, the researcher is, in essence, the research tool. The researcher is the lens through which the meaning of the experience for the participants is viewed. The researcher doesn't just describe the perceptions of participants, but seeks themes and commonalities among the experiences of participants. Because we all experience an *eigenwelt*, our personal reality, bracketing is a way of identifying the researcher's values and beliefs and, as much as possible, setting these aside as one interprets the experiences of the participants so as not to color or alter the meanings presented by the participants. Therefore, to ensure reliability and validity of the findings, it is crucial that the researcher undergo a process of bracketing which enables him or her to identify values and beliefs held about the phenomenon in question. Once these thoughts, feelings and beliefs have

been identified and reflected upon, the researcher makes a conscious effort not to allow his or her own personal meaning to influence the analysis of the data.

The process requires that the researcher, who has his or her own *eigenwelt* and all the beliefs, values and meanings associated with his or her *eigenwelt* must acknowledge this influence and attempt to separate him/herself from all causal speculation, preconceived notions and reasons and approach the meaning of the phenomenon for the participants openly.

Researcher's Bracketing

The purpose of this study was to gain insight into the experiences of infant nutrition decision-making for women enrolled in the WIC program in East Tennessee. Prior to performing the interviews, a bracketing interview took place between the principal investigator and a colleague. A summary of the principal investigator's values and beliefs regarding infant feeding methods is presented below.

It is important to the researcher that she was breastfed as an infant. She takes comfort and support from her mother and appreciates the fact that her mother did this and now she must do this. She is also influenced by the medical recommendation to breastfeed and the scientific literature which designates breastfeeding as the superior form of infant nutrition. The researcher states that she "always planned on breastfeeding"; she made the decision during pregnancy.

It was difficult for researcher to breastfeed in public. She states that she believes that the breasts exist for the function of nourishment; she doesn't view breasts as sexual object. The ability of the breastfeeding mother to return to her pre-pregnancy weight was

an issue for the researcher. She states that this was a positive factor in the decision-making process.

There doesn't seem to be any choice for the researcher; she felt that she had to continue to breastfeed despite the difficulties. Breastfeeding involved a stronger sense of engagement between the researcher and her second child than it did with her first child. The researcher states that with her first child she felt like a "pacifier". With the first child breastfeeding seems to go slowly—the researcher is "counting the minutes" for the feeding session to end – the process of breastfeeding is slow, and the time between feedings for the first child is fast. The researcher felt trapped by the responsibility and duty of breastfeeding. After her daughter became ill and it was questionable whether or not the daughter would survive, breastfeeding provided a newfound sense of closeness and maternal giving that the researcher had not experienced initially.

With the second child time is not an issue. The breastfeeding process seems to proceed smoothly and quickly – the second child nurses and is ready to do her own thing. Immediately after the birth of this child, breastfeeding imparts a sense of closeness between mother and infant for the researcher.

Characteristics of the Sample and Recruitment Process

The study involved the formation of a voluntary sample based upon the following criteria: women who had given birth within the past 6 months, were twenty-one years of age or older, were able to speak and understand English, were receiving either the WIC food package for breastfeeding mothers or those for postpartum women and their infants, were enrolled in the WIC program in East Tennessee, and were willing to talk about their

experiences regarding their infant feeding decision-making process. It is important to note that the purpose of phenomenological research is to gain a more complete understanding of the participants' lived experience. Therefore, the "sample" of participants for this study is not meant to be representative of a larger population, but to provide a description of their unique experiences.

Participants were informed of the study through fliers distributed at the Knox County Health Department and by the Knox County Health Department practitioners and staff. The sample consisted of thirteen women. Participant recruitment ended when no new meanings or themes emerged from analysis of the transcripts.

Data Collection and Recording

Women interested in participating in the study contacted the principal investigator by phone. At that time, women were asked if they met the eligibility criteria outlined in section III. Women who met the eligibility requirements met individually with the principal investigator at the Knox County Health Department or at a site selected by the participant. All women received thorough written and oral descriptions of the study. Women who wished to participate signed the consent document, completed the demographic data form, and chose a pseudonym for the interview. The women were then interviewed privately and individually by the principal investigator. Interviews lasted approximately twenty minutes to one hour and were audiotaped and later transcribed by the principal investigator. The tapes were labeled with the pseudonyms chosen by the participants and the dates that the interviews took place. The tapes were destroyed by the principal investigator immediately following transcription. The consent forms, transcripts

and demographic data forms were stored in a secure location where they will remain for a period of three years.

The interviews began with the grand tour question, "What was it like for you deciding what to feed your baby?" The experiences of the participants were the focus, and the investigator avoided any leading questions or remarks. Statements and questions that followed the initial question were limited to seeking clarification or providing encouragement for the participants to elaborate upon their experiences. After the interviews were completed, each participant received a \$20.00 Wal-Mart gift card as compensation for her time and effort.

Field notes were logged after each interview which described the feelings of the interviewer, the tone of the interview, and a description of each interview process. A research log was maintained by the investigator to record "what was done, when it was done, why it was done, and what was learned in the process" (Brink, 1998, p.323).

Data Analysis

Data analysis involved "reading and rereading field notes or transcripts of interviews on a daily or frequent basis and deciding what has been learned so far, what is puzzling, what is unanswered, and what does not fit" (Brink, 1998, p.324). Using the theoretical framework set forth by Merleau-Ponty, the interviews were analyzed with reference to the four concepts of others, time, body and world. Meaning-units were determined and then grouped into common themes, or experiential patterns (Thomas & Pollio, 2002). Individual themes which occurred within a transcript as well as global themes which occurred across transcripts were identified and a thematic structure was developed

(Thomas & Pollio, 2002). Data collection continued until no new categories emerged from the data analysis.

Several of the transcripts were selected for review by the University of Tennessee's inter-disciplinary Phenomenology Group. This group upheld strict confidentiality protection measures. Prior to review of any transcript, group members signed a confidentiality agreement distributed by the principal investigator; discussion of the information in transcripts outside of the group was strictly prohibited. Pseudonyms were used to refer to participants and any identifying information was removed from transcripts.

Validity and Reliability

To ensure validity, the interview questions were open-ended and relevant to the subject under study. The course of the interview followed the cues set forth by the participant. The interviewer listened actively, "pursuing leads and cues from respondents that allow [her] to formulate additional relevant questions" (Hutchinson et al., 1992). The interviewer refrained from using theoretical jargon or attempting to reassure, console or educate the participants.

The personal biases of the researcher pose a potential threat to the validity of the results. My own emotions, experiences, thoughts, as well as cultural and personal biases regarding infant feeding decisions were identified and bracketed during a bracketing interview with a colleague that was transcribed and analyzed by the researcher and the inter-disciplinary phenomenology group prior to the onset of data collection. The bracketing transcript was used as a tool to assess for potential bias in interpretation.

Sufficient time was allotted to interviews to ensure that the respondent was fully informed of the study and that the interview was allowed to end naturally (Hutchinson et al., 1992). The interviews took place in a private office at the Knox County Health Department, at the researcher's office in the Division of Nursing at Carson Newman College, at local libraries, or at the participants' residences. Field notes were taken immediately following each interview and interviews were transcribed as soon as possible by the researcher.

An important measure to ensure validity was the review of selected transcripts by the inter-disciplinary phenomenology group at the University of Tennessee. The group reviewed the two transcripts as well as the researcher's bracketing interview. In addition, once the overarching themes and sub themes had been determined, these themes were reviewed by the group and deemed accurate and true to the words of the participants. The researcher also shared her findings with three of the participants in the study who agreed that the findings appropriately represented their experiences.

Protection of Human Subjects

Approval from the University of Tennessee's IRB was sought and obtained before any interviews were conducted. Approval for the recruitment of participants was sought and obtained from the Knox County Health Department. Because the proposed study will involve human subjects, the researcher took all possible precautions to ensure their protection. The researcher strove to maintain a sample that reflected the characteristics and composition of the WIC enrollee population. Racial and ethnic groups were treated equitably; all subjects received the same explanation of the research purpose and

procedures, the same incentive, the same consent form, and had access to the same support throughout the research period. Participants were fully informed of their rights as participants and of the procedures involved in the research. Written consent to participate was obtained from all participants.

The study was described orally and in writing to those who volunteered to participate before they were asked to sign the informed consent document. The research was described as a study created to understand how women decide to feed their infants. All description and explanation of the research was provided by the researcher in simple language and potential participants had ample opportunity to ask questions of the investigator. The consent document contained all the basic elements of informed consent, and a copy was provided for the participants' use and information. Interviews began only after participants had received written and oral explanations of the study, any questions about the study were answered, and written consent to participate in the study was obtained.

Each participant was asked to select an alias which was used throughout the interview to protect her identity. Only the principal investigator knew the actual identity of the participants, and no personal identifiers were linked with the data. Written data (demographic data sheets, field notes and transcribed interviews) was kept in a locked file cabinet in the office of the principal investigator in the Division of Nursing at Carson-Newman College.

There were no foreseeable physical risks to participants nor were there any anticipated psychological risks to the participants. There was the potential benefit of improved self-awareness and empowerment for the participants as they were given the

opportunity to discuss their experiences with an interested audience. There was the benefit to science by increasing awareness of influential factors in the infant nutrition decision process as experienced by women in East Tennessee enrolled in WIC.

Summary

The phenomenological method attempts to uncover each participant's perception of reality in order to understand the meaning that the phenomenon in question has for the participant. This phenomenological study has revealed what it is like to make infant nutrition decisions as a woman enrolled in the WIC program in East Tennessee. The descriptions of this process were derived from the participants' own words. The findings of the study represent the captured themes and commonalities that the method uncovered. The following chapter will present these findings.

CHAPTER IV

FINDINGS

This study was performed to achieve a better understanding of what it means to decide what to feed one's baby for women in East Tennessee enrolled in the USDA's WIC Program. Thirteen participants responded to the following question: "What was it like for you deciding what to feed your baby?" Based on their responses, further questions were posed to encourage elaboration or clarification.

All interviews were transcribed by the researcher and then analyzed individually and in a group for meaning units. Meaning units were then clustered and an overarching thematic structure of the meaning of this experience for these participants emerged. This chapter begins with a brief review of the demographic characteristics and a contextual sketch for each of the participants. Following this, the thematic structure specific to each phase of the decision-making process will be discussed in detail and illustrated by excerpts from the various interviews.

Demographic Characteristics

Thirteen women voluntarily participated in the study. Of the participants, one woman was African-American and one was of Middle Eastern descent. All remaining participants were Caucasian. Participants ranged in age from 21 to 32 years of age. All women had delivered an infant within six months of being interviewed. Table 4.1 provides the general demographic details for each participant.

TABLE 4.1

Participant Demographics

Participant	Infant Feeding Method	Age	Parity	Highest Level of Education	Smoker	Relationship to father of infant	Method of Feeding for Participant as an Infant
Ann	BF and supplement then FF at 3 mos PP	26	2	College Student	Yes	Not Involved	Breastfed
Beth	Exclusively BF x 6 months	24	2	High School	No	Married	Breastfed
Cathy	Exclusively BF x 4 months	32	2	Junior College	No	Married	Formula Fed
Donna	FF (x 3 months)	27	3	GED	No	Married	Formula Fed
Ellen	FF (x 6 months)	21	1	High School	Yes	Not Involved	Formula Fed
Faith	BF (occasional supplementation) x 3 mos	32	2	College Degree	No	Married	Breastfed
Georgia	Exclusively BF x 6 weeks	22	1	College Student	No	Not Involved	Breastfed
Haley	Exclusively BF x 6 months	31	3	College Degree	No	Married	Breastfed

Table 4.1 Continued

Participant	Infant Feeding Method	Age	Parity	Highest Level of Education	Smoker	Relationship to father of infant	Method of Feeding for Participant as an Infant
Inez	BF x 3 weeks the switched to formula	21	1	High School	Yes	Engaged	Breastfed
Jill	BF x 5 mos	31	2	Master's Degree	No	Married	Formula Fed
Kate	Exclusively BF (Pumping)	21	1	High School	No	Married	Formula Fed
Lori	Formula	23	3	High School	Yes	Living Together	Not Sure
Mindy	BF x 3weeks then switched to formula	21	1	High School	Yes	Living Together	Formula Fed

Participant Vignettes

Ann

Ann is a 26 year old white, single mother of two children. She breastfed her first child until he was 5 months old and she had hoped to breastfeed this infant for that same duration so her children could “be equal.” She views herself as a strong, independent woman who can make it on her own without the help of others. Unfortunately she is overwhelmed with the responsibility and demands of being an unemployed, single parent. For many reasons, she decided to give up breastfeeding when her daughter was three months old. She feels guilty for making this choice. She has set very high parenting standards and feels that she is held to a high standard by her parents, especially her mother. Ann views breastfeeding as a challenge, or somehow going above and beyond what most women do, and none of her friends have breastfed; she chose to breastfeed because her mother breastfed her. She does not feel that she is living up to the standard set by her parents and herself, and this realization is a great source of discomfort and guilt.

Beth

Beth is a 24 year old married, white mother of two children. She had her first child at the age of 19. She stopped nursing her first daughter after one week, following the advice of her pediatrician. As a young mother, she blames her lack of experience and knowledge for not breastfeeding her first child, and she regrets this decision to this day. Now, she is determined to successfully breastfeed this infant, and she has, as she states, a “passion for breastfeeding.” She feels that breastfeeding is best and, therefore, is what a mother should do unless there is some medical problem which prevents her from doing so. She states

that women don't really have a choice regarding infant nutrition. Beth feels empowered by her breastfeeding experience; it is her goal to help other women in their breastfeeding efforts by providing education and support.

Cathy

Cathy is a 32 year old married, white mother of two children. She states that she wanted to breastfeed her first child, but her first husband was adamantly opposed to this decision, so the infant was fed formula. She feels guilty for this decision, and this guilt has strengthened her resolve to breastfeed her second child. She is currently married to a different man who is supportive of breastfeeding. She was not breastfed as an infant, none of her friends have breastfed, and the only relative who breastfed was her paternal grandmother.

Donna

Donna is a 27 year old married, white mother of three children, all of whom were formula fed. She has never attempted to breastfeed. She had her first child at the age of 15, and she states that, at that time, she was uncomfortable with the idea of breastfeeding. During the first half of the interview, Donna seemed very secure in her decision to formula feed, but later she admitted that she does experience guilt in not having breastfed her children. She worries that they have experienced more sickness since they were not breastfed.

Ellen

Ellen is a 21 year old single, Black mother of a six month old son. She is temporarily living in a group home, but she and her son will soon be moving into their own home. Ellen has a history of drug use, and she has struggled with the change in lifestyle that

caring for an infant requires. She decided to feed her infant formula because she did not want to be “stuck at home all the time”. In her opinion, she has matured and has accepted the responsibility of motherhood. She is satisfied with her infant feeding decision and states that formula feeding has enabled her to get a job.

Faith

Faith is a 32 year old married, Middle Eastern mother of 2 sons. She moved to this country with her family five years ago. Following the advice of her physician, Faith fed her first son formula, and the regret she suffered over that decision influenced her decision to breastfeed her 3 month old infant. Faith, who speaks fluent English, is very friendly and outgoing. As the eldest daughter-in-law she is responsible for managing the family home which includes several families. She speaks candidly about her fear that she would be unable to breastfeed and manage her household duties. She has been able to find a balance, and now she views breastfeeding as more convenient. She is proud of her decision and her resolve.

Georgia

Georgia is a 22 year old single, Caucasian mother of a seven week old daughter; she and her daughter live with Georgia's parents. Georgia was breastfed as an infant and she states that she always knew she would breastfeed her own children. Currently, Georgia is exclusively breastfeeding her infant and she is proud of this commitment. She is quick to admit that without the support of her parents things would have probably worked out differently. She is a college student who returned to school when her infant was three weeks old. Georgia plans to breastfeed until her infant is at least six months old.

Haley

Haley is a 31 year old mother of 3 children. Haley attempted to breastfeed her first child, but switched to formula when she encountered difficulty. She regretted this decision and successfully breastfed her second son, and she states that this successful experience has enabled her to overcome the breastfeeding challenges she faced early on with her third son, who is currently 6 months old. Haley is proud of her decision and claims the special bonding that breastfeeding allows has been the greatest benefit of the experience.

Inez

Inez is a 21 year old, unwed, white mother of a three month old daughter. At the time of the interview, she and her boyfriend had become engaged. She states that she wanted to breastfeed and made this decision during her pregnancy; she was strongly influenced in this decision by her future mother-in-law, who had successfully breastfed four children. She stopped breastfeeding at 3 weeks postpartum because she was unable to establish an adequate breastfeeding routine, and she feared she was not producing enough milk to satisfy her infant. The interview began with the participant being somewhat reserved in her responses. However, she began to open up as the interview progressed, and she described the conflict and guilt she experienced as she struggled to reconcile her maternal expectations and desire to breastfeed with peace of mind.

Jill

Jill is a 31 year old, white, married mother of two children. She breastfed both children and feels very strongly that breast milk is superior to formula. She is an athlete and coach for whom physical excellence is very important. She is a strong advocate of

breastfeeding and views her experience as a ministry to others of a mother's commitment to her infant.

Kate

Kate is a twenty-one year old Caucasian mother of a six week old son. She delivered in a free-standing birthing center. She never considered breastfeeding until the nurse midwives at the maternity center and her Lamaze instructor informed her of the benefits. Unfortunately, her son does not nurse well, so Kate uses a breast pump and feeds him breast milk from a bottle. She regrets that he is unable to nurse because she misses the closeness of that experience, but she feels that the most important thing is that her son gets the physiological benefits of breast milk. She is still attempting to feed him from the breast at every feeding before offering the bottle, and she states that every day he is getting better.

Lori

Lori is a 23 year old unmarried, Caucasian mother of three children. She decided during her pregnancy that she would formula feed her infant who is currently three months old. She states that she briefly breastfed her first son, but switched to formula due to the pain she experienced while breastfeeding. She does not feel that the benefits of breast milk outweigh the benefit of convenience that formula feeding provides. She is satisfied with her decision and proudly points to the health of her older children as evidence that formula feeding was a good choice.

Mindy

Mindy is a 21 year old engaged, Caucasian mother of a 7 week old daughter. She planned to breastfeed her infant, but switched to formula after the infant was diagnosed

with respiratory syncytial virus, and Mindy did not believe that she was making enough milk to satisfy the infant. She is satisfied with her decision and is enjoying the freedom and convenience that formula feeding allows.

Contextual Ground: Cultural Contradiction

Phenomenological description involves identifying the contextual ground from which the figural events and perceptions of participants arise. One cannot choose this ground to which one is “thrown”; therefore, the ground is set and both limits and supports the realm of experiential possibility for the person. More often than not, one is unaware of the influence this context imposes on our perceptions. Existential phenomenology emphasizes the importance of an individual’s context in determining his or her self-understanding, perceptions, beliefs and actions.

Our perception of choice, our actions and decisions are bound by the constraints of our cultural beliefs, customs and values. One’s culture dramatically impacts the level of health knowledge, attitudes and actions of a population. All of the participants interviewed for this study share the common ground of the American cultural contradiction of two opposing standards of infant nutrition - infant formula and breast milk. Important decisions about infant nutrition were made by these women in the context of a vast array of confusing and conflicting information regarding the available choices. All the participants in this study were influenced by what they perceived to be the cultural standard for infant nutrition. The strong feelings that the participants expressed regarding their infant feeding choices revealed that they had made normative judgments with regard to breastfeeding and formula feeding.

As indicated in Chapter Two, over the past fifteen years, research supporting the benefits of breast milk has proliferated, and the promotion of the benefits of breastfeeding has been wide spread. All of the participants in the study, regardless of their feeding decisions, were knowledgeable of the physiologic benefits of breast milk for infants. Despite this knowledge, three mothers made the initial decision to formula feed, and of the ten mothers who breastfed, three mothers decided to stop and switched to formula feeding. It is evident, then, that knowledge of the benefits of breastfeeding is an insufficient impetus to breastfeed for many women.

Formula has been an acceptable alternative to breastfeeding since the early 1940s and quickly grew to become a medically approved substitute for breast milk. In the U.S. where there is an abundance of food and safe drinking water, the health advantages of breastfeeding are not dramatic or readily apparent; formula feeding is considered by many to be an adequate substitute for breast milk. Due to the rapid rise in the popularity of formula feeding, several generations of families have been raised safely on formula, and many women of child bearing age were not breastfed as infants and have no close relatives to serve as breastfeeding role models. Because of the prevalence of formula feeding by their peers and family members, many women believe a baby should be formula fed, for this is the only form of infant nutrition with which they are familiar. One participant states:

And the area where we're from, it's kind of a poor area, and I don't know, everybody just – it's WIC and just formula, you know? I'd never known anyone to breastfeed until – I'd never even thought about it, I thought you give a baby

formula; that seemed like the natural thing.... You have a baby and you get the bottle. You never see a baby without a bottle! That's like part of being a baby.

(Kate)

Everyone I've known has bottle fed. (Lori)

On the other hand, many women enrolled in WIC have taken the breastfeeding promotional campaigns to heart and value breast milk as the best form of infant nutrition.

One participant put it this way:

You know, all through your pregnancy you hear 'breastfeeding, breastfeeding, breastfeeding'. And during your pregnancy, for me at least, it became, that's what a mother is. That's what a mother does. A mother does not give a bottle, because, in a way, like, I'd go to the WIC office, or I'd go to my prenatal appointments, and you'd get all these pamphlets, breastfeeding, breastfeeding, and I never once got one about bottle feeding. You know, and to me that was, and not saying that people put this in my head, this is how I took these things, you know, because there are a lot more instructions on breastfeeding versus bottle feeding. To me, it was like, this is what a mother should be. (Inez)

In addition, many of the women who chose to breastfeed were breastfed as children, and therefore, the idea that breastfeeding is something mothers do was reinforced by the actions of their own mothers.

The message that “breast is best” is being fervently promoted in books about pregnancy and child rearing and by the U.S. government, but public support of breastfeeding is usually lacking. Many nurses and health care professionals are hesitant to promote breastfeeding as the superior method of infant nutrition “because they do not want parents, especially the bottle feeding mothers, to feel guilty” (Riordan, 1997, p.96). Furthermore, it is considered socially acceptable to feed an infant a bottle in public, while, in most settings, breastfeeding in public remains suspect. The presence of breastfeeding rooms, places designated as appropriate for breastfeeding, tacitly implies that breastfeeding in other areas is inappropriate. In the work place several factors mitigate against breastfeeding. Short or absent maternity leaves, the absence of on-site nurseries and the absence of policies providing breaks for nursing mothers to feed their infants or pump provide evidence that breastfeeding is considered something a woman does on her own time.

Despite a mandate from the Office of the Surgeon General to promote and encourage breastfeeding, the USDA continues to provide free formula to all infants for their first year of life through the WIC program with the U.S. government spending over \$500 million per year on subsidized infant formula (Blum, 1993). This mixed political message is evident when participants describe the breast milk promotional posters and pamphlets in the WIC office:

You know, the only time I really see the pamphlets saying you should breastfeed is at WIC. They’ve got it hanging up on a wall, and things like that. It’s the only

place that really makes you feel like you should have gone the other way. My doctors have never questioned it or given me any problem. (Donna)

At WIC they've got three posters hanging up that talk about how good it is to breastfeed. One says something like breastfeed your baby for six months and prevent obesity; the other talks about how breastfeeding babies don't get sick as often, and the third one says [breastfeeding] protects against some disease. So what else are you supposed to think – if you don't breastfeed, then your kid's screwed, basically. (Mindy)

And I've seen on the pamphlets that babies are more likely to get ear infections if they aren't breastfed, and that does make me feel guilty. It makes you feel that way when you see all the signs and stuff. (Donna)

So currently a cultural contradiction exists in which breastfeeding is intensively promoted as “the best”, but there is a lack of many of the structural supports necessary to make breastfeeding an option for all women. This cultural contradiction results in an unsteady ground from which mothers must make the important decision of what to feed their infants.

Thematic Structure

Analysis of the transcripts revealed three phases of the infant feeding decision.

Deciding and the Influence of Others the title of the first phase which occurs during the

prenatal period or even before conception and includes the following themes and sub themes, “Breast is best” (Sub themes: “*It seems the most natural thing for me*”, and “*This is what a mother should be*”), versus “They can make formula so good that it doesn’t really matter” (Sub themes: “*Formula feeding is so convenient*” and “*I just never felt comfortable with the idea of breastfeeding*”). A diagram of the thematic structure is provided in the Appendix.

Following the birth of her infant, each woman is faced with the implications of her feeding choice, and she must decide whether or not to continue breastfeeding or, if formula feeding, whether to continue with the formula subsidized by WIC. This phase is entitled, *Living with One’s Decision* and involves the following three themes: “*I can’t do this!*”; “*I’m in this for the long haul!*”; and “*Whatever [formula] the child likes is what he should get*”: *Changing Formula Brands*.

The third stage of the decision-making process is entitled, *Coming to Terms with One’s Decision: Freedom versus Guilt*. Below is an outline of the three phases of the decision-making process and the related themes and sub themes for each phase, all of which will be described in detail in the following discussion.

I. Deciding and the Influence of Others

1. “Breast is best”

a. “*This is what a mother should be*”

b. “*It seems the most natural thing for me*”/ “*This is the way that God designed it*”

2. “They can make formula so good that it doesn’t really matter”

a. *"I was uncomfortable thinking about breastfeeding"*

b. *"Formula feeding is so convenient"*

II. Living with One's Decision

1. "I can't do this!"

2. "I'm in it for the long haul!"

3. "Whatever [formula] the child likes is what he should get": Changing Formula Brands

III. Coming to Terms with One's Decision: Freedom versus Guilt

Deciding and the Influence of Others

Deciding what to feed a new baby is an important and personal decision that all mothers must make. With regard to the timing of the decision, all participants stated that they made this decision before the baby was born.

I decided [to formula feed] before I delivered him. (Ellen)

I guess I just always knew that, um, if I ever had children that I would do everything in my power to breastfeed, because I know that it is best for them.
(Georgia)

The prenatal, and in some cases preconceptional, timing of this decision implies that these women had preset ideas of how an infant should be fed, and these expectations were strongly influenced by their cultural context. A woman's perception of the cultural

standard and attitudes regarding mothering and infant feeding methods strongly influenced her decisions. Early in the interview process it became evident that one's perception of "what a mother should be" was tightly intertwined with one's attitudes regarding breastfeeding and formula feeding; this influence went mostly unnoticed by the women themselves, however.

A woman's standard of motherhood stemmed from numerous sources, including the actions and attitudes of her mother, the beliefs and attitudes of her significant other, her perception of societal norms, her peer group, advice from health care professionals, and the mass media. Women were more likely to choose the infant feeding method used by family and friends – the method with which they had had the most exposure and experience. One important source of information and guidance was a woman's mother. Almost every participant was strongly influenced by her own mother's infant feeding decisions or those made by a woman they admired for her maternal aptitude. Husbands or partners were also consulted, but in most instances they simply supported the mother in whatever decision she made. For all the participants in this study, the initial feeding decision was made primarily by the women themselves.

During pregnancy, each participant was asked by her provider how she intended to feed her infant, but participants did not feel that these professionals tried to influence their decisions one way or another. Although health care providers and WIC professionals were often the source of pamphlets promoting breastfeeding, most participants describe the personal stance of these professionals as neutral.

Well, my doctor never really discussed it much with me. It was more, he asked me, and I said, "I want to breastfeed." ... And he said, "Well, whatever you want to do is fine." So he didn't really push one way or the other; he was like, "whatever you decide". (Inez)

The most I ever heard about it at WIC when I was pregnant was "So, are you going to breastfeed?" And when I said, 'yes,' she talked to me a little bit about it and that was it. I think that if I had said 'no' then she would have just gone on with her speech. (Kate)

"Breast is Best"

During the prenatal period or before, participants considered their options and made value- judgments regarding breast milk, breastfeeding, formula and formula feeding. Regardless of her personal infant feeding decisions and experience, each participant was knowledgeable of the benefits of breastfeeding. All participants acknowledged the "breast is best" message they had received from pamphlets, lay textbooks about pregnancy and motherhood, and parenting magazines and frequently noted that breastfed infants didn't get sick as often as formula fed infants. This perception of the superiority of breast milk to formula did influence some mothers' initial infant feeding decisions:

I never once heard that bottle feeding is okay, too. You know, it's always, 'Breastfeeding is SO much better than bottle feeding.'...I think there were no pamphlets about bottle feeding... I was never informed that it is okay to do bottle

feeding. Like, I was never once told that. And I think that's why, to me, I was like, 'If no one has said this to me then how can I think it's okay not to breastfeed?' (Inez)

A lot of stuff I read when I was pregnant with her was about how much better it is; it makes them smarter and healthier. And that was the reason I wanted to [breastfeed] with her. (Cathy)

All the women who decided to breastfeed believed that "breast is best," and they intended to give their infants the best.

"It seems the most natural thing for me"

Many participants described breastfeeding as the most natural form of infant nutrition in contrast to artificial infant formula. For these women, lactation was considered a "natural", biological process requiring no additional equipment or supplies.

Breast milk is the most natural and healthy thing you can feed your baby. You give them a good start. (Jill)

Why wouldn't I give her something that was made specifically for her by me? It seems the most natural thing for me, you know. (Jill)

In addition to being "natural," breastfeeding was viewed by many as God's will:

I just feel like it's God's, that's what God made us to do. I don't think someone as awesome as God made a woman's body to lactate if that wasn't how you're supposed to nurture your baby... It's not just some stored milk supply; you MAKE it from your blood, and the different stages and types of milk – it's just so amazing. God just designed this so awesome. (Beth)

But I think it's so funny, because I had always looked at it as this is what God wants us to do – it's the natural way. (Jill)

For these women, formula was not considered an adequate substitute for breast milk, and they considered formula feeding to be an affront to nature and to God unless there were unspecified “problems” that prevented breastfeeding .

“This is what a mother should be”

All participants in the study described a maternal ideal to which they aspired. Most women perceived the ideal mother to be one who sacrifices her own comfort for the well-being of her child and who makes every attempt to provide the infant with all possible advantages, including breast milk.

It's only natural for a mother to want to do the best thing for her child ...I saw [breastfeeding] as a ministry as well because, um, the girls I coach were seeing

my commitment to my baby and how much I would have to take time away from myself... (Jill)

He's my responsibility and it's my responsibility to give him the best that I can, so he's worth that. You know, he's my child! It's my job to make sure he has the best. (Kate)

Many mothers who had not breastfed previous children expressed regret for not doing so. This regret prompted them to decide to breastfeed the current infant.

I just wish now that I had spent more time trying to make it work. 'Cause I really went through that with her, not a bad depression, but really felt like I wasn't the mom that I should be since I didn't nurse her. (Beth)

And I just felt like I missed out on something. That, that's just something that you should experience. (Cathy)

As stated earlier, a woman's perception of the maternal ideal was intricately tied to the behaviors and attitudes of her own mother. Women who were breastfed as children all initially decided to breastfeed.

I think my mother is the main reason why I had my kids natural, why I breastfed.

We have this pride that we can do whatever, you know, so when I set my mind to do things, especially when it comes to my kids, I guess, if I, I think I compare myself to my mother, and I'm not even close to as virtuous as she was, but I aspire to that. (Ann)

"They can make formula so good that it doesn't really matter"

Despite the fact that all participants had heard and most recounted the message that "breast is best," for the mothers who chose to feed their infants formula, formula was considered to be an equal substitute for breast milk, or, at least, "good enough".

It's got the same nutrients in it, you know, I didn't see a reason not to. (Lori)

Two of the three mothers who decided to formula feed their infants had fed previous infants with formula with good results.

Since [formula] was so good with the other two kids I just decided to use it with him, so I just went with it. (Donna)

"Formula feeding is so convenient"

All the women who chose to formula feed stated that they believed it would be more convenient than breastfeeding.

With the bottle it's just so convenient – it's SO much easier. (Lori)

In contrast, breastfeeding was viewed by these women as difficult and confining. They did not feel that they would be able to work, go to school, or meet their daily commitments if they breastfed.

First of all because I didn't, I didn't want to have to stay at home all the time, not like I didn't want to be around my child or anything like that, but I just didn't want to breastfeed. I mean I couldn't go out and do anything. (Ellen)

I had pretty much made up my mind before he was born. 'Cause I knew I was gonna be working...I went back to work three weeks after he was born. (Donna)

"I just never felt comfortable with the idea of breastfeeding"

Several participants were uncomfortable with the concept of breastfeeding, and this discomfort strongly influenced their decision to formula feed.

Breastfeeding was just not something I wanted to do. (Donna)

I did not want to feed him milk from my breast. (Ellen)

For these women, the perceived drawbacks of breastfeeding, including discomfort with the thought of breastfeeding and the idea that breastfeeding ties a woman to the home, were figural and overshadowed any perceived breastfeeding benefit. That these

perceptions were held so strongly prior to the actual birth of the infant, especially for women with no previous child rearing experience, indicates the influence of a woman's cultural beliefs and attitudes regarding infant feeding methods.

In summary, the decision to breastfeed or formula feed was made by the women before or during pregnancy. This decision was strongly influenced by a woman's cultural context and her perceptions of the cultural norm for infant nutrition. After the birth of the infant the women's intentions were put into action.

Living with One's Decision

During the first few weeks following the birth of their infants the women were faced with the reality of their feeding experience and had to decide whether or not to continue breastfeeding or, if formula feeding, whether to continue with the formula subsidized by WIC. Unlike the initial decision, this phase of the decision-making process was primarily determined by the woman's personal experience of feeding her infant, her perception of the benefits, the degree of sacrifice required by the chosen method, and her perception of her ability to carry out her decision.

For all mothers who intended to breastfeed, the full implications of this decision were not understood until after the infants' births. As stated earlier, during pregnancy many of the participants viewed breastfeeding as "natural"; implicit in this perception was the idea that breastfeeding would come naturally, with the woman's body doing what it was made to do and the infant doing what he or she was made to do.

In contrast to these unrealistic expectations, the reality of establishing breastfeeding involved "struggle" and worry for all of these mothers, even those who had breastfed

other infants. These women did not take into account the interdependence between mother and infant. The breast can do what it's supposed to do, but if the infant and mother cannot coordinate their efforts, feeding will fail to take place. Consequently, all breastfeeding mothers described feeling unprepared for the breastfeeding interaction and the challenges it presented. During the early "struggle" of breastfeeding initiation, the mothers were very self-conscious and aware of the effort and time required to successfully breastfeed.

And they make it seem like, 'It's okay, everybody's the same size and it's going to fit', and I'm like, 'When was this book wrote?' I'm like, 'This is not working!'
(Mindy)

I don't think anybody told me, "You're probably going to have a hard time the first couple of days." I thought the baby pops out, you put it on the breast and that's that.... And informed about it like I was, compared to the average Jane, I still feel like there was a lot I didn't know. I didn't know it would be so difficult and I didn't know where all I could find help. (Kate)

Perceived support or lack of support was a strong determinant during this decision-making phase. Most participants perceived a strong sense of support from health care professionals while they were in the hospital; for the most part, infants roomed in with mothers and nurses respected mothers' wishes not to supplement with formula or offer

infants pacifiers or artificial nipples. Lactation consultants were readily available to offer support and assistance.

My night nurse was great... they handed her right to me and helped her latch on and she nursed, and, I mean, she never left me. The nurses really worked with me and made sure she was nursing good and let her stay with me and kept asking if there were any problems. (Beth)

[The nurses] were really good, they would stay in there and [the lactation consultant], she was really, really good, I'd call her all the time and she really helped with the latching on. (Inez)

Once these women left the hospital or birthing center, however, they felt unprepared for the tremendous sense of responsibility and the unanticipated difficulties that arose as they "struggle(d)" to be the sole source of their infants' nutrition. Infants that had difficulty latching on and colicky infants were not perceived by mothers as enjoying the experience; subsequently, the mother's perception of her breastfeeding skill was brought into question by herself and her family. In addition, many participants described their constant worry that their infants would starve. They did not feel that they produced enough milk to satisfy their infants which caused them to doubt their maternal capabilities. Other women lacked confidence in their infant's ability to nurse:

So the lactation consultant came and talked to me, and all she told me was that eventually she would latch on, that I'd just have to stick with it, and I'm like, "What am I supposed to be doing in between times?" And she was like, "She's not going to starve to death." And I'm like, I'm sorry. She's not latching on, which means she's not eating, which means she's gonna starve. And they're gonna get me for negligence. I'm not going to starve my baby! (Mindy)

Embarrassment over breastfeeding in public was another impediment which made women reconsider their initial decision. This embarrassment stemmed from worry of public exposure of the breast but also from the perception that others were made uncomfortable in the presence of a breastfeeding mother. To avoid breastfeeding in public, some mothers (Kate and Faith) pumped and gave their infants breast milk in a bottle.

The implications of this embarrassment (staying at home and the accompanying sense of isolation, or experiencing shame when breastfeeding in public) were not considered during pregnancy when the initial decision to breastfeed was made. Many of the breastfeeding participants described various levels of acceptable public breastfeeding spaces. For instance, the participant's own home was the most acceptable and comfortable space for breastfeeding; participants didn't describe any inhibitions while breastfeeding in this setting. The homes of family members were considered less open than a woman's own home, and, in this setting, participants described the need to go into a separate room away from others in order to breastfeed.

I could never [breastfeed] in public... Women would do it and I'm just like, "I can't do this!" I couldn't even sit in another room thinking that people out there know what I'm doing in here. Even though it's natural, it's like, "Hey, her tit's plopped out!" (Mindy)

Faced with the worry and struggle associated with the establishment of breastfeeding, women worried about the level of personal comfort and control that would be sacrificed for the sake of decision to continue breastfeeding. These mothers had not achieved a sense of engagement with their infants and spoke in terms of "I" when describing their breastfeeding experience. Attempts to breastfeed resulted in tears for the mother and her infant, and these mothers dreaded the thought of future difficult feedings. In addition, they did not mention any immediate personal benefits of breastfeeding; the only benefits they mentioned were the theoretical health benefits, but the demands on the Self were figural and outweighed these intangible benefits. All participants who made the initial decision to breastfeed had to further decide whether or not to follow through with this decision.

Many of these women were torn between their desire to live up to their expectations of providing "the best" for their infants and establishing some sense of control over their mental health and their bodies. Ann describes herself as two opposing halves with one half desiring to breastfeed and the other half desperate to quit which made her feel "crazy".

I'm uncomfortable, sweating all the time, you've got milk all over you all of the time – you just feel ughh... I wanted to do that for [my baby], and I did, but the sweat, and hot flashes – I was like, I'm going to go crazy! (Ann)

I was like, 'okay, this isn't working'. And I'm driving myself crazy, I'm in tears -
- I'm upset because I can't feed my baby. I've got to do something to make this better for me. (Inez)

The struggle, worry and loss of control were perceived as threats to a woman's freedom to decide how she would feed her baby, ultimately threatening her potential to live up to her perceived ideal of motherhood.

And I feel like I'm the worst person in the entire world, because why can't I feed my baby? (Mindy)

'Cause to me, it was making me really depressed. That, you know, I wasn't really
(pause) the right kind of mom. (Inez)

"I can't do this!"

Women who felt overwhelmed by the struggle and worry regained control by deciding to stop breastfeeding. These participants used defeated language when describing their breastfeeding struggles, and the focus was primarily on the self – "I couldn't do it."

It was too much on me... If I'm sitting there so upset over something I can easily fix by just doing a bottle, then why put her through that, too? (Inez)

All the mothers who stopped breastfeeding expressed concern over a lack of perceived support once they left the hospital.

I didn't have the nurses bringing her in and saying, like, she needs to eat, you know, we're going to go ahead and wake her up... I would sleep until she woke up. So, it was kind of like, no one was waking me up to help me get the schedule going when it was time for her to eat, and my mom works, so she couldn't do that, you know. And my boyfriend, he, he doesn't wake up. (Inez)

For the participants who made this decision, breastfeeding cessation occurred within three weeks to three months post partum; those women who had the least familial and professional support were more apt to quit than women who had strong support. For most of the women this decision occurred when they had reached a distinct point in time when they could no longer bear the responsibility. In contrast, Ann, a single mother, made this decision gradually and began supplementing with formula when she required a break.

Well, I gradually started supplementing with formula. It was basically for selfish reasons, when I just wanted to get a break, and go to a movie, or go hang out with friends. I mean, just not having to do every two hours, being with her and no break. (Ann)

"I'm in it for the long haul!"

Unlike the decision to formula feed an infant, breastfeeding presents a choice at every feeding. All participants who attempted to breastfeed experienced the early obstacles of keeping the infant awake, making sure that the infant was latching on appropriately, and waiting for their milk to come in.

Every time I was, like, this time I'll give him formula, I thought, "Well, I'll give him breast milk now and formula at the next feeding." And the that feeding would come, and I'd think, "Oh, I'll go ahead and breastfeed. And like that, I was getting more comfortable with each feeding. (Faith)

In addition, many breastfeeding mothers struggled with the integration of breastfeeding with a return to school or work. One mother was already working at the time the interview took place and two other mothers were full-time college students. Breastfeeding women planning to return to work or school were actively considering how to integrate breastfeeding with their anticipated new schedule.

She can have pumped breast milk during the day and then in the evenings when I get home I can breastfeed her, you know before she goes to bed, and maybe once at night, and when she wakes up in the morning. (Georgia)

Despite these obstacles, mothers who made the decision to continue breastfeeding stated over and over that they were "determined" and "committed" to follow through

with their decision. By keeping the benefits of breastfeeding figural and downplaying the difficulties, they maintained a staunch determination to persevere. These mothers used fighting, active language, and they were able to maintain a sense of control throughout the struggle.

It was definitely stressful at first. But you know, knowing that it was the best for both parties involved, and that that was what we were going to do – we worked through our obstacles. (Georgia)

So it's a struggle, but it's that important. (Kate)

I'M GOING TO DO THIS, you know. I, I KNOW I can do this (laughs). I was determined to breastfeed and not let it bother me. (Beth)

Most of these women actively sought advice and help for the management of breastfeeding difficulties by keeping in close contact with private lactation consultants, lactation consultants at WIC, and/or pediatricians. In addition, these women also had strong familial support for breastfeeding. All but one of the women who decided to continue breastfeeding were married and described the support provided by their husbands who shared the responsibility for child care and housework. One single mother described the tremendous support she received from her own parents:

I get so much help with both my parents there. I'm not sure how successful we would have been breastfeeding at first if I hadn't had their help. I'm not sure how successful I would have been... Without the extra support it probably would have been different. (Georgia)

Most of these mothers also established a close relationship with at least one friend, relative or group who strongly supported her breastfeeding efforts.

And I've really embraced the ladies in the LaLeche League because they're really into that and will say, 'hey, that's normal, here's how to fix it'. (Beth)

In addition to support from health care professionals, family, and friends, many of these mothers relied on spiritual strength gained through prayer to help them get through this challenging time. Breastfeeding required a high degree of sacrifice and dedication, and participants who felt that the challenge was beyond their human ability sought help from a spiritual source. Although most of these mothers described themselves as Christians, Faith, a Muslim woman of Middle Eastern descent who had lived in America for four years, voiced the same concerns, and kept repeating that she would continue to breastfeed for as long as she could, "God willing."

I feel like, and it may sound funny, but I feel like I've relied on Him more this time, because I pray that He'll help me through this. And He's just given me a

peace this time and I feel like we're doing fine, and I'm doing what I need to do.

And we'll be okay. (Beth)

For women who decided to continue breastfeeding, the process eventually became more comfortable and fluid, and the mothers described being fully engaged in the process. These participants referred to "we" when describing the breastfeeding interaction between mother and infant. They viewed themselves and their infants as a partnership involving give and take from both the mother and the infant.

It was evident that the women who chose to continue to breastfeed had personalized the experience. They each described some aspect of their breastfeeding which they viewed as unique to their breastfeeding experience. For instance, many mothers described the frequency of nursing as unique; another participant explained that her infant will only nurse at one breast per feeding. Mothers who breastfed other children were surprised by the differences in breastfeeding technique between their children. Part of personalizing the process involved the maternal understanding and respect for the unique and individual characteristics of the infants and the maternal/infant interaction.

Women's descriptions of breastfeeding once the process was established were markedly different from their descriptions of the initiation phase. Their perception of anxiety regarding breastfeeding problems was greatly reduced, and women no longer referred to their experience as "crazy". Many participants now described the experience of breastfeeding as enjoyable; maternal enjoyment was tied to the mother's perception of the infant's satisfaction with the experience which was measured by the infant's

motivation to breastfeed, the infant's emotional response to the feeding, and the satiety of the infant.

These mothers were now confident in their breastfeeding abilities and described breastfeeding as "more convenient" than formula feeding and the bonding as "a blessing". Of all the perceived benefits of breastfeeding, bonding was the most figural for women who decided to continue breastfeeding. These mothers described the "amazing" bond that they believed breastfeeding fostered between themselves and their infants. One mother states:

When he is looking at me he doesn't look anywhere else. The value of our time together, you know, you (pause) can take the baby and breastfeed him, and when he looks at you and his eyes are locked on you, it's just, it's the most incredible thing in the world. (Haley)

I like the fact (looking and speaking to infant) that you look at me and your nutrition comes from mom! You know, that creates that bond with us. (Beth)

I think for me there's a difference, it's really special – I'm really glad I did it – it's special. I don't really know how to describe it... I'm not exactly sure what it is, but I think there's a different kind of bond – a closer, I don't know. We pay more attention to each other. (Cathy)

Time seemed to pass quickly for these women and the anticipated duration of breastfeeding was perceived as relatively short.

It's just such a special experience that you don't get to have forever; it's so short-term. (Beth)

If breastfeeding is the best then I'll be more than willing to sacrifice my time and a little bit of effort to, you know, it's only a year, if that. (Jill)

This perception of breastfeeding as a time-limited behavior was unique to those mothers who made the decision to continue breastfeeding. The thought of eventually weaning saddened many of these women. When her friends asked her when she was going to stop breastfeeding, one participant stated:

Well, WHY should I?! We're not having any problems – I met a woman who was breastfeeding and her baby was sixteen months old, so I don't know. (Cathy)

Before, I just planned to breastfeed for six months. So now (name of infant) is six months and I can't imagine stopping this, you know, right now. (Beth)

Interestingly, many women who decided to continue breastfeeding no longer viewed formula feeding as an option, and their conviction that women should breastfeed “unless there's a problem”.

We don't even have any formula in the house for back-up. It's not even a consideration – just not even a part of the regimen. (Haley)

I really don't think women have a choice! (Beth)

“Whatever [formula] the child likes is what he should get”: Changing Formula Brands

After the birth of their infants, the women who decided to formula feed their infants faced struggles of a different kind. For the most part, they worried that the WIC approved formula was not an appropriate match for their infants. Problems with infant formula included infants spitting up or being perceived as fussy and “not satisfied” with the chosen formula. During pregnancy none of these mothers considered the brand of formula they would feed their infants. In the hospital the WIC approved brand was initially selected. It was only when infants did not respond well to this formula and the women decided to switch formulas to better meet the infants' needs.

I like the Similac with iron; what they've got on WIC right now is that real cheap stuff, I mean, I think WIC should give you the milk the child drinks regardless of how much it is. Whatever the child drinks is what he should get. Good Start (formula) is nasty. And he didn't like it at all; every time I tried to feed it to him he'd turn away and wouldn't have anything to do with it. So I spend \$50.00 [per month] on Similac. (Ellen)

Mothers who initially breastfed but stopped also had to decide which formula to feed their infants.

I had to decide what kind of formula I'm going to give her. And that's hard, because WIC only covers so much and there are so many different kinds – you know do I want her to have liquid or concentrate? You know. She got sick from all the other formulas we tried so I had her on the Good Start DHA and ARA so she could have the iron. Well, that didn't do to well, she spit up all the time, so now I've got her on the Good Start Supreme, the concentrate, and it keeps her full longer and she's doing really good with it. (Mindy)

Despite the perceived problems with formula, none of these mothers considered breastfeeding or a return to breastfeeding as an option.

In summary, *Living with One's Decision* required women to give up their romanticized notions regarding infant nutrition methods and face the reality of their decisions. Breastfeeding mothers encountered difficulties during the early postpartum period that forced them to reconsider their expectations and intentions regarding infant nutrition and motherhood in general. Some women decided, "I can't do this" and stopped breastfeeding. In contrast, women who kept the benefits of breastfeeding figured maintained a steadfast determination to persevere and decided that "[they were] in it for the long haul". Eventually these women reached a point where the benefits of convenience, a relaxed perception of time, and bonding were appreciated and viewed as "a blessing". Women who chose to formula feed faced problems with infant dislike of or

inability to tolerate the WIC approved formula, and often tried several formulas before finding the “right” one for their infant.

Coming to Terms with One’s Decision: Freedom or Guilt

“Freedom *is* only in the choice of one possibility – that is, in tolerating one’s not having chosen the others and one’s not being able to choose them” (Heidegger, 1962, p. 331).

Coming to terms with one’s decision required a reformulation of each woman’s perception of motherhood based upon her actual experience and her perception of the cultural ideal. For the few participants who did not attempt to breastfeed, there was underlying doubt in the correctness of their decision to formula feed. These women feared that they might have prevented hardship for their children if they had breastfed. These participants all stated that if their circumstances had been different (i.e. fewer children to care for, staying home rather than returning to work, more mature when had children) they probably would have breastfed. One mother who never considered breastfeeding stated that she felt guilty because she wondered if her decision resulted in more suffering from illness for her children:

I do feel guilty sometimes, because he has been sick, you know with bronchitis or whatever, and my daughter had a lot of ear infections. And I’ve seen on the pamphlets that babies are more likely to get ear infections if they aren’t breastfed, and that does make me feel guilty... Because I feel like that was my fault; I could

have, you know, prevented that, but, you know, it does make you feel guilty.

(Donna)

Participants who initiated breastfeeding but stopped, experienced varying degrees of disappointment and guilt. This disappointment stemmed from the perception that they were unable to attain the maternal potential set by themselves and by society; they suffered varying degrees of guilt and disappointment due to the perception that they had failed themselves and their infants.

When I can't be **wonder woman**, basically, I feel like I'm disappointing myself."

(Ann)

And for me, when I decided to not [breastfeed] any more, I was like, 'Okay. Am I not the best mother that I could be?' I feel like I've disappointed everyone, because everyone is expecting me to be this GREAT mom, you know, breastfeeding. (Inez)

Others' acceptance of the decision to stop breastfeeding was important to most participants. Inez states she was not comfortable with her decision to stop until her boyfriend provided reassurance:

So he just sat me down and he told me it was okay to do this. That he didn't mind – screw everybody else and their opinion because they're not taking care of our

kid. They're not having to go through what we had to go through with the complications of breastfeeding. (Inez)

All of the mothers who initiated breastfeeding but stopped stated that if their situations had been different then they might have been more committed to breastfeeding.

For those women who decided to continue breastfeeding, overcoming this challenge increased their sense of control and self-esteem and affirmed (to themselves and to the world) their abilities as good mothers. They were satisfied with their decision and felt empowered and self-actualized by their breastfeeding experience.

He hasn't had so much as a sniffle! And that is what is so good I think – that's MY MILK! It makes me feel proud. (Kate)

Consequently, they spoke very positively about their overall breastfeeding experiences and were motivated to inform their family and friends about the benefits of breastfeeding. Many of the mothers described themselves as “passionate” about breastfeeding and viewed breastfeeding promotion as a personal crusade.

But I've got these friends who are trying to get pregnant, so I've been running around with these papers saying, “You have to read this!” And I made everybody read them, and so now everybody's all, “I can't use formula.” So I've spread the word – I'm like, “Read what this does! (Kate)

These women had achieved “freedom” in the Heideggerian sense, for they no longer viewed formula feeding as a choice.

Why would you choose to formula feed unless something is wrong? I don’t know, I just really don’t think there is much choice unless something is wrong. (Jill)

Overall, most participants were satisfied with their infant feeding decisions and focused on the benefits of their chosen method. For instance, many participants mentioned the fact that formula feeding was important for paternal bonding with the infant.

I love [formula feeding] because he can, you know, it was kind of like when we first decided to breastfeed, he was like, ‘Well, I’m not going to get to feed her for a long time.’ And he wanted to be able to feed her, you know, that’s Daddy’s little girl! And it kind of upset him that he wasn’t going to be able to feed her. (Mindy)

Formula feeding was viewed by all the mothers who used it as convenient and liberating. Donna and Ellen both stated that formula feeding enabled them to get a job and/or return to school. Mindy candidly stated that she was pleased with her switch to formula feeding because she found breastfeeding to be too restrictive upon her lifestyle:

So when she got sick and I quit breastfeeding, I started smoking again. It’s so nice now – If I want to go outside and smoke a cigarette on the porch I don’t feel

guilty; If I want to have a glass of wine or a margarita – or two!! I can without worrying how it will affect her. (Mindy)

Women who made the decision to continue breastfeeding described breastfeeding as easy and convenient. One participant who formula fed her first son, but who was currently breastfeeding stated:

You don't have to wash bottles, and wherever you are you put him on your breast, and that's it. And the sterilization and all that – with breastfeeding you can stay away from the germs, you know, the chances are less because with bottles you can get bacteria and this and that, but with breastfeeding you don't have to worry about the water or sterilization. (Faith)

Although other indications were cited as justification of their decision, breastfeeding mothers emphasized the bonding benefits of breastfeeding over all the others. This emotional benefit was perceived to outweigh the worries and struggle associated with the breastfeeding initiation phase.

If you're feeding the baby, he's your central focus at that time... and it's like my world just goes into slow mo at that point – it's wonderful (looking at infant). But I like that aspect of it, where you can take a time out – it's almost therapeutic. (Haley)

Regardless of the chosen infant feeding method, all mothers pointed to their infants' weight gain, growth and apparent health as evidence that they had made the right decision.

And she's growing a lot – I mean, her growth rate is 100%. It's good. So, now she's gained two and a half pounds in three weeks and grown three inches. She's already out of some of her three month clothes! (Inez)

'Cause she is just now three months old, and she is almost fourteen pounds, so she is very healthy. (Ann)

[The baby's] doing really well... I know my kids are well-taken care of; they're well-fed, obviously, so I'm satisfied with the formula. (Lori)

Summary

The findings of this study reveal that for these women deciding what to feed a newborn was a complex and value-laden process. *Deciding and the Influence of Others* occurred either before or early in pregnancy and was made primarily by the woman herself, based upon her perception of cultural expectations and ideas concerning motherhood and infant feeding. After the infants' births, the women were faced with the reality and implications of their decisions; this phase was entitled, *Living with One's Decision*. Women who decided to breastfeed had to further decide whether or not to

continue. Women who decided to formula feed struggled with finding the right formula to meet the unique needs of their infants.

In *Coming to Terms with One's Decision*, the women acknowledged disappointments and either accepted their decisions or suffered from guilt. Like the initial decision, this phase was influenced by the woman's perception of others' expectations of her as a mother, but the strength of these perceptions was tempered by the knowledge of her personal infant feeding experience.

It is evident from these findings that there are numerous opportunities for nurses and health care professionals to support women in their infant feeding decisions. The following chapter provides a discussion of the findings and addresses the implications for nursing theory, practice, education, research and health care policy.

CHAPTER V

DISCUSSION

Introduction

Like the participants in this study, I was constrained by my beliefs and attitudes regarding infant nutrition. While pregnant with my first daughter, I simply assumed that I would breastfeed, because I was breastfed as an infant, and I believed strongly in the benefits of breastfeeding. However, when my daughter was diagnosed at nine months of age with a rare disease that required a year's treatment with chemotherapeutic agents, I was advised by her doctor to continue breastfeeding. Over the course of that year, despite a very low white cell count, she did not experience any major illness, and I attributed this well-being to the immunologic protective effects of breast milk. So when I became pregnant with my second child, I did not perceive a choice in the matter; I knew I would breastfeed.

When I began working on this research, I viewed infant feeding methods as simple sets of actions. I had not previously considered the effects of my cultural context, my attitudes and my structural system of support and how these determinants influenced my perception of choice and, ultimately, my infant feeding decisions. However, in interviewing mothers for this research I have developed a much richer understanding of the complexities of the infant feeding decision-making process, how one's culture impacts this process, and the challenges and struggles mothers face as they decide the "right" method of infant feeding for themselves and their infants. Infant feeding decisions occur over a long period of time during which a woman's attitudes and needs and those

of her infant change. This chapter discusses the findings of this study in light of the role that the phenomenological realms of Others, Body and World, and Time play in the experience of deciding what to feed one's baby.

Others

Rubin (1967) states that a woman's maternal ideal reflects the qualities, traits, attitudes, and achievements she finds desirable (Rubin, 1967). As noted in Chapter Four, each woman's initial feeding decision was strongly influenced by her perception of a maternal standard to which she aspired. This standard of motherhood stemmed from numerous sources, including the actions and attitudes of her mother, the beliefs and attitudes of her significant other, her perception of societal norms, her peer group, advice from health care professionals, and the mass media. Each woman's perception of "what a mother should be" was tightly intertwined with her attitudes regarding breastfeeding and formula feeding; this influence went mostly unnoticed by the women themselves, however.

The influence of this public-conscience, or "voice of the *they*" (Heidegger, 1962, p.323), is evident as the women described how they made their initial infant feeding decisions. Every participant made this initial decision prior to pregnancy or prior to the birth of the infant. Research indicates that most women decide what they will feed their infants during pregnancy or before (Dix, 1991; Hill et al., 1995). That the initial decision was made before the experience of infant feeding had become a reality implies that participants made this decision based upon theoretical information obtained from others. Research supports the finding that a woman's cultural beliefs regarding infant nutrition

strongly influence her infant feeding decisions (Entwisle, Doering, & Reilly, 1982; Kearney, 1988). Women who choose to breastfeed hold very different attitudes regarding infant nutrition methods than do women who choose to formula feed (Arafat, Allen & Fox, 1985; Manstead, Proffitt and Smart, 1983).

For some of the women, breastfeeding was viewed as a natural component of motherhood; these women strongly believed that *"breast is best"*, and their cultural context supported the link between breastfeeding and good mothering; all of the participants who were breastfed as infants decided to breastfeed. In addition, most of these mothers were married, and their spouses also believed in the benefits of breastfeeding and supported the decision to breastfeed.

For other women, formula feeding an infant was viewed as the most natural and common method of feeding an infant. These women were formula fed as infants and most, if not all, of their family and friends formula fed their infants. These women had been successfully raised on formula and, though they knew of the benefits of breastfeeding, they did not believe that the differences were that significant (*"They can make formula so good that it doesn't really matter"*). The low rates of breastfeeding initiation and duration among women enrolled in WIC indicates that formula feeding continues to be the prevailing social norm for infant nutrition for this population of women.

In the United States, women are taught to value individuality, independence, and freedom. Given this philosophical context, many women view the maternal commitment and sacrifice required by breastfeeding as an infringement upon a woman's personal

freedom and independence because it can't be an equally shared responsibility (Blum, 1993; Ehrenreich, 1990; Galtry, 1997; Hartmann, 1981; Law, 2000). One author states:

In a world in which human beings prefer to maintain both physical and emotional autonomy, where getting things done is a measure of personal worth, where time is compartmentalized into neat, observable divisions, where families are nuclear and scattered, breastfeeding is nothing less than a culturally subversive activity (Maushart, 1997, 227-228).

It is not unusual, then, that many participants viewed breastfeeding as a term of confinement during which a woman is unable to work or lead any sort of social life.

Living with One's Decision

The participants described their personal experiences of putting their intentions into action once the infants were born; the focus shifted from Others in general to the Self as it learned to relate with this new "Other". The relationship formed between a mother and her infant is unique and differs significantly from her previous experience with Others. An infant is dependent upon its mother in ways no other person has ever been before (with the exception of her other children). Each woman tried to integrate her concepts of her Self and how that she related to the World before the arrival of the infant with her new perceptions of herself as a mother with an infant and the changes this new relationship brings to her interaction in the World. This adaptation in one's self-concept is supported in the literature (Mercer, 1981; Mercer, 1985; Rubin, 1984).

For the mothers who decided to breastfeed, the significant maternal sacrifice is figural and the women struggled to establish a balance between the needs of the self and the needs of the infant. For women who decided to continue breastfeeding, the positive aspects of the experience were perceived to exceed and outweigh the negative ones. This finding is supported in the literature (Bottorf, 1991; Leff, 1994).

For others, the obstacles associated with breastfeeding initiation were perceived as insurmountable, and so they decided to stop. These mothers did not achieve a sense of engagement, and the mother's perception of a lack of control over the feeding process were pronounced. These women do not mention any immediate benefits of breastfeeding; the only benefits they were aware of were the theoretical health benefits and the demands on the Self were figural and outweighed these intangible benefits. These mothers dreaded the thought of future difficult feedings.

The findings revealed that a woman's perception of control strongly influenced her decision to continue or stop breastfeeding. Mothers who did not feel that they produced enough milk to satisfy their infants felt inadequate and unable to provide the requisite nourishment for their infants. Infants that had difficulty latching on and colicky infants were not perceived by mothers as enjoying the experience; this finding is supported in the literature (Dykes & Williams, 1999; Hoddinott & Pill, 1999). Women who experienced these difficulties did not feel in control or confident in their ability to nurture their infants which caused them to doubt their maternal capabilities, resulting in anxiety. Women who were unable to overcome the difficulties gave up and regained control through switching to bottle feeding. Research supports the finding problems encountered with the breastfeeding process challenge a woman's sense of control; if she feels that she is unable

to solve the problem she is likely to stop breastfeeding (Mozingo et al., 2000; Rempel, 2004; Wambach, 1997).

Many of the mothers who decided to continue breastfeeding relied upon spiritual strength gained through prayer to help them overcome the obstacles during this period. Interestingly, this phenomenon is not discussed in the literature. It is evident from the findings that breastfeeding was perceived as a challenge that required a high degree of sacrifice and dedication, and participants who felt that the challenge was beyond their human ability sought help from a spiritual source.

The findings indicate that the infant nutrition decision-making process involved a learning curve regardless of the method chosen. In addition to learning about the unique nutritional needs, responses and temperaments of their infants, mothers had to adjust to the perceived lack of control, uncertainty, and worry associated with infant feeding.

Most of the participants sought information from various sources (books, educational pamphlets, prenatal parenting classes, health care providers, friends and family) in order to make an informed infant feeding decision. Research indicates that most mothers desire information to help them make informed decisions regarding infant nutrition (Jaeger, Lawson, & Filteau, 1997; Rodriguez, Miracle, & Meier, 2005; Nyqvist, Sjoden, & Ewald, 1994).

For women who chose to formula feed their infants, most of the learning process occurred after the birth of the infant when the infants were perceived to dislike the prescribed WIC formula. Participants were faced with a vast array of formula options; each type of formula was marketed as a unique match for a particular type of infant or to correct a particular problem with the feeding process. These mothers felt responsible

for learning about the options in order to make the “right” selection to meet the unique needs of their infants.

Many mothers were unhappy with the formula provided by WIC. Ellen’s son would not eat the formula provided by WIC; she stated that WIC should provide a baby with the appropriate formula regardless of the cost. Many of the women, including Ellen (who could least afford it), paid for a brand of formula not covered by WIC in an effort to give their infant the formula they thought best suited the infant. The fact that women paid for formula in order to make the “right choice” indicates that the provision of free formula from WIC is not the only variable taken into consideration by these women when they make their infant nutrition choices. Most of the formula feeding mothers tried two or more different types of formula before settling on “the right one”.

For participants who chose to breastfeed, the learning process began during pregnancy and was described as ongoing. The literature supports the fact that breastfeeding involves the incorporation of a definite skill set that changes over time with the changing needs of the infant (Bottorf, 1991; Chezem, 1997; Dennis, 1999; Locklin, et al., 1993). Many of these mothers stated that they wished they had the knowledge they had at the time of the interview when the infant had been born, for they would have avoided making many mistakes.

During pregnancy, many women held unrealistic expectations regarding breastfeeding. Consequently, all mothers described feeling unprepared for the breastfeeding interaction and the challenges it presented. This sense of disillusionment is supported in the literature (Mozingo et al., 2000). During the early “struggle” of breastfeeding initiation, the mothers were very self-conscious and aware of the effort and

time required to successfully breastfeed. This finding is supported in the literature (Bottorf, 1991; Entwisle et al., 1982; Mozingo et al., 2000).

For women who decided to continue breastfeeding, the process eventually became more comfortable and fluid over time and the mothers describe being fully engaged in the process. These participants viewed themselves and their infants as a partnership involving give and take from both the mother and the infant; this description of “teamwork” between mother and infant is supported in the literature (Bottorf, 1991; Hewat & Ellis, 1984). These mothers were now confident in their breastfeeding abilities and described breastfeeding as “more convenient” than formula feeding and the bonding as “a blessing”. The literature supports the fact that women who feel more confident in their ability to breastfeed are more likely to continue breastfeeding (Bottorff, 1991; Loughlin, Clapp-Channing, Gellback, Pollard & McCutchen, 1985).

Body and World

Each of us is a “being in the world”, and, as such, our bodies are our interface with the world. Experience is a result of our interaction with the world. Breastfeeding presented a challenge because it changed a mother’s position to the world around her, and required the formation of a new self-image and new way of belonging and being in the world. Also, the familiarity a woman had established throughout her life with her body was challenged, for breastfeeding required a change in a woman’s perception of her breasts and their function. This change of perception is understandably difficult to achieve given the fact that women have spent their entire lives

confronted with the cultural image of the breast as a sexual object (Baumslag, 1995; Blum, 1993).

All the women who decided to stop breastfeeding were preoccupied with the effects that breastfeeding would have upon the attractiveness of their breasts. Mindy states that she was “so glad to get my boobs back!” when she stopped breastfeeding. It is interesting to note that women who decided to continue breastfeeding only mention their breasts in terms of their capacity as nurturing organs; no mention was made by these women of their male partner’s attitude toward their breasts.

For many participants embarrassment was the figural drawback of breastfeeding. Research supports the finding that embarrassment and discomfort with the idea of breastfeeding in public is strongly tied to a woman’s view of the role of her body and her relation to the world (Buskens, 2001; Mahon-Daly & Andrews, 2002). By choosing to formula feed, women effectively removed their bodies as an essential component of infant feeding; for women who chose to breastfeed, the use of breast pumps enabled them to provide breast milk while separating their body from the process. Participants who depended heavily upon a breast pump focused primarily on the physiologic benefits of the breast milk rather than the emotional benefits of breastfeeding. This finding is supported in the literature (Blum, 1993).

Time

Women who decided to continue breastfeeding viewed time differently than women who breastfed and then decided to stop. The duration of breastfeeding was viewed as short and limited by those mothers who decided to continue and as impossibly tedious

and excruciatingly slow with no end in sight for those mothers who decided to stop. These mothers were very aware of the fact that there would come a time when breastfeeding would end; In fact, many participants were saddened by the thought of weaning. On the other hand, for those mothers who decided to stop breastfeeding, switching to formula was viewed as the only end to their torment.

Coming to Terms with One's Decision: Freedom or Guilt

As participants came to terms with their infant feeding decisions, their individual experiences tempered their unrealistic expectations and perceptions of the societal norms that were so figural as they made their initial decisions. Women who initiated breastfeeding but stopped, experienced varying degrees of disappointment and guilt. This disappointment stemmed from the perception that they were unable to attain this maternal potential set by themselves and by society. This sense of guilt and disappointment which stems from the idea that they have failed themselves and/or their infants has been described by other researchers (Bottorff, 1990; Chezem, et al, 1997; Kearney, 1988; Mozingo et al., 2000).

In contrast, those women who decided to continue breastfeeding perceived themselves and their infants to be successful; they were empowered and self-actualized by their breastfeeding experience. Overcoming this challenge increased their sense of control and self-esteem and affirmed (to themselves and to the world) their abilities as good mothers. This sense of empowerment achieved through breastfeeding is supported in the literature (Dennis, 1999; Jones, 1986; Locklin & Naber, 1993). These women had

achieved “freedom” in the Heideggerian sense, for they no longer viewed formula feeding as a choice.

For the few participants who did not attempt to breastfeed, there was underlying doubt in the correctness of their decision to formula feed. These women feared that they might have prevented hardship for their children if they had breastfed. Interestingly, these participants and those who initiated breastfeeding but stopped all stated that if their circumstances had been different they probably would have breastfed. Research supports the finding that a woman’s perception of structural support strongly influences her perception of choice with regard to infant feeding options (Earle, 2000; McKinley & Hyde, 2004).

Ultimately, all of these participants seemed relatively happy with their infant feeding decisions. Although other indications were cited as justification of their decision, breastfeeding mothers emphasized the bonding benefits of breastfeeding over all the others. This emotional benefit was perceived to outweigh the worries and struggle associated with the breastfeeding initiation phase. Formula feeding mothers emphasized the freedom and convenience gained by their chosen method. Regardless of their infant feeding decisions, all participants justified their infant feeding decisions by focusing on the personal benefits attained by their chosen method. Infant weight gain and good sleep habits were viewed by all mothers as evidence that infants were satisfied with the chosen nutrition method. Many studies support the finding that women use the degree of infant weight gain and growth as a marker of infant feeding “success” (Apple, 1987; Leff et al., 1994).

In summary, the findings of the study support the important role that Others, Body and World, and Time play in a woman's infant feeding decision-making process. The influence of Others was the strongest during the initial decision-making phase prior to the birth of the infant. The change brought about through the birth of the infant altered each woman's Body/World relationship and required that she learn new patterns of relating to the World. For the most part, during this phase, the interaction between the infant and the mother were figural. In phase three the women experienced either freedom or guilt from their decisions. Each woman gauged the degree of infant feeding "success" based upon the personal benefits gained and by noting the growth and weight and well-being of her infant.

Implications for Nursing Theory and Research

This study identified three phases of infant nutrition decision-making. In the literature there is a substantial base of empirical data that describes and analyzes infant feeding behavior, but there is no overarching theory that explains how and why women make the infant feeding decisions that they do. Ajzen's theory of planned behavior has been posited as an explanatory model for breastfeeding (Duckett, 1998; Manstead, et al, 1983; Wambach, 1997). Ajzen's (1988) theory of planned behavior builds upon the theory of reasoned action (Ajzen & Fishbein, 1980) which claims that one's intentions are directly influenced by one's attitude and subjective perceptions of a behavior, as well as one's motivation to comply with social norms. The strength of one's intentions can then predict the performance of a given behavior (Ajzen & Fishbein, 1980). According to the theory of planned behavior, one's behavior is not assumed to be completely under

volitional control, therefore, perceived behavioral control (PBC) is added as an additional influential variable in one's formation of behavioral intent. Manstead et al., (1983) found that attitudes and perceptions of subjective norms explained 60% of infant feeding variance. Wambach's 1997 study only partially supported the utility of the theory of planned behavior, however. Strength of breastfeeding intention was not an important predictor of breastfeeding duration; a woman's perception of control was the most influential variable for predicting breastfeeding duration (Wambach, 1997). Duckett et al., (1998) found that one's attitudes, perception of social norms and perceived behavior control were all predictive of a woman's breastfeeding duration. The theory of planned behavior has been effective in predicting a woman's infant nutrition intentions, but the theory has proven to be less predictive of breastfeeding duration.

In this study, breastfeeding intent was described as strong – the women were “positive” and “sure” they would breastfeed. Regardless, a lack of knowledge with regard to the difficulties of breastfeeding initiation and the requisite support structure resulted in disillusionment and feelings of a loss of control for some of these participants, and, ultimately, early breastfeeding cessation.

Galtry (1997) argues that structural factors such as a woman's occupational status, level of physical health, access to infant nutrition information and material social support constrain a woman's choice with regard to infant nutrition, and the degree of structural constraint is predictive of her infant feeding decisions. Unfortunately, most of the research supporting this idea focuses primarily on the a woman's occupational status and the degree of flexibility she has in setting her own hours and taking breaks to pump her breasts or feed her infant (Cohen & Mrtek, 1994; McKinley & Shibley-Hyde, 2004).

Other studies focus on a woman's social support system (Arlotti, et al, 1998; Littman, Medendorp & Goldfarb, 1994; Raj & Plichta, 1998). It is not surprising that structural factors were found to be influential in these studies.

The findings of this study indicate that many areas of structural support influenced a woman's decisions. Therefore, there is a need to study all of these determinants together as a group to achieve a closer representation of a woman's perception of structural support. Also, the initial decision is made before the birth of the infant. Regardless of how much they have read, first-time mothers may be unprepared, like the participants in this study, to adequately assess their structural support system until after the infant is born.

Bandura's (1977) self-efficacy theory has also been used as the basis for the concept of maternal self-confidence with regard to breastfeeding. Breastfeeding self-efficacy is influenced by a woman's past breastfeeding experience, vicarious experiences, verbal persuasion, and physiological responses to breastfeeding (Blyth, Creedy, Dennis, Moyle, Pratt & DeVries, 2002); the authors found that breastfeeding self-efficacy was a strong predictor of breastfeeding duration. Dennis (1999) also found that breastfeeding duration is dependent upon a woman's confidence in her ability to breastfeed.

The findings of this study support the claim that women who are confident in their ability are more likely to continue breastfeeding. There are two obvious problems with this theory, however. First, research indicates that most women make their infant nutrition decisions prior to pregnancy; this theory does not shed any light on infant nutrition intentionality. Second, the theory has only been used to explain breastfeeding.

Research using this theory needs to focus on all mothers and the influence of self-efficacy upon their infant nutrition decisions.

This study has added to the understanding of what women enrolled in WIC experience as they decide what to feed their infants. There is a need for more studies that test the efficacy of the theories mentioned above for women enrolled in WIC. It is important to add that this approach to theory building must be approached humbly and cautiously, as one of the principles of existential phenomenology is to avoid the overly simplistic reduction and objectification that occurs with the use of deductive methods (Polkinghorne, 1989).

Each of these theories identifies important influences with regard to a woman's infant nutrition decisions, but none satisfactorily explains the totality of the decision-making process which includes the initial decision (intention), the decision to continue or stop breastfeeding, and coming to terms with the decision, the three phases of decision-making identified in this study.

Implications for Nursing Practice

The results of this study have a number of important implications for nurses working with women enrolled in WIC (labor and delivery, postpartum, nursery nurses as well as lactation consultants, nurse practitioners and nurse clinicians). Insight gained from the study findings will increase nurses' sensitivity to this important and personal decision-making process. It is important to note that breastfeeding and formula feeding mothers used similar measures to justify their feeding decisions (the health and well-being of the infant) which indicates that the goals are similar among both groups of women; what

differed was the women's perceptions of barriers, the prioritization of competing needs (infant needs versus maternal needs), and the degree to which the women believed that breast milk was a superior form of infant nutrition. The stronger a woman's belief in the benefits of breast milk the more determined she was to overcome perceived obstacles and barriers to continued breastfeeding. Pamphlets, posters and books should be used to reinforce the nurse's message, not replace it. Research supports the fact that women are more apt to choose breastfeeding if a nurse or physician has discussed the benefits of breastfeeding with them (Lu, Lang, Slusser, Hamilton, & Halfon, 2001). Raisler (2000) found that women of low-income preferred face-to face, individualized discussions of infant nutrition options rather than generic pamphlets or books (Raisler, 2000).

The findings of this study indicate that if a woman does not perceive the nutritional and emotional benefits of breastfeeding to outweigh the perceived obstacles, then she will decide to formula feed, or, if she initiated breastfeeding, she will decide to stop in favor of formula feeding. During the prenatal period, nurses must discuss not only the benefits of breastfeeding (and present these benefits in an absolute rather than ambivalent way) but also the individual's perception (and the perceptions of her support system) of barriers to breastfeeding. Nurses need to acknowledge the challenge of breastfeeding initiation and provide honest, accurate information about a woman's perceived barriers. These discussions need to occur early on in the pregnancy as this is the time that most women make their initial decision to breast or formula feed.

A thorough assessment of the pregnant woman's breasts needs to occur and frank discussions about problems that may arise as a result of the woman's anatomy need to take place. Information regarding problems encountered with inverted or flat nipples

needs to be provided when necessary, and discussion of available methods to overcome these problems needs to occur before the birth of the infant.

Since many of the women in the study switched feeding methods because they did not feel like the infant was satisfied, nurses need to discuss women's expectations with regard to infant responses to feeding. Infant hunger cues need to be described. Women who make the initial decision to breastfeed should be asked about their knowledge of available resources for breastfeeding support. This information should be provided prior to delivery, especially for those women who do not have a cultural context that supports breastfeeding.

In the hospital or birthing center, nurses and health care professionals should conduct a psychosocial assessment of all mothers' perceptions and expectations of infant behavior and hunger/fullness cues, anxiety level, degree of flexibility or rigidity with regard to infant care, responsiveness to infant cues and in general, and response to the first early feedings (Kearney, 1988). Breastfeeding mothers should be asked how long they intend to breastfeed, and nurses should assess any social, attitudinal, or structural barriers and assist in the development of a personalized plan to help her meet these goals.

Many breastfeeding participants in this study encountered significant infant feeding problems once they left the hospital. There was no comprehensive coordinated care system to manage breastfeeding problems (early or late) for the women who participated in this study. Most of the mothers were unaware of the breastfeeding services provided by WIC. In contrast, Cricco-Lizza (2005) reported that participants in her study perceived strong breastfeeding support from their WIC office prior to pregnancy and during the postpartum period and were well-informed of the breastfeeding benefits provided through

WIC. Mothers who decide to breastfeed should automatically be scheduled for a follow-up appointment in the WIC office two to three days after delivery to discuss the breastfeeding process and identify any problems. It is important to note that the reason most often cited for early breastfeeding cessation by women in the study (the perception of an insufficient milk supply or the perception of ineffective breastfeeding technique) could probably have been prevented with appropriate education and guidance by health care professionals.

I didn't know that there were lactation consultants at WIC and I was on WIC.

They never told me. And when the nutritionist asked me when I was pregnant about how I would feed my baby she was encouraging about breastfeeding, but she never said, "when he's born if you have problems call us, we can help." I had no idea that they had that. I think if I had known that and spent more time with the lactation consultant things would have been different. (Kate)

Breastfeeding mothers were also not consistently aware of the breast pump availability through WIC, and, for those who knew about the availability, there was uncertainty regarding who was eligible to use these pumps.

Many of the mothers who breastfed beyond the first two months postpartum stated there was a need for more professional support and peer support during this time. Early breastfeeding problems appear to be fairly well addressed in the literature, by lactation consultants, and by nurses and physicians in the hospital setting. Unfortunately, problems which come later in the process, such as what a mother needs to do to maintain or

increase her milk supply, what to do when an infant goes through a growth spurt or goes on a feeding “strike”, are not adequately addressed; mothers felt like the “blind leading the blind” when it came to this un-chartered territory. The dependence of many participants upon spiritual strength indicates an opportunity for parish nurses to provide spiritual and nursing support for these women.

Breastfeeding promotional campaigns need to portray women in public confidently breastfeeding to deter the common belief that this practice is inappropriate or indecent. Nurses need to provide women with information regarding methods to discretely breastfeed in public during pregnancy and in the hospital as part of a woman’s discharge teaching. As more women breastfeed in public the process will become viewed as more commonplace and acceptable.

Implications for Nursing Education

Many nurses feel uncomfortable discussing breastfeeding with patients because they lack expertise in breastfeeding management. Consequently, the Center for Nutrition Policy and Promotion has recommended that health care professionals working with women during the perinatal period receive specialized training and technical assistance to aid them in their efforts to promote breastfeeding (USDA, 1996). Colleges of nursing need to develop comprehensive continuing education courses to fill this need.

Undergraduate and graduate nursing curricula should include sufficient coverage of the principles of breast milk production, the benefits of breast milk and breastfeeding, and techniques to manage common problems in order to enable graduates to confidently and accurately assist clients in their breastfeeding endeavors.

Implications for Health and Public Policy

The findings of this study and others indicates that a plan to return to work or school after the birth of an infant is an important reason women choose not to breastfeed or breastfeed only for a short-time (Chezem, Montgomery, & Fortman, 1997; Dennis, 2002). Many authors speculate that employment is the primary reason breastfeeding initiation and duration rates for women of middle- and high-income are significantly higher than those for women of lower income (Baumslag, 1995; Blum, 1993; Chezem et al., 1997). These authors argue that women with higher socioeconomic status can afford to take longer maternity leaves and experience greater flexibility and control over their work schedules to accommodate breastfeeding or pumping than women in the lower-income bracket.

Policies need to be enacted that equalize the playing field to ensure that women truly have a choice in what to feed their infants. Breastfeeding women who take an 8-12 week maternity leave breastfeed longer than women with shorter maternity leaves (Chezem et al., 1997). Places of employment need to provide clean, private facilities in which a woman can pump, along with approved and scheduled breaks to enable employees to pump or breastfeed.

Finally, if the desire of the U.S. government is to promote and encourage breastfeeding, then the primary focus of the WIC program needs to be the support of breastfeeding rather than the administration of free formula. One participant put it this way:

You know, when I was sitting in the WIC office, all I heard was, “formula, formula, formula.” And I thought – they’re going about this all wrong. If you’re offering something that’s free then people are going to do what it takes to get it. You know, you have to jump through hoops to get the formula anyway, so it seems like they should have a program where they have lots of lactation consultants to work with and a mom, you know, has to make an effort at [breastfeeding] for at least a little while, and then, if it doesn’t work, then okay, you can have the formula. (Kate)

The money spent by the USDA on formula (over \$500,000,000/year) could be reallocated to fund peer counselors, lactation consultants, educational programs and a comprehensive breastfeeding support system.

Conclusion

This study sought to contribute to nursing knowledge regarding the process of infant nutrition decision-making by women enrolled in WIC in East Tennessee. The existential phenomenological method enabled the participants to describe the events and experiences that were meaningful to them, and the systematic evaluation of the transcripts provided insight into the collective meaning of the infant feeding decision-making process for these women. The findings revealed that deciding what to feed a newborn is a complex and value-laden process. The contextual ground was identified as cultural contradiction regarding infant feeding methods as evidenced by the presence and promotion of two

opposing standards of infant nutrition. This cultural context shaped the women's attitudes and beliefs, thereby influencing her infant feeding decisions.

Three distinct phases of the infant feeding decision were revealed. *Deciding and the Influence of Others* occurred prior to delivery of the infant and was strongly influenced by a woman's perception of the cultural maternal ideal. The themes "*Breast is best*" versus "*They can make formula so good that it doesn't really matter*" were figural and underscore the existing cultural contradiction with regard to infant feeding methods. The second phase occurs after the birth of the infant and was entitled, *Living with One's Decision*. This decision was influenced by the woman's perception of her personal infant feeding experience and included the following sub themes: "*I can't do this!*"; "*I'm in this for the long haul!*"; and "*Whatever the child likes is what he should get*".

The third stage of the decision-making process is entitled, *Coming to Terms with One's Decision: Freedom versus Guilt*. Women who believed that their experience enabled them to fulfill their expectations and achieve their maternal goals were empowered and free. Those who felt they had not reached their expectations experienced varying degrees of guilt. All women focused on their infant's well-being as evidence that they had made the right decision.

Currently, there are two culturally acceptable substances for infant nutrition, breast milk and formula. Breast milk is very different from formula and the act of formula feeding is very different from breastfeeding; women must decide which method they will choose to feed their infants. The findings of this study suggest that both the woman's attitudes and beliefs regarding the feeding choices and her perception of structural

support influence her infant feeding decisions. Overall, women choose the method of feeding which results in a perceived net benefit for themselves and their infants.

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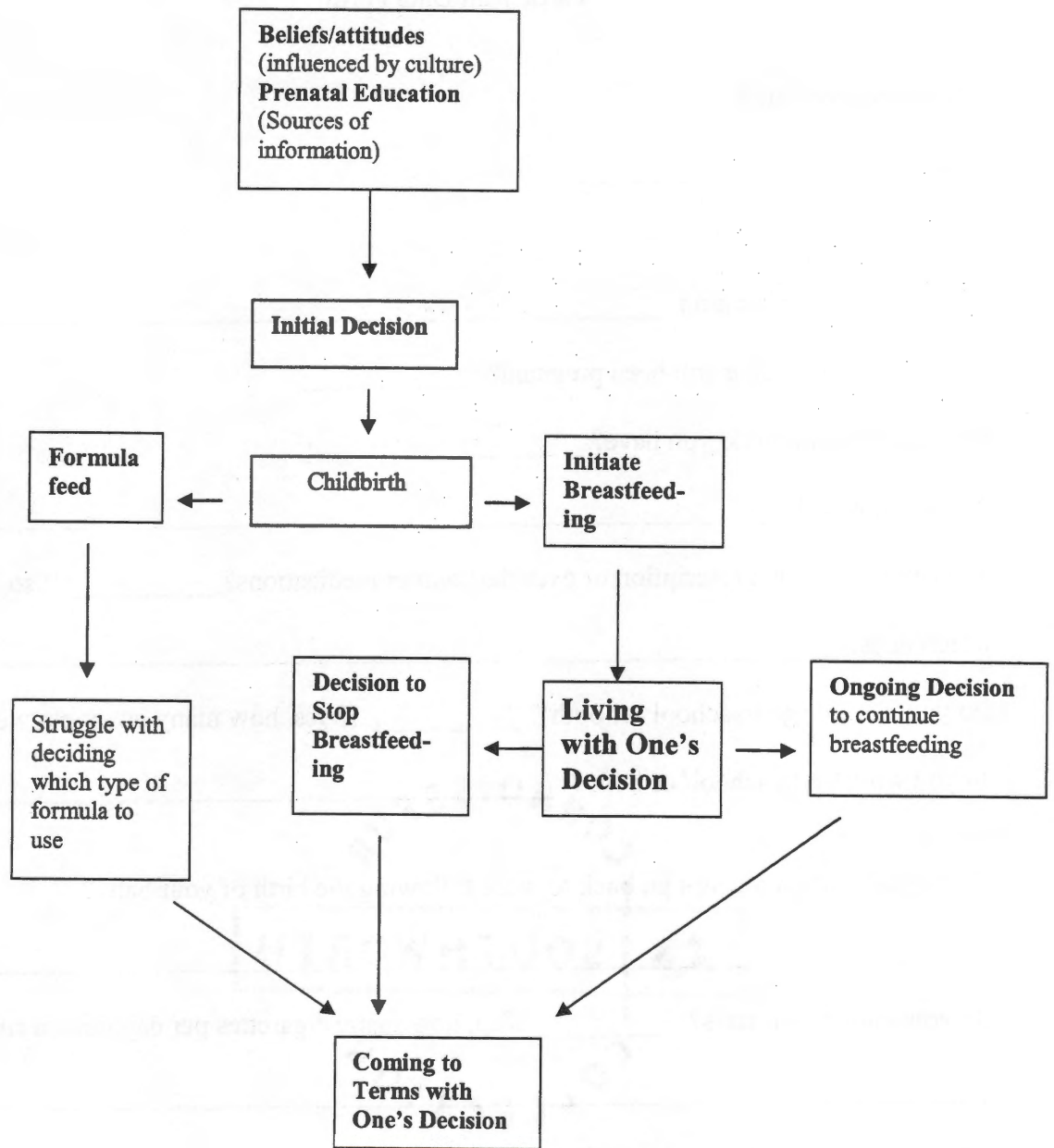
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APPENDICES

AS SOUTH NORTH

100% Cotton Fiber



Thematic Structure: The Experience of Making Infant Nutrition Decisions

Participant Data Form

I. Mother Information

Name _____

Age _____

Highest level of education _____

How many times have you been pregnant? _____

How many children do you have? _____

Are you married? _____

Are you taking any prescription or over the counter medications? _____ If so,
which ones? _____

Do you work or go to school (or both)? _____ If yes, how many hours per week
do you work/go to school/ or both ? _____

If you work, when did you go back to work following the birth of your baby?

Do you smoke cigarettes? _____ If so, how many cigarettes per day do you smoke?

When you were a baby, were you breast or bottle fed?

Did you go to any birth/infant care classes while you were pregnant?

II. Infant Information

What is your baby's date of birth? _____

How many weeks along were you when your baby was delivered? _____

Is your baby a girl or a boy? _____

How much did your baby weigh when he/she was born? _____

Does your baby drink breast milk? _____ If so, how many times per day?

If you breastfeed, do you also give your baby formula? _____ If yes, how many times a day does your baby drink formula? _____. What kind of formula does he/she drink? _____

Does your baby eat food other than breast milk or formula? _____ Please list these other foods and discuss how often your baby eats these foods:

How old was your baby when he/she began eating these foods? _____

Does your baby drink anything other than breast milk or formula (water, juice, etc.) _____ . If so, then how often does he or she drink these other fluids?

If you are formula feeding your baby what kind of formula does your baby drink?

How old was your baby when he/she began drinking formula? _____

Has he/she ever been breastfed?

Did your healthcare provider discuss infant feeding choices with you? _____ If so, what kind of advice did she/he provide?

Did a WIC employee discuss infant feeding choices with you? _____ If so, what kind of information was provided?

What do you know about the food packages that WIC has to offer?

What food package are you currently receiving from WIC? _____

Have you been to any of the nutritional counseling sessions offered by WIC?

INFORMED CONSENT STATEMENT

Formula or Breast Milk: A Phenomenologic Study of Infant Feeding Decisions Made by WIC Recipients in East Tennessee

You are invited to participate in a research study designed to explore your experience of deciding how to feed your baby.

Information

If you participate in this study you will be asked to fill out a form to provide the investigator with some basic information about yourself and your baby. You will meet with the researcher in an office at the University of Tennessee's College of Nursing or at a location you choose to discuss your experience of deciding how to feed your baby. The interviewer will record this discussion with a tape recorder. The interview will last approximately one hour. After completing the interview you will receive a \$20.00 Walmart gift card.

Risks

There are no foreseeable risks to you. Participation in the study will in no way affect the benefits and services you receive from WIC. The Knox County Health Department is not responsible for the implementation of outcome of the study.

Benefits

The interview will give you the opportunity to talk to an interested person about your experience of deciding how to feed your baby.

Confidentiality

All information in the study will be kept confidential. You will select an alias which will be used for the interview and to label your demographic sheet and the audiotape of the interview. Tapes and records will be kept in a secure place. Only the principal investigator will have access to the information. No reference will be made that could link you with the study. The tapes will be stored for three years and then destroyed.

Compensation

If you decide to participate and complete the study, you will receive a \$20.00 Walmart gift card as compensation for your efforts. If you do not complete the interview then you will not receive the gift card.

Participant Initials _____

Participation

Your participation in the study is voluntary. You may withdraw from the study at anytime. If you choose to withdraw from the study before data collection is completed, your data will be destroyed.

Consent

I have read the information provided on this form. I have received a copy of this form. I agree to participate.

Participant's signature _____ Date _____

I have discussed the terms outlined in this document with the participant.

Investigator's signature _____ Date _____

The University of Tennessee College of Nursing

Formula or Breast Milk: A Phenomenological Study of Infant Feeding Decisions Made
by WIC Recipients in East Tennessee

Investigator: Blair Short, RNC, MSN

Women's Health Nurse Practitioner, Doctoral Candidate at the
University of Tennessee, and Assistant Professor at
Carson-Newman College, Division of Nursing

If you are enrolled in WIC and have had a baby within the past 6 months, you are invited
to participate in a research study.

The purpose of this study is to learn about your experience of deciding how to feed your
baby. If you decide to participate in this study, you will be asked to meet with me at the
University of Tennessee's College of Nursing, or at a convenient location for you, to
discuss your experience. The interview will last about an hour.

Compensation: A \$20.00 Gift Certificate to Wal-Mart

If you are interested in participating in this research study, please call
Blair Short, RNC, MSN at 471- 4779 (email: bshort@cn.edu).

*** The Knox County Health Department is in no way responsible for the
implementation or outcome of this research project ***

Statement of Confidentiality

Formula or Breast Milk: A Phenomenologic Study of Infant Feeding Decisions Made by
WIC Recipients in East Tennessee

I understand that the information that I will be transcribing is research data that is
privileged and confidential. I will not discuss this information with anyone other than the
principle investigator.

Signed _____ Date _____

Investigator _____ Date _____

Phenomenology Group Statement of Confidentiality

I understand that the information discussed by this group is research data. In order to protect the confidentiality of research participants I agree to discuss the content of the transcripts only with the phenomenology group. I will not discuss the content of the interviews with any one who is not a member of the phenomenology group.

Signatures

VITA

Blair Short was born in Memphis, Tennessee. She attended the University of Tennessee where she received a Bachelor's Degree majoring in Psychology and Philosophy in 1990. She married in 1993. In 1996 she completed the requirements for a Master's Degree in Nursing at the University of Tennessee specializing in Women's Health. She had her first child in 1998. After working as a women's health nurse practitioner and as a labor and delivery nurse, she entered the Doctoral Program in Nursing at the University of Tennessee in 2001. While completing the requirements for the degree she worked as a graduate teaching assistant and as an adjunct faculty member at the University of Tennessee. She had her second child in 2003. She was hired as an Assistant Professor at Carson-Newman College in the summer of 2004. The doctoral degree was received May, 2005.