THE EXPERIENCE OF INFANT FEEDING FOR FIRST-TIME MOTHERS: A HERMENEUTIC ANALYSIS

By

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To the faculty of Washington State University:

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Forward

Childbirth and caring for children is a fundamental privilege of human existence. Becoming pregnant and nurturing a growing human being may cause a woman to relinquish what she understands of pregnancy, birth, and caring for babies. Trust or lack of trust in medical providers, nurses, and support systems plays a pivotal role in how a woman may view the experience of becoming a mother.

Becoming pregnant at 20 years of age was a frightening, but eagerly anticipated event. I had wanted children since I was a little girl. It seemed having a baby would make me part of the grown-up world. I sought advice from my doctors, nurses, friends, and my mother. My husband did not impose an opinion on pregnancy, birth, or baby care. I never asked and he never offered. Otherwise, the key players had an opinion on what to do, how to do it, and when to do it. Advice was never far away. When confused, I sought out advice from books and self-proclaimed experts on pregnancy, childbirth, and childrearing. I read the books my mother and grandmother read by Dr. Benjamin Spock. His books seemed rigid to me and without any margin of error. Sheila Kitzinger’s books presented more current and relevant information to my generation. In Kitzinger’s books, she offered guidance to consider natural childbirth, walking during labor, and keeping the baby with you at all times. Briefly, I read about infant feeding. There were two choices: breastfeed, or bottle feed. Both sounded viable because I had never seen anyone feed a baby with anything except to offer formula in a bottle. I felt confident that the nurses would help me when the time came.

Labor came, difficult, and long. In recovery, I was resting and my baby was not with me. After a short time, the nurse came in, pulled back the blanket and said, “It is time to feed your baby.” She held my breast in her hand and helped my daughter latch on to my nipple. I looked at
her and said, “So, that is how I am supposed to feed my baby?” Her response was clear: “It is one way to feed your baby.” That moment will stand in my mind forever. How babies are fed may be a mother’s choice, but there are many influences compounding the decision. The advice and guidance from others played a pivotal role in how I learned to feed my babies. My first child nursed with the transitions of sore and cracked nipples, cluster feeding, colic, and was weaned at the age of 20 months. My second child breastfed for 18 months and had difficulties with latching to the breast, sleepiness, jaundice, and infrequent feedings in the first month. There were many times I strongly considered weaning him from the breast because of stress, conflicts with everyday life, and encouragement of others, but I continued as long as I could.

I have wondered for many years how I would have fed my babies if the nurse had not initiated the first feed with my daughter. I was young, newly married, very low income, uneducated, and unemployed. I used food stamps and was enrolled in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). According to current empirical knowledge, I should have never offered my infants human milk; I did not fit the categorization of women most likely to breastfeed infants and I was undecided until the nurse initiated the first feed. Since then I have often reflected on how a mother prepares, initiates, and sustains infant-feeding practices and what these experiences are like for her?
Dedication

This dissertation is dedicated to my children, Erin and Alex, for without them, I would have never known the amazing journey of being a mom.
THE EXPERIENCE OF INFANT FEEDING FOR FIRST-TIME MOTHERS: A HERMENEUTIC ANALYSIS

Abstract

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Infant feeding is a unique relationship between a mother and infant that is like no other human relationship in the lifespan. Research suggests women struggle with infant-feeding choices and decide how to feed infants prior to the birth. The phenomenon of infant feeding and maternal choice of feeding methods warrants further investigation and research. A clear understanding of what the experience means of being a first-time mother and preparing for, initiating, and sustaining infant feeding has not been fully addressed in the literature. The aim of this Heideggerian hermeneutic research project, to generate a comprehensive interpretation of first-time mothers’ experiences regarding how they prepare for infant feeding before birth and initiate and sustain infant-feeding methods in the first six weeks of an infant’s life, resulted in findings that have implications for healthcare professionals and mothers. Twelve first time mothers, recruited from the Northwest region of the United States, were interviewed three times each. Two patterns emerged from the analysis of transcribed interviews: Tending to life: Ready to feed and Coming into motherhood: Suffering, loving, and being. The interpretive patterns, along with underlying themes, are presented in relation to nursing practice, education, policy and research.
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CHAPTER ONE

Infant feeding is a unique relationship between mother and infant. Feeding offers nourishment, comfort, and establishes trust between mother and child. Currently, there are two methods to nourish an infant: (a) human milk, also known as breast milk, or (b) artificial baby milk, known as formula. Human milk is currently considered the standard method to provide essential nutrients for infants, promoting optimal growth, and protection from infectious disease. Commercially manufactured formula can be provided as an alternative method to nourish an infant when human milk is unavailable, contraindicated, or not selected.

In the United States, 75% of childbearing women choose to initiate infant feeding by offering human milk to newborns by exclusive breastfeeding. However, by six months postpartum, only about 13% of women are exclusively breastfeeding their infants (Centers of Disease Control and Prevention [CDC], 2010). Researchers suggest that there are a number of obstacles, barriers, and personal preferences that cause women to change their feeding method (Grassley & Nehms, 2008; Healthy People, 2010; Hoddinott, Kroll, Raja & Less, 2010; Howett, 2006; Johnson, 2010; Kaufman, et al., 2010; Martucci, 2012). Historical relevance of infant feeding creates challenges for mothers in how to prepare for infant feeding. Over the past 100 years, trends of infant feeding have fluctuated from exclusively offering human milk to considering formula as the standard method to nourish infants. Each generation of mothers predominantly views infant feeding in accordance to cultural and societal expectations and their personal health beliefs.

In addition, maternal confidence and sense of self-efficacy have been linked to infant-feeding methods (Dennis, 1999a, 2002b, 2006c; Singhal & Lanigan, 2007). Mothers with high levels of maternal self-efficacy are more likely to choose breastfeeding as a primary means to
nourish infants; whereas, mothers less confident about infant feeding are more likely to offer formula (Dennis, 1999a, 2002b, 2006c; Singhal & Lanigan, 2007). Infant feeding is unique to each mother and the experience of infant feeding is an intimate and complex experience. However, there is insufficient evidence to help practitioners understand what this experience means to women.

The purpose of this research was to conduct a hermeneutic study of the lived experience of first-time mothers (a) preparing before birth to feed their infants, (b) initiating feeding in the first week after birth, and (c) sustaining infant feeding at specific time points. The focus of this study was to have a deeper understanding of the experience of infant-feeding decisions. The first chapter of the dissertation presents the background, significance, problem statement, research question, and aims of the study proposal.

**Background and Significance**

The focus of this study is first-time mothers’ experiences of infant feeding. Research has shown there is an observable process of infant-feeding decisions before birth, at birth, and during the first weeks of life. However, women may change intentions. A woman’s experience in how she prepares to nourish her infant and sustain infant feeding can have lifelong consequences for both mother and child. Engagement in health-promoting activities, such as providing human milk to infants, increases physiologic reserve, and prevents adverse outcomes (Korff, et al., 1997, Lawrence & Lawrence, 2005). National and international organizations encourage women to consider breastfeeding their infants for the first six months of life, including the World Health Organization (WHO) (2012), American Academy of Pediatrics (AAP) (2012) and Healthy People 2020. In January 2011, Surgeon General Regina Benjamin issued a statement
encouraging women to consider breastfeeding as the standard way to nourish infants for the first six months of life and up to one year.

Current literature provides substantial evidence of the benefits of human milk for both mother and infant. Benefits for mothers include reduced incidence of breast and ovarian cancers over the lifetime, more rapid return to pre-pregnant weight, and more effective uterine involution after birth (Lawrence & Lawrence, 2005; AAP, 2012; Lowdermilk, Perry & Cashion, 2010). There are known differences in the health status of infants provided human milk compared to those receiving formula. Human milk provides essential nutrients for infants, promotes ideal growth, and protects from infectious disease and childhood obesity (CDC, 2010; Lawrence & Lawrence, 2010; WHO, 2012). Breastfed infants have overall fewer acute infections (such as respiratory infections and otitis media), and lower incidence of chronic illness, skin rashes, and mortality (CDC, 2010; Lawrence & Lawrence, 2010; WHO, 2012).

Mothers may decide initially before birth to breastfeed based on health care benefits for both mother and infant. However, mothers often change their decision, and this phenomenon has not been fully investigated. Mothers who initially decide to provide human milk to infants have offered reasons in survey studies for not continuing. These include perception of inadequate milk production, inconvenience, and discouraging comments from family, friends, and health professionals. Societal and cultural attitudes about women’s bodies, sexualization of breasts, the need to return to work, influence from partners, and ideas about parenting can influence feeding methods (Buikstra & Hegney, 2008; Lee, 2007a, 2008b; Simmie, 2006; Thulier, 2009). Studies found women select formula feeding for convenience, returning to work, knowing how much the baby receives, less frequent feedings, and family members’ availability to help with feedings (Blyth, et al., 2002; Britton & Britton, 2008; Robinson, 2010; Stanton, 2011). When women
change infant-feeding decisions from standard to alternative methods, it is unclear if these infant-feeding decisions are emotionally satisfactory to women. Literature is insufficient to explain what it means to mothers who select a feeding method and then either change or sustain the chosen method.

Scientists have recognized the challenge of mothers in the United States to provide human milk to their infants. Researchers suggest variables, both modifiable and nonmodifiable, related to the likelihood women will provide human milk to their infants or change to alternative methods, such as formula. Certain demographic characteristics such as low income, low education, and African American descent are associated with women less likely to provide human milk, or breastfeed (Britton & Britton, 2008; Blyth, et al., 2002; CDC, 2010; Robinson, 2010; Stanton, 2011). Caucasian mothers with middle income and some college education are more likely to breastfeed their infants (Blyth, et al., 2002; Britton & Britton, 2008; CDC, 2010; Robinson, 2010; Stanton, 2011). Despite extant literature describing modifiable and nonmodifiable variables related to feeding, research studies in-depth explanations of how mothers make or change their decisions and ultimately feed their infants.

Infant feeding, especially breastfeeding, has been historically romanticized with pictures of mothers and infants comfortable and contently embraced. Historical relevance of infant feeding is pertinent in the study of decision-making for mothers. In the early 1900s, women breastfed their infants out of necessity, or sought out services of wet nurses. However, by the 1920s, women were seeking emancipation and sought alternative methods for infant feeding. The American Medical Association (AMA) endorsed formula feeding in 1929 as the optimal form of infant nutrition. In the 1950s and 1960s, formula was the standard of infant feeding, and viewed more favorably than offering human milk (Thulier, 2009). Historical trends changed in
the 1970s and 1980s with more mothers preferring to offer their infants human milk in the first months of life (Thulier, 2009). Today, the majority of women initially prepare to offer human milk to infants in the first months of life. However, a large majority will wean within days or weeks and use formula feeding as a primary method for nourishing infants (Britton & Britton, 2008; Dennis, 1999a, 2002b, 2006c; Singhal & Lanigan, 2007).

Behavioral theories, such as the theory of planned behavior (TPB) and the theory of self-efficacy explain behavioral influences in the decision-making process. However, behavioral theories relate to choice, implying there is a “correct” choice. Mothers initiate an infant-feeding method perceived as consistent with behavioral values, beliefs, and outward influences. Behavioral theoretical models are used to describe the variables that influence infant-feeding decisions (Blyth, et al., 2002; Britton & Britton, 2008; Dennis, 2003). The TPB and self-efficacy theories suggest women who have not yet had children may be more likely to seek infant-feeding guidance from outside influences. Despite the consistent use of the TPB and self-efficacy theories in infant-feeding studies, a lack of understanding remains between (a) what contributes to a mother’s experience in her infant-feeding decision and (b) how she ultimately nourishes her infant.

Current literature is replete with survey and empirical studies promoting exploration of childbearing women’s views on infant feeding. However, there are a limited number of studies that interpretively explore the experience of how mothers prepare, initiate, and sustain infant feeding in the first weeks after birth. All known interpretive studies explore infant-feeding decisions of African American mothers living in southern regions of the United States (Howlett, 2006), or formula-feeding-only mothers who have had more than one birth (Robinson, 2010).
There are no known studies implementing longitudinal interpretive methods that explore how first-time mothers prepare to feed their infants before birth, shortly after birth, and at six-weeks postpartum. A hermeneutic study will contribute to the extant knowledge and promote a deeper understanding of the common experiences of new mothers in nourishing their infants. Currently, there is lacking empirical knowledge about how women choose feeding methods. In practice, current empirical knowledge is helpful but lacks depth regarding obstacles, barriers, and facilitators related to infant-feeding issues. This study will enhance known evidence and prepare practitioners to provide higher-quality care to childbearing women in the clinical setting.

**Problem Statement**

Infant feeding is necessary for the continuation of the human species. Current evidence suggests nourishment in the first year of life can have long lasting effects on health status. Despite recommendations to use human milk as the standard method to feed human infants, the majority of infants are not provided human milk after a few weeks. To have a better understanding of how women prepare to feed their infants across a limited period, researchers need to explore feeding decisions and experiences of mothers from before birth, a week after birth, and to six weeks after birth. Although there are studies suggesting mothers feed their infants based on modifiable and nonmodifiable variables, there are very limited studies exploring the experience of infant feeding interpretively, and there are no known interpretive longitudinal studies at the aforementioned specific time points.

**Purpose Statement**

Missing in infant-feeding research is an understanding of the lived experience of how mothers make infant-feeding decisions during the critical period of before birth to six weeks after birth. In preparing for the birth of infants, many women anticipate how they will feed their
newborns. Despite decisions made prior to birth, infant-feeding expectations and realities evolve over the first weeks of life. The majority of women will choose to breastfeed infants; however, most will either wean infants from exclusive breastfeeding within the first weeks to months after birth, and use partial breastfeeding, or wean completely to formula. Recent findings from the Centers for Disease Control and Prevention (2012) suggest despite 74.6% of women initially choosing human milk to nourish infants, less than 35% are still exclusively offering human milk to their infants at three months of life. Mothers who wean or modify infant-feeding methods prior to three months constitute an important source of information for development of infant-feeding policies and childbearing educational programs. Those who sustain offering human milk to infants can offer valuable information as well. A deeper understanding of the experience of infant feeding for first-time mothers will help to identify cultural influences, social structures, impediments, and facilitators. These understandings can promote a higher quality of care in the clinical setting and promote optimal outcomes for both mother and infant.

The purpose of this study was to explore how first-time mothers prepare to feed their infants and to more fully understand the meaning and experience of infant-feeding preparation prior to birth, infant feeding one week of birth, and at six weeks after birth.

**Research Question**

The following research question guided this study:

1. What does it mean to first-time mothers to prepare for infant feeding before birth, initiate infant feeding at birth, and sustain infant feeding in the first six weeks after birth?
Specific Aim

1. To explicate and interpret feeding decisions and experiences of first-time mothers before birth, one week after birth, and at six-weeks after birth.

Summary

Method of infant feeding is a choice women may decide before an infant is born and throughout the feeding experience. There are two primary methods to feed an infant: (a) human milk and (b) formula. Human milk provides optimal nutrition for infants in the first year of life; however, the majority of women who initiate infant breastfeeding will wean or supplement feedings by alternative methods, such as formula feeding within weeks after birth. Researchers have suggested modifiable and nonmodifiable variables contribute to a woman’s decision regarding infant feeding; however, these variables remain conceptually and empirically unelaborated. Moreover, the critical time of decision making and learning to infant feed, often by trial and error, is from a few weeks before to six weeks after birth. Hermeneutic research of lived experiences will deepen understanding of how mothers view infant-feeding decisions and continue to nourish their infants.
CHAPTER TWO

Literature Search Strategies

A preliminary literature review was conducted via the Cumulative Index to Nursing and Allied Health Literature (CINAHL), ProQuest, and PubMed databases using the terms: infant feeding, decision making, history, formula, breastfeeding, mothers, mothering, social influences, professional, baby, infant, self-efficacy, and birth. The literature review is organized into four categories: (a) the historic perspective of infant feeding (16 publications), (b) methods of infant feeding (20 publications), (c) maternal considerations with infant feeding (18 publications), and (d) societal influences (21 publications). These categories are explored for contextual contributions to the scientific literature and are now described in detail.

Historic Perspective of Infant Feeding

During the end of the 19th century in the United States, infant feeding was rapidly changing from (a) providing infants with human milk to (b) the use of scientifically formulated artificial baby milk. Historical evidence of infant feeding includes wet nursing, bottle feeding, and breastfeeding (Stevens, Patrick, & Pickler, 2009; Thulier, 2009). At the beginning of the 20th century, two-thirds of infants were breastfed by their mothers (Hirschman & Butler, 1981). For women unable to breastfeed, or declining to breastfeed, wet nurses provided nourishment to infants. Wet nurses were considered the best substitute, but were difficult to find, leading to the use of animal milks, gruels, broth, teas, and indigestible starches (Golden, 1996). These substitutes created health dangers for infants with diarrhea, dehydration, and increased infant mortality (Foss, 2010; Golden, 1996; Stevens, Patrick, & Pickler, 2009; Wolf, 2001). With the invention of pasteurization, access to clean water and increased awareness of germ theory, infant mortality rates dropped, and the dangers of formula use decreased (Blum, 1999; Foss, 2010).
During this time, the American Medical Association encouraged women to consider the benefits of relying on medical advice to guide infant feeding (Foss, 2010; Golden, 1996; Hausman, 2008; Wolf, 2000). Due to the complex nature of formula feeding, the specialty area of pediatrics further evolved in the care of infants, with pediatricians reporting one-quarter of their practice was solely focused on directing infant-feeding practices (Apple, 1986; Thulier, 2009; Wolf, 2000). Formula feeding was designated as complex with individualized recipes to meet specific nutritional needs of infants (Sellew, 1926). By the 1940s, only about 25% of women in the U.S. were breastfeeding their infants and cow-based formulas were considered the “standard” method to nourish infants. Mothers were encouraged to regard infant formula as a safe substitute for human milk (Stevens, Patrick, & Pickler, 2009). Formula companies aggressively marketed to pediatricians and mothers, resulting in a consistent decline of breastfeeding until the 1970s (Foss, 2010; Wolf, 2000; Stevens, Patrick, & Pickler, 2009). Mothers viewed formula feeding as scientific advancement in the care of infants and depended on their physicians’ instructions to best care for their infants (Foss, 2010; Thulier, 2009). Infants were fed on rigid schedules and mothers encouraged to use “modern” tools and devices to care for their infants (Foss, 2010; Wolf, 2001). Improvements came with sanitation, availability of clean water, and refrigeration in homes. As a result, formula use became safer with far fewer negative side effects and dangers to infants (Apple, 1987; Golden, 1996).

During the 1950s, formula was considered the ideal replacement for breastfeeding when mothers were unable to produce sufficient milk (Steven, Patrick, & Pickler, 2009; Spock, 1953; Thulier, 2009; Wolf, 2000). Women viewed breastfeeding as old-fashioned and confining, thus reducing independence (Apple, 1987; Steven, Patrick, & Pickler, 2009; Thulier, 2009). Historical evidence suggests in the 1950s, it was rare to see an infant sickened by prepared
formula (Wolf, 2001). Citizens in the United States were enjoying post-war prosperity and considered scientific advancements influential to improvements of quality of life (Mahnke, 2000). Mothers looked to their pediatricians for infant care and feeding advice. Women’s magazines and pediatricians were aggressively pursued by formula companies, promising mothers and physicians “healthy and satisfied infants” when fed scientifically formulated baby milk (Foss, 2010). Formula companies profited under the approval of the American Medical Association, and physicians made sizable profits by recommending formula feeding to mothers (Golden, 1996). As formula-based infant feeding became more popular, so did hospital births. In 1928, 50% of all infants were born at home. By the 1950s, 98% were born within the hospital setting (Golden, 1996; Foss, 2010; Wolf, 2001). Rigidity of hospital schedules and the need to sterilize bottles and nipples were included in the advice given to breastfeeding mothers. Hospitals had established nurseries and mandated separation between mother and infant, contributing to reduced rates of successful breastfeeding (Steven, Patrick, & Pickler, 2009; Thulier, 2009; Wolf, 2000a, 2001b). By the early 1970s, only 22% of women initiated breastfeeding after birth and less than 8% were still breastfeeding at three months (Apple, 2006; Golden, 1996).

The 1970s included a surge of maternal opposition to medical advice and breastfeeding became more prevalent. A new feminist push for women to control their bodies created a shift for some women to view breastfeeding as a “natural” right of families and motherhood. According to Thulier (2009), breastfeeding research began in earnest, focusing on the benefits of breastfeeding and limitations of human milk for preterm infants. Further research consisted of decreased rates of acute and chronic illness, and possible neurocognitive benefits of mother’s milk (Gross, Geller, & Tomarcelli, 1981; Thulier, 2010). Historic literature suggests during the
1980s, a surge in breastfeeding support prevailed, and new allied health professionals focused on infant-feeding practices emerged (IBCLC International, 2011). The specialty of lactation science has increased over the past 20 years. The role of the International Board Certified Lactation Consultants (IBCLC) emerged as a nursing specialty experienced in advising mothers with wide range of infant-feeding situations. Currently, there are several thousand IBCLC’s in practice in the United States offering support and advice to childbearing women, information that was historically passed from mothers to daughters and in mother-to-mother groups (Blum, 1999; Foss, 2010; Wolf, 2000). In 1981, WHO developed the International Code of Marketing of Breast-milk Substitutes. The code addressed the concerns of marketing practices by formula companies and the negative impact to breastfeeding (Thulier, 2009). The code was overwhelmingly supported by all nations with the exception of the United States, which was the only vote of dissention (Thulier, 2009; Golden, 1996; Wolf, 2000; Apple, 2006).

The 1990s saw breastfeeding rates hover at 49% of women breastfeeding their infants, 51% opting for formula as the primary means of infant nourishment (Calamaro, 2000). Research and education continued with policy changes of rooming-in, unlimited access to infants by mothers, and providing breastfeeding education to parents. Healthy People 2000 presented objectives to increase breastfeeding rates to “at least 75% the proportion of mothers who breastfeed their babies in the early postpartum period and at least 50% the proportion continue to breastfeed their babies until five to six months old” (United States Public Health Services [USPHS], 1999). The American Academy of Pediatrics issued a policy statement in 1997 supporting providing only human milk to infants in the first six months. By 2004, rates of breastfeeding were stabilizing with 73% of infants offered human milk at birth, 30% at three months, and 11% at six months (CDC, 2007).
Women who decide to use formula for infant feeding are a lucrative market for the formula industry (Apple, 1987; Golden, 1986; Palmer, 2009; Wolf, 2000). Health benefits of offering human milk to infants is well-known; however, infant formula use remains a profitable venture. The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) is the largest consumer of infant formula today. The makers of Similac, Abbott Laboratories, has an estimated profit of 7% each year over the past 20 years, after recovering from a voluntary formula recall (Abbott, 2011). Mead Johnson Nutrition, makers of Enfamil has seen an 18% increase in formula sales in 2011, with $900 million first-quarter sales (Cohen, 2011).

Infant feeding is a complex decision and rich in history of mothers making choices based on identified knowledge, societal expectations, and political viewpoints. History illustrates infant feeding as a dynamic and evolving practice in need of more exploration. Current scientific literature has shown advancement in technology; however, all contexts have influenced the course of infant-feeding practices. Because the future cannot be predicted, a deeper understanding of the influence of infant-feeding history can help health care professionals better comprehend mothers’ decisions regarding infant-feeding practices.

**Methods of Infant Feeding**

Breast milk and formula are food substances, whereas breastfeeding and bottle feeding are practices. This section will focus on the differences, advantages, and disadvantages of breast milk and formula as infant nourishment. Health outcomes for infants have been scientifically proven to differ between infants who are offered breast milk and those provided with formula. However, despite increased awareness of health care benefits of offering breast milk to infants, the majority are only offered breast milk for a few weeks after birth.
Breastfeeding. The term “breastfeeding” can be confusing when evaluating current infant-feeding research. Attempts to standardize terms used in breastfeeding must consider the following: exclusive breastfeeding is offering human milk without any supplementation, including water, juice, teas, or complementary foods. All nutrients, water, proteins, vitamins, and minerals are provided from human milk. Scientific literature suggests infants in the first six months of age should receive only human milk, unless there is medical indication to do otherwise (AAP, 2005; CDC, 2011; UNICEF, 2010; WHO, 2011). Partial breastfeeding is defined as breastfeeding with any nutritional supplementation, including water, formula, teas, or complementary foods.

The benefits of human milk are greatest when provided without formula in the infant’s diet. Offering human milk to an infant is a mother’s unique gift to her infant, providing nourishment, protection from acute and chronic illness, and comfort (Mulder & Johnson, 2010). Breastfed infants have less likelihood of digestive problems, otitis media, and infant mortality (AAP, 2005a, 2012b; Bartick & Reinhold, 2010; CDC, 2011; Kramer, et al., 2002; Monajemzadeh, et al., 2010; Mulder & Johnson, 2010; UNICEF, 2010; WHO, 2011).

Disease prevention. Breastfeeding research has provided strong empirical evidence that infants nourished with human milk have less incidence of acute and chronic illness. Human milk provides infants with anti-inflammatory and antimicrobial properties, and enhances immunomodulatory agents contributing to immune system function (Abrahams & Labbock, 2011). Studies found infants have reduced acute otitis media, gastroenteritis, pneumonia, dermatitis, asthma, childhood obesity, diabetes, necrotizing enterocolitis, and sudden infant death syndrome (SIDS), (AAP, 2005a, 2012b; CDC, 2011; Ip, et al., 2007; Kramer, et al., 2002 Mulder & Johnson, 2010; Monajemzadeh, et al., 2010).
In otitis media, breast milk enhances bacterial and hormonal interactions for the infant, which influences the oral cavity and eustachian tubes. This decreases the incidence of, and serves as a protective factor against, otitis media (Abrahams & Labbock, 2011). Meta-analyses suggest reduced levels of breastfeeding and introduction of formula before six months of life increases incidence of otitis media with effusion (Abrahams & Labbock, 2011). A study by Monajemzadeh, et al. (2010), suggests children who were exclusively breastfed in the first six months of life were significantly less likely to be colonized with Helicobacter pylori (H. pylori) at ages two to 14 years of age. Further studies support findings that breast milk significantly reduces incidence of necrotizing enterocolitis and diarrheal disease (Berman & Moss, 2011; Lambert, et al., 2011).

Childhood obesity rates in the United States are increasing at alarming rates. Obesity is a familial and multifactorial health condition with genetic, endocrine, and metabolic influences (Thompson, 2007). Currently, estimates suggest over 30% of children are overweight or obese (Ogden, Carroll, Curtin, Lamb, & Flegal, 2010). Overweight or obese children are more likely to have increased risk factors for high blood pressure, diabetes, and sleep apnea (Li, Ford, Zhao, & Mokdad, 2009). Researchers suggest that infants who receive breast milk in the first six months are less likely to suffer the effects of childhood obesity (Owen, et al., 2005; Ryan, 2007). Infants given human milk are at reduced risk of developing childhood obesity; however, confounding variables, such as maternal obesity, smoking, ancestry, nutritional intake, and socioeconomic status contribute to childhood obesity rates in the United States (CDC, 2011, Ogden, et al., 2010). Researchers find human milk can help to prevent adult onset disease, such as cardiovascular disease, diabetes type 1 and type 2, and asthma (Lawlor, et al., 2005; Martin, et
Further, a causal effect of breastfeeding reduces systolic blood pressure in adults (Lawlor, et al., 2005; Martin, et al., 2005).

A meta-analysis regarding breastfeeding and the incidence of SIDS determined there is a causal relationship between formula and the rates of SIDS (Vennemann, et al., 2008). Sudden infant death syndrome has decreased in the past 20 years; however, it continues to be the leading cause of death for infants in the first year of life (Vennemann, et al., 2008). The rate of SIDS is double in formula fed infants during the first year of life (Vennemann, et al., 2008).

**Formula Feeding.** The cultural shift of infant feeding is related to the social context of the care of women in the past 100 years (Apple, 1997; Golden 1986; Hausman, 2003). As more women gave birth in the hospital setting, the use of scientific advances influenced infant-feeding methods. Women sought new methods of pain relief and physician managed labors. Drugs, most frequently narcotics and scopolamine, were available to women in labor, resulting in women becoming unable to participate in the birth process. More infants were born via forceps and under the influence of medications (Leavitt, 1986). Mothers were unable to care for their infants; therefore, infants were provided with formula in the hospital nursery.

Infant feeding evolved from a maternal driven practice to a scientifically influenced method of rigidity and maintained feeding schedules. Women’s approaches to infant feeding stemmed not from commitment of one method over another, but from efforts to routinize feeding practices into daily lives as prescribed by physicians and childcare experts (Kaufman, Deenadayalan, & Karpati, 2009; Spock, 1946; Swellar, 1926). Further research suggests women initially offer breast milk, but wean to formula in the first weeks or months due to perception of not enough milk or painful latch (Mulder & Johnson, 2010). In 2005, estimates from the CDC (2011) indicate that 75% of infants are offered breast milk at birth; however, by three months
only 32% are exclusively offered human milk; and by six months of age, rates are as low as 12%.
Formula is considered relatively safe with clean water and good sanitation. Despite
improvements, infants provided formula are at increased risk of infections, mortality, and
morbidity (CDC, 2011; O’Brien, Buikstra, & Hegney, 2008; Stuebe & Schwarz, 2010). Further
research suggests formula fed infants are five times more likely to be hospitalized in the first
year of life due to upper respiratory or gastrointestinal illness (Paricio-Talayero, et al., 2006).

Presently, most women view formula as a viable and acceptable means to nourish infants.
In focus groups conducted in the United States in 2002 by the Ad Council (a nonprofit
organization that promotes critical messages for the American public), women expressed
understanding the benefits of breastfeeding. However, women reported viewing human milk as
optional and helpful for infant health, but not essential (Stuebe & Schwarz, 2010). Despite vast
amounts of breastfeeding promotion, childbearing women continue to view infant feeding as
more than health benefits. This study will offer a deeper understanding of maternal views of
infant feeding and perceived advantages and disadvantages of chosen methods of infant feeding.

**Maternal Considerations with Infant Feeding**

Breastfeeding can provide both physical and psychological benefits to the mother.
Breastfeeding improves bone mineralization in women in postmenopausal years, and is
protective against post-partum depression, type 2 diabetes, obesity, and ovarian and breast
cancers (Ip, et al., 2007; Li, Jewell, & Grummer-Strawn, 2003; Stuebe, et al., 2005; Watkins,
Meltzer-Brody, Zolnoun, & Stuebe, 2011). Breastfeeding research has shown that the longer the
duration of breastfeeding, the lower the risk of type 2 diabetes, with the authors concluding
lactation may reduce the risk of type 2 diabetes by improving glucose homeostasis (Stuebe, et al.,
2005). Additional studies found women who choose formula feeding have a 28% higher risk of
developing cardiovascular symptoms if breastfeeding is less than three months (Stuebe & Schwarz, 2010).

Women choose formula feeding for a variety of reasons, the most common being perception of low milk supply, sore nipples, and altered sleep patterns. Negative experiences with breastfeeding are associated with altering feeding methods. Researchers have suggested women who wean from human milk to formula are more likely to have depressive symptoms and feelings of inadequacy as mothers (Rabin, 2006). Women who choose to offer infants human milk and then transition or abruptly wean to formula, may experience physiological upset with increased risk of depressive symptoms (Watkins, Meltzer-Brody, & Zolnoun, 2001). A history of short breastfeeding and supplementing or initiating feedings with formula is associated with depressive symptoms in women (Watkins, et al., 2011). Symptoms women may experience include anxiety, decreased maternal self-efficacy, hyperawareness of pain, and difficulties with maternal bonding (Watkins, et al., 2011; Gaynes, et al., 2005; Dennis & McQueen, 2009). Studies reviewed suggested incidence of depressive symptoms, including decreased self-efficacy with infant feeding, were not resolved with support or professional intervention (Watkins, et al., 2011; Gaynes, et al., 2005). Women who do not view infant feeding as successful or positive are more likely to have decreased sense of confidence or self-efficacy.

**Self-efficacy and maternal decision-making.** Self-efficacy is defined by Bandura (1994) as a dynamic intertwining of behavioral, personal, and environmental factors. Bandura described self-efficacy as a means for a person to have the ability to transform their environment, not only to have an effect on the current generation, but also future generations. There are four main concepts of self-efficacy: (a) mastery, (b) vicarious learning, (c) social persuasion, and (d) perception of physical health.
Mastery. The first concept is mastery of experiences through life events. Researchers found women with positive experiences are more likely to repeat those steps to promote positive outcomes. Infant-rearing choices, including feeding experiences, are more likely to be repeated with subsequent children (Kaufman, Deenadayalan & Karpati, 2010; Hoddinott, Kroll, Raja, & Lee, 2010; Dennis, Sheehan, Schmied, & Barclay, 2010; Grassely & Nelms, 2008).

Vicarious learning. The second concept of self-efficacy is learning through vicarious experiences. Studies have suggested vicarious experiences gained in childbearing women influence infant-feeding decisions. Research conducted by Hoddinott, Kroll, Raja, and Lee (2010) measured witnessed experiences of infant feeding, and the influence on childbearing women’s decisions regarding infant-feeding methods. Results suggested childbearing women who witness breastfeeding within 12 months of giving birth are six times more likely to choose breastfeeding over alternative methods (Hoddinott, et al., 2010). Maternal choice of one infant-feeding method over another, as seen through vicarious experience, influences infant feeding decisions and satisfaction of method. Other studies found that women formulate intent of infant-feeding methods before becoming pregnant or early in pregnancy (Chamber & McInnes, 2006; Shaker, Scott, & Reid, 2004; Wojciki et. al, 2010). Women unsure or ambivalent about infant-feeding choices, and who do not have any vicarious experience of infant feeding, may not select feeding methods until birth (Kaufman, Deenadayalan, & Karpati, 2010; Nichols, Schutte, Brown, Dennis, & Price, 2009). Literature regarding infant-feeding experiences can convey powerful messages for a first-time mother who may not have her own experiences related to infant feeding.

Social persuasion. The third concept of self-efficacy is social persuasion. Culture and social pressures influence choices and sense of accomplishment, enhancing self-efficacy and
feeling “confident” in one’s ability to be successful. Social persuasion from governmental agencies, media, and clinical settings encourage women to consider breastfeeding as the optimal feeding method of infants in the first year of life. The U.S. Surgeon General (2011) encourages all women to breastfeed their infants. Healthy People 2020 initiative includes objectives regarding breastfeeding infants in the first year of life (Healthy People, 2009). The World Health Organization (2003) and American Academy of Pediatrics (2011), recommend women consider breastfeeding their infants in the first year of life. There are cultural influences on infant feeding; for example, self-efficacy and feeding intent can vary. Hispanic cultures are more likely to choose to breastfeed infants, whereas African Americans are less likely (Kaufman, Deeandayalan, & Karpati, 2010; Wojciki, et al., 2010). Maternal decision-making includes cultural and social expectations of infant feeding, social economic status, education, health status, and the geographic region in which families live (Centers for Disease Control and Prevention, 2010).

**Perception of physical health.** The final concept of self-efficacy according to Bandura (1994) is perception of physical health status. Perception of birth experience is highly valued in women. When a woman does not have the expected birth experience, or untoward events occur, this can influence self-efficacy and maternal self-confidence. Currently over one-third of women give birth surgically according to the Centers for Disease Control and Prevention (2011), and the majority of these are unplanned and emergent. Bandura (1994) further supports this by discussing how a person will perceive self-efficacy based on personal assessment of task difficulty and amount of effort required.

**Maternal decision-making.** The four influential principles of Bandura’s theory can be applied to maternal decision-making and infant-feeding intent. A woman’s confidence in her
own body to nourish her infant influences her decisions to initiate and continue breastfeeding. In role mastery, a woman will feel successful and confident in her ability to feed her infant (Dennis, 1999). Seeing other women feed infants and social persuasion from credible sources can promote a woman’s confidence in her ability to nourish her infant (Dennis, 1999; Dennis, 2003).

Studies found maternal self-efficacy as an important determinant in infant feeding (Britton & Britton, 2008; Blyth, Creddy, Dennis, Moyle, Pratt, & DeVries, 2002; Dennis, 1999). Dennis (1999) developed a survey tool of 14 items based on Bandura’s theory of self-efficacy and social cognitive theory that has been successfully tested in the postpartum period. Results suggested self-efficacy and maternal decision-making is influenced by self-esteem, confidence in being able to breastfeed, relationship with one’s own mother, birth experience, and care in the maternity care unit by health providers (Dennis, 2003a; 2006b; 2007c; Drake, Humenick, Amankwaa, Younger, & Roux, 2007). Women who felt supported, well cared for, and had a sense of control over their birth experience were more likely to consider breastfeeding and continue longer than women who had interventions at birth, maternal exhaustion, and lack of support from family (Blyth, Creddy, Dennis, Moyle, Pratt, & DeVries, 2002; Britton & Britton, 2008; Dennis, 2003a, 2006b, 2007c; Drake, Humenick, Amankwaa, Younger, & Roux, 2007). Characteristics correlating with breastfeeding self-efficacy included educational level, sense of self-esteem, age, mode of delivery, adequate pain management, and feelings about being a mother. Women less confident, less educated, and suffering from anxiety were less likely to have high scores of breastfeeding self-efficacy (Blyth, Creddy, Dennis, Moyle, Pratt, & DeVries, 2002; Britton & Britton, 2008; Dennis, 2003a, 2006b, 2007c; Drake, Humenick, Amankwaa, Younger, & Roux, 2007).
Using the Dennis (2006) self-efficacy survey tool, McQueen, Dennis, Stremler, and Norman (2011) performed a randomized controlled trial to test if breastfeeding support can enhance breastfeeding initiation and duration. Researchers examined mothers’ abilities to decrease their perception of breastfeeding difficulties by increasing maternal confidence and capability of nourishing infants. The intervention group received three individualized sessions to enhance self-efficacy, two in the hospital setting with a face-to-face support session from a specially trained lactation nurse, and one session via telephone (McQueen, Dennis, Stremler, & Norman, 2011). Participants in the control group received standard hospital and community care. Results revealed health care support can influence self-efficacy, but does not necessarily remedy predisposing factors prior to breastfeeding initiation, birth interventions, and covariants (such as education levels, age of mothers, or cultural and societal influences) (McQueen et al., 2011). Further results suggested mothers in the intervention group had higher self-efficacy scores than those in the control group; however, breastfeeding rates were not significant between groups (McQueen, et al., 2011). Therefore, this study suggests infant-feeding decisions are multifaceted and require deeper investigation.

In an unpublished dissertation by Robinson (2010), Dennis’s self-efficacy survey tool was used to examine prenatal breastfeeding self-efficacy among African-American women in the southern region of the United States. The purpose of this multi-method study was to actively listen to the stories of women and identify factors that influenced infant-feeding decisions (Robinson, 2010). Results suggested maternal self-efficacy and feeding decisions were stronger in women who intended to breastfeed than in women who anticipated exclusively formula feeding their infants (Robinson, 2010). In the narrative interviews, themes emerged consistent
with Bandura’s four concepts of self-efficacy, including (a) social persuasions, (b) vicarious experiences, (c) perceived health status, and (d) mastery (Robinson, 2010).

Maternal self-efficacy profoundly influences infant-feeding decisions. Despite the strong presence of literature and published studies describing self-efficacy, as it relates to feeding intention, there continues to be gaps in the literature. The majority of studies use quantitative designs and measurements. Current research methods categorize mothers into non-modifiable and statistically derived modifiable outcomes variables without elucidating the experiential nature and meaning of their feeding intentions. There is a strong need to have a better understanding of how modifiable and non-modifiable variables influence maternal decision-making, feeding intention, initiation, and duration. A deeper understanding is required of influences and factors that may predict feeding intent in different populations. Current literature has identified factors regarding feeding intent, but little is understood on the impact of these factors and the common experiences of women making feeding decisions. Theoretical frameworks can provide structured guidance to human behaviors; however, theories cannot fully explain how women make informed and personal choices regarding infant feeding.

**Societal Influences**

Infant-feeding education and breastfeeding promotion have targeted individual women, in order to influence infant-feeding decisions. However, decisions regarding infant feeding involve more than just the mother: they include partners, family members, friends, and neighbors. Each stakeholder exerts influence on infant-feeding decisions.

**Support systems.** Friends, family, and partners strongly influence a woman’s infant-feeding decisions. Although a pattern of attitudes, and cultural and societal influences play major roles in how a woman decides to feed her infant, the strongest and most consistent
influence is the father of the infant (Sharma & Petosa, 1997). The majority of family members and partners have limited to no experience with breastfeeding; however, influences such as pediatric advice, participation in WIC, and advice from grandmothers may guide infant-feeding decisions of mothers. Women who have friends that breastfeed are more likely to choose breastfeeding as a primary means of infant nourishment; however, lack of vicarious experience with breastfeeding increases the likelihood of choosing alternative methods (Hoddinott, et al., 2010). While many partners, mothers, and family support breastfeeding, mothers who exclusively breastfeed appear to have more support than limited breastfeeders (Kaufman, Deenadayalan, & Karpati, 2010). Attitudes from fathers have been studied with both negative and positive attitudes regarding infant-feeding choices. According to Sharma and Petosa (1997), fathers viewed breastfeeding as a healthier, natural form of infant nourishment. However, negative attitudes about being separated from the mother, or feeling left out, created challenges between a mother and father with continued breastfeeding. Currently fathers are more actively engaged in infant care, want to participate in infant-feeding decisions, consider formula feeding as more convenient, and view breastfeeding as healthier (Henderson, McMillian, Green, & Renfew, 2011).

**Professional influences.** Numerous studies related to infant feeding focus on professional influences on feeding decisions to guide the studies. Professional health care influences from nursing and medical providers are considered relevant to a woman’s choice in infant feeding. Several studies are specific to initiation and duration of breastfeeding, and the correlation to Baby-Friendly Hospital Initiative (BFHI) practices in the hospital setting. Studies have suggested women who receive consistent and skilled support when making infant-feeding decisions have a more positive experience. However, messages received by mothers and family
members from professional support may not match infant-feeding recommendations presented in the literature and from other providers. Several studies have found mothers rely heavily on health professionals for infant-feeding guidance and nearly half of those surveyed would have appreciated more information (Leahy-Warren, 2007; Nelson, 2007; Whelan, McVoy, & Kearney, 2011).

The literature defines social support in a variety of ways, presenting conflicting clarity regarding true meaning. Dimensions of social support can include interpersonal social networks, including family, friends, partners, and acquaintances. Consideration to social networks and support systems does not isolate to only family and friends; social support and networks can be professional support from nursing and medical staff. Numerous studies describe the supportive influence of nursing staff on feeding, bathing, and caring for infants (Leahy-Warren, 2007; Murray, Ricketts, & Dellaport, 2007; Nelson, 2007; Whelan, McVoy, & Kearney, 2011). Social support from health professionals assists mothers in deciding how to feed their infants, with the majority of advice or encouragement focused on breastfeeding. As breastfeeding is encouraged and considered the best feeding method for infants in the first year of life, mothers respond confidently when receiving consistent support from professional resources during childbearing years. When mothers receive inconsistencies in advice and support, mothers become frustrated, confused, and less confident in their abilities to feed and care for their infants based on scientific knowledge and advice. Hancock and Brown (2010) present data to suggest mothers who decide to use formula receive minimal education on proper sterilization techniques in formula preparation. Labiner-Wolfe, Fein, and Shealy (2008) found only 12% of women received educational information regarding proper formula preparation and use. The lack of education
provided by nursing staff indicates the need to further explore postpartum mothers’ infant-feeding needs.

**Baby-friendly hospital practices.** The Baby-Friendly Hospital Initiative (BFHI) originated in 1991 by the World Health Organization (WHO) and United Nations Children’s Fund (UNICEF). The primary purpose is to help guide health care providers of childbearing women to consider the implications of offering human milk to infants rather than artificially created baby milk. There are ten steps in BFHI practices, each specific to promote infant-feeding practices, encouraging the use of human milk (WHO/UNICEF BFHI, 1991).

In studies correlating BFHI and breastfeeding initiation, results suggest a direct link between professional support and infant-feeding outcomes. A population study by Murray, Ricketts, and Dellaport (2007) investigated the effects of hospital practices and professional support based on BFHI recommendations on breastfeeding duration. Mothers who received at least five of the BFHI practices were more likely to breastfeed regardless of socioeconomic status. Nursing practices influential to infant feeding included; having a hospital policy promoting breast-feeding, promoting breastfeeding within the first hour, having the infant room-in with the mother 24 hours a day, offering no supplementation with water or formula, and discouraging pacifier use. For mothers who received all five of these BFHI practices, 66% were still breastfeeding at 16 weeks. However, less than 33% of mothers who had not received at least five BFHI practices where still breastfeeding at 16 weeks (Merten, Dratva, Ackerman-Lierich, 2005; Rowe-Murray, & Fisher, 2002).

Studies supporting BFHI practices have changed infant-feeding practices on a national level, including studies by Merten, Dratva, and Ackerman-Lierich (2005); Rowe-Murray and Fisher (2002); Mannel and Mannel (2006); Chien, Tai, Chu, Ko, and Chiu (2007), and Spiby, et,
al (2009). All suggested implementation of BFHI increased initiation of breastfeeding and lengthened breastfeeding duration. In studies where less than three practices were implemented, rates of breastfeeding initiation were not increased. The most influential practice to breastfeeding was having a policy specific to encouraging breastfeeding by health care and nursing staff (Chien, et., al, (2007).

Societal and professional influences of infant feeding are historically proven to be a major influence in how women decide how to feed infants. Therefore, further research is needed to have a deeper, more critical understanding of how outward influences impact a mother’s infant-feeding decision with which she is comfortable.

Summary

Extensive research on infant feeding has resulted in volumes of literature. The major foci are (a) survey studies, (b) prediction of breastfeeding duration based on maternal self-efficacy, and (c) the influence of professional and societal expectations. Historical relevance clearly explains the transition from (a) providing human milk as a necessity of survival to (b) women having the option of deciding or choosing how to nourish infants with human milk, formula, or a combination of both. Currently, the majority of infants are breastfed after birth, with less than half continuing to receive breast milk at three months of age. Currently, women view breastfeeding as optimal, but may find offering human milk challenging and difficult to manage in modern society. Issues surrounding decreased self-efficacy, embarrassment, and isolation inhibit women’s feeding decisions. Maternal benefits of breastfeeding are numerous with both physical and psychological advantages, including decreased risk of breast and ovarian cancer, obesity, and depressive symptoms in the postpartum period. For infants, benefits of human milk are also numerous, with reduced incidence of otitis media, SIDS, and infectious disease. Despite
studies exploring infant-feeding methods, choices, and influences, research continues to lack an explication in infant feeding from the experience of mothers themselves. Cultural constraints and societal expectations are not widely studied or understood. How mothers perceive infant feeding, choose how to feed, and the method with which mothers are most comfortable are not widely studied and are currently lacking in empirical research. This study explored infant-feeding decisions for first-time mothers, augmenting an understanding of how such decisions evolve and are experienced in the weeks before and after birth.
CHAPTER THREE

Research Design and Method

A longitudinal research design was proposed for this study, using an interpretive phenomenological approach. Twelve women were recruited, with 11 completing the study. Three separate interviews at specific touch points were conducted with 11 women before and after experiencing their first birth, along with field notes and interpretative commentary comprising the data. The methodology, procedures (recruitment and sampling, data collection and analysis, and ethics review), and evaluation strategies are described in this chapter.

Methodology

This study used a Heideggerian hermeneutic approach. Considered interpretive, hermeneutics is a scholarly tradition rich in exploring the meaning of a lived experience (Crist & Tanner, 2003). As a source of inquiry, findings can reveal a deeper understanding of a phenomenon and contribute to extant knowledge (Vandermause, 2008). Considered both a research method and philosophy, Heideggerian hermeneutics creates the foundation for an interpretive approach and historical foundation as described by Diekelmann and Ironside and others as the “process of interpretation” (Diekelmann & Ironside, 2011; Tanner & Crist, 2004). Known as the study of “phenomena,” or how experiences appear to individuals, hermeneutics is taken from the Greek root of “hermeneia” defined as understanding the process of self and language (Annells, 1995). Hermeneutics, often referenced as “the study of phenomena,” is used to explore the experience of being and raises awareness and understanding of everyday life, often through well conducted interviews that encourage individuals to tell their stories (Benner, 1994). This study employed the use of Heideggerian hermeneutics to better understand the lived
experiences of first-time mothers regarding infant-feeding decisions before birth, one week after birth, and six weeks after birth, which is considered the end of the postpartum period.

**Historical and Philosophical Underpinnings of Hermeneutics**

As defined by the German philosopher, Wilhelm Dilthey (1833-1911), hermeneutics is the art of interpretation (Diekelmann & Ironside, 2011). *Being-in-time* and *time-as-lived* is central to hermeneutic work with persons constructing their own reality from experiences and beliefs (Diekelmann & Ironside, 2011; McConnell-Henry, Chapman, & Francis, 2009). The origin of the term hermeneutic comes from the Greek mythological being, Hermes, the son of Zeus, who interpreted messages for mortals. Mortals did not understand the messages, and Hermes provided interpretation (Cohen, Kahn, & Steeves, 2000). The role of Hermes was instrumental to the formation of the Greek verb hermeneuein, meaning to interpret, which eventually led to the current term hermeneutics (Vandermause, 2008). In the 19th and 20th century, philosophers such as Bretano, Stumpf, Husserl, Heidegger, Marcel, Sartre, and Merleau-Ponty extended the premise of interpretive phenomenology through the three phases: the “Preparatory Phase,” the “German Phase,” and finally the “French Phase” (Cohen, et al., 2000; Mapp, 2008).

Husserl (1886-1938) and Heidegger (1889-1976) influenced the German phase, facilitating the current views of hermeneutics. The founder of the phenomenological movement, Husserl, was disillusioned with current scientific inquiry and proposed phenomenology as a means to study inquiry of the lived experience (Crist & Tanner, 2003; McConnell-Henry, Chapman, & Francis, 2009; Vandermause, 2008). Husserl rejected Cartesian dualism and focused on the intertwinement of mind and body (McNamara, 2005). Husserl stressed the value of discovering truth in the lived experience and applying validity and rigor to phenomenological
inquiry. Known for using “bracketing,” in which investigators put aside assumptions and bias, Husserl wanted to expose the true essence of the “lived” experience (Cohen, et al., 2000; McConnell-Henry, et al., 2009).

Martin Heidegger was one of Husserl’s students. Heidegger was interested in the question of being (Healy, 2011). Studying Aristotle, theology, and mathematics, Heidegger encountered Husserl’s famous text Logical Investigations. Husserl’s work left a profound impression on Heidegger, but did not appear to satisfy his sense of the lived experience (Healy, 2011). Heidegger rejected and modified the philosophical traditions of Husserl by emphasizing one’s being-in-the-world -- a unique manner of understanding the human lived experience (Healy, 2011). Based on the perspective of the lived experience, individuals are not in isolation of their surroundings, but embedded in the social and cultural period in which they live (Wojnar & Swanson, 2007). Heidegger’s intent was to share his perceptions and thoughts of using interpretive impressions to seek a deeper understanding of the human lived experience. The term being-in-the-world refers to the notion that knowledge of every day existence is temporal, relational, and intersubjective (Evan & O’Brien, 2005). In 1962, Heidegger introduced the conceptualization of dasein, emphasizing the human way one is in the world (Wojnar & Swanson, 2007). Heidegger proposed that how one understands the world is linked to perceived reality. Therefore, investigators must realize their own assumptions and apply this view to research methods, thereby acknowledging and not disavowing their own perceptions. The goal of the hermeneutic study is to identify the participant’s view of their world from a blend of the investigator’s understanding of the phenomenon of study and data from relevant sources (Wojnar & Swanson, 2007).
The Hermeneutic Interview

The interview is the fundamental source of information when conducting qualitative research. The basic premise of the hermeneutic interview is to gain a deeper insight and understanding of the proposed phenomenon in order to achieve a description of universality (Creswell, 2007). Shifting from post-positivist thinking, and using a Heideggerian approach, the investigator uses the interview, seeking to uncover the lived experience as revealed in a person’s story. As stories are presented, interpretation begins, creating an opportunity for deeper understanding of shared experiences of a phenomenon (Creswell, 2007; Crist & Tanner, 2003). The goal is not to discover idiosyncratic events, or unique understandings, but rather to seek out commonalities and differences among participants (Benner, 1984). Interviews can be single or multiple events with in-depth focus on a particular phenomenon (Moustakas, 1994). Seidman (1991, 2013) recommends a series of interviews to develop a history of a participant’s story and provides for further opportunities to expand on emerging issues and events that may have appeared in the first interview. An important objective of this method is to gain enhanced understanding of the phenomenon and make sense of the experience through dialogue (Vandermause, 2008). Language is a vital piece in understanding an experience, as language reveals the experience to the listener (Heidegger, 1971). When the exchange of language occurs, “the experience is not of our own making; to undergo here means that we endure it, suffer it, receive it as it strikes us and submit to it” (Heidegger, 1971, p. 57). Therefore, the interview creates the narrative between all participants, and the co-investigator and participants co-create the findings (Crist & Tanner, 2003).

Interviews proceeded after written informed consent was obtained from participants. After consent was obtained, in accordance with Institutional Review Board (IRB) requirements,
the investigator initiated the interview, and the interpretive process began in keeping with the Heideggerian hermeneutic methodology. A unification of ideas presented as the investigator prompted the participant to share her story or experience. With the shared experience, a narrative text emerged. Questions for the interview were presented in open-ended format to elicit the experiences from the participant’s stories and not the interviewer’s preconceptions. Interviews were digitally recorded and transcribed verbatim with identifying information removed, including family names, addresses, or easily identified aspects during the interview. The investigator maintained field notes to be used with interview transcripts to enhance understanding and gain deeper insights. Field notes offered the opportunity to maintain a record of demeanor, appearance, vocalizations, body language, and observations not otherwise contained or captured in a transcribed narrative (Crist & Tanner, 2003). These observations were used during the interpretive process and incorporated into the text.

**Pseudonyms.** Participants were encouraged to choose a pseudonym for the interview to enhance the meaning of the interview for the participants (Vandermause & Fleming, 2011). Pseudonyms were used to protect participants’ anonymity because they were sharing sensitive or uncomfortable subjects and offered a protective barrier when sharing one’s experience (McLeod & Francis, 2007).

**Characteristics of the interview.** Interviewing is used frequently in qualitative studies and is an integral aspect of the research process (Benner, 1994; Vandermause & Fleming, 2011). According to Dinkins (2005), the presentation of interview questions can enhance participants’ thoughts and feelings, which can directly influence data quality. In the study of everyday practical knowledge and events, the interview questions are posed in a naturalistic manner using simply worded, open-end questions conducive to participants’ comfort (Benner, 1994).
Interview questions are inviting and answerable, rather than abstract or academic, to avoid leading the participant to a particular answer (Vandermause, 2008). In conducting a hermeneutic interview, the following areas offered guidance to the process, (a) setting the tone of the research, (b) implementing the use of open-ended questions and sentences, (c) seeking assent, and (d) encouraging participants to keep the story, or return to the story (Vandermause & Fleming, 2011).

Therefore, the investigator “set the tone” of the interview by posing open-ended questions reflective of the phenomenon of infant feeding. Questions presented were specific to infant feeding or the experiences related to the phenomena of study. Wanting to elicit a response, the opening questions were inviting, prompting the participant to want to answer the question and tell her story. Questions that followed continued to be open and responsive to the participant’s story and experience (Vandermause, 2008). (See Appendix A).

As the interview progressed, the investigator engaged in an evolving dialogue with the participant, guiding the interview, rather than controlling it. This process allowed for open and reflective responses from participants (Dinkins, 2005; Vandermause & Fleming, 2011). Using the technique of open-ended or incomplete sentences allowed the participants to draw on their own ontological insights and perspectives. The interview technique used was unique to hermeneutics and grounded in ontological philosophy. During dialogue and exchange of language during interviews, interpretations by the investigator need to be credible. Validating accuracy of the experience and exchange of language were accomplished by confirming participant feelings and impressions during the interview.

When conducting a hermeneutic interview, the story or experience being shared can venture outside the phenomena of interest. Mothers presented experiences encompassing
childbirth, infant care, relationships, and social issues surrounding motherhood. Although contributory to the phenomena of interest, the investigator guided the interview to keep the focus on the experience of infant feeding. The investigator assessed if the tangent was pertinent to the story, and if so, explored relevance, or brought the participant back to the issue at hand. Careful consideration was warranted if the participant became anxious, nervous, or showed distress through tone or body language. Participants were given the option of stopping or pausing the interview if needed.

In summary, presented aspects of the hermeneutic interview were useful to explicate and release experiences often overlooked in clinical practice. This scholarly method was used to explore the unique human relationship of the maternal-infant dyad. Interviews were used by the investigator to explore aspects of the maternal-infant relationship as related to preparing for infant feeding before birth, initiating at birth, and sustaining infant feeding in the first six weeks after birth.

**Establishing Rigor/Trustworthiness of Findings**

The rigor of interpretative research is an important issue with distinct implications to current and future nursing research. Rigor allows for legitimacy of the growing body of nursing research, defining, and informing nursing practice (deWitt & Pleog, 2006). A criterion of rigor is necessary to ensure accountable and high quality research methodology (Madison, 1988; Morse, Barrett, Mayan, Olson, & Spears, 2002).

Validity of qualitative research comes to question with the contextual nature of investigating the lived experience of human beings. Validity in qualitative research differs from quantitative research due to the subjectiveness of data, rather than the categorical generalizations in which quantitative research is focused. Broadly defined, validity in qualitative research is
considered as “well-grounded or justifiable; relevant and meaningful” (Merriam-Webster’s Dictionary, 2012). Whittemore, Chase, and Mandle (2001) present compelling dialogue regarding the tension between qualitative nuances of contextual and generalized findings of qualitative research versus aggregate evidence of quantitative findings with regards to validity. The evaluation criteria selected encompassed the application of four primary and six secondary criteria presented by Whittemore, et al. (2001) to establish validity. The research method chosen was based on philosophical, ethical, and current extant knowledge with known gaps in the literature. The criteria used were specifically meant to uphold standards that represent truthfulness of findings.

**Primary criteria.** According to Whittemore, et al. (2001), there are four primary criteria by answering questions specific to credibility, authenticity, criticality, and confirmability, also known as integrity. Each question addressed specific arenas of validity with the intent to explain the truthfulness of research findings. For the questions regarding credibility, an overriding goal of qualitative research, the following needs to be asked: “Do the results reflect the experience of the participant or the context in a believable way?” and “Are the results believable?” (Lincoln & Guba, 1985). The second criterion is authenticity, reflecting the meanings and experiences lived by participants. The authenticity questions should answer the concern: “Does the presentation of the emic perspective exhibit awareness to the subtle differences in the voices of all the participants?” (Sandelowski, 1986). The third and fourth aspect, criticality and integrity, are crucial for consideration. There are infinite differing interpretations and assumptions in interpretative research. Personal bias and assumptions can influence the research process, thereby creating opportunity to taint research findings. In criticality and integrity, investigators need to pay attention to ambiguities and explore bias. The question that needs to be answered:
“Are investigators self-critical and do they seek integrity at each phase of inquiry?” (Johnson, 1999). In assessing the validity of integrity, the investigator needs to assess neutrality of study findings and fulfillment of all primary criteria (deWitt & Pleog, 2006). Validity threats of assumptions, not paying attention to discrete data, and bias can reduce the trustworthiness of research findings. Using a systemically sound method of data analysis can reduce threats to validity. These four primary criterions are not isolated or able to stand alone; however, they are applicable to all qualitative research studies (Whittemore, et al., 2001). Secondary criteria provide supplementary principles that can be tailored to specific studies.

**Secondary criteria.** Although secondary criteria are not as global as primary criteria, secondary criteria can be instrumental contributors to the development of validity in research findings. The following are guiding concepts in secondary criteria of validity. These include explicitness, vividness, creativity, thoroughness, congruence, and sensitivity (Whittemore, et al. 2001). According to Lincoln and Guba (1985), explicitness allows a defensible posture for others to review findings and follow the interpretive efforts of the investigator. The following question bears asking: “Was there an audit trail of findings and processes that can be followed?” The second criterion, vividness, allows the investigator to assess for richness of data, depth and clarity. The third criterion, creativity, encourages the investigator to pursue imaginative ways of organizing data and presenting data reflective of contextual findings. The fourth criterion, thoroughness, addresses completeness and saturation. Saturation is variable and according to Benner (1994), saturation is met when no new themes or findings are revealed in data analysis. Although Crist and Tanner (2003) state that the approximate number of 10 participants is useful for interpretive studies, the number of participants is not absolute until the investigator believes saturation is met using validity criteria (Whittemore, Chase, & Mandle, 2001). The fifth
criterion is congruence. In evaluating congruence, considerations need to be assessed if themes make sense. “Do findings and themes fit one another?” “Is there a sense of alignment with findings?” Congruence aligns the methodology, method of data collection, and analysis (Whittemore, et al., 2001). The sixth criterion is sensitivity, with research study reflective and sensitive to human, cultural, and social contexts (Whittemore, et al., 2001). These six criteria were used as supplementary guiding principles and used in tandem with primary criteria.

**Techniques to validate trustworthiness.** Techniques implemented to satisfy both primary and secondary criteria were met by requesting and receiving consistent feedback from dissertation committee chair and dialogue with research team members. Dialogue occurred with members of the research team to ensure that integrity and criticality concerns were addressed. In addition, field notes outlining experiences, biases and concerns provided additional opportunity to affirm validity. In summary, the test for validity will be whether the results of the experience of infant feeding for first time mothers are believable, not only by those reading the findings, but by those who have experienced infant feeding in contemporary society. The members of the dissertation team conducted a final examination for validity as they reviewed the results of the analysis and data interpretation.

**Methods**

**Pilot Study.** A pilot study was conducted with one participant to engage the research design for the purpose of testing the procedural plan and making adjustments as needed. The initial interview was at 40 weeks gestation, one interview at one week after birth and 6 weeks after birth were completed. The transcripts were processed and prepared for analysis. After analysis, no changes were made in research design, recruitment, data collection, or data analysis procedures. The analysis of the pilot study contributed to the final summary and interpretation.
Participant Sample. The target population was first time childbearing females, ages 18-44, residing in the Northwest region of the United States with a viable, singleton pregnancy. A purposive sampling method was used to recruit participants. Hermeneutic studies consider sample size as adequate when interpretation are clear and interviews stop revealing new findings or conclusions (Willis, 2007; Crist & Tanner, 2003). This study interviewed 12 women, with 11 completing all three interviews. After careful review of text and considerations for validity, adequacy of sample size is believed to have been met for this study. If adequacy of sample size had not been met with number of participants interviewed, recruitment would have continued and IRB approval would have been sought to increase the number of participants.

Participants were English speaking first time mothers and able to provide informed consent. Inclusion criteria for the first interview were women during the third trimester, with gestation greater than 30 weeks and considered to have a low-risk pregnancy by self-report. The second interview was conducted approximately one week after birth. Inclusion criteria were mothers with self-reported minimal complications from labor and delivery. Minimal complications were defined as instrumental delivery, uncomplicated surgical birth, including non-emergent cesarean birth, controlled gestation diabetes, and mild preeclampsia. Excluded mothers were participants who had emergent surgical delivery for severe fetal distress or emergent maternal health status change with admission to an intensive care unit. Further exclusion of participants from the study included infants who have been admitted to the neonatal intensive care unit for any purpose other than expected transition from birth. The third interview was conducted at approximately six weeks after birth, with exclusion criteria of illness that precludes a mother’s ability to care and feed her infant or infants with major medical illness or
disease. None of the participants was excluded. All interviews conducted were included in the analysis.

**Recruitment.** Recruitment flyers were used to inform medical providers and potential participants of the study. The flyer contained basic inclusion criteria and contact information. (Please see Appendix B). The researcher recruited participants from Missoula, Montana, which is located in the Northwest region of the United States. The population of Missoula, Montana is considered a metropolitan area by the definitions of the United States Census. The current population of Missoula, Montana is 68,394 with 92% Caucasian ethnicity. Median income is $37,316 with 93.9% completing high school and 41.4% completing baccalaureate education (US Census-Quick Facts, 2012). Statistical findings describe infant feeding in Montana as consistent with the national averages, with 83.5% of infants breastfed at least once and/or breastfed with supplement, and 40.1% exclusively breastfed at three months (Centers for Disease Control and Prevention, Breastfeeding Report Card, 2012).

**Retention.** Participants were offered incentives that included gift cards from Target in the amount of $15.00 per interview, and then a baby gift of no more than $10.00 at the final interview. After the first interview, permission was sought to contact participants via phone for follow-up interviews at approximately one week after the anticipated due date, and five weeks after the second interview. Two attempts were made via telephone to contact participants for second and third interviews. Only one participant did not complete all three interviews. If a participant did not return contact, no further attempts to re-contact were made. Thank you notes were given to all participants.
Data collection

Data was collected using open-ended questions in face-to-face or phone interviews. The purpose was to facilitate unstructured interviews with gentle guidance to maintain the focus on the research question. Interview guides are included in Appendix A. Each participant was interviewed once, with 11 of the 12 participants interviewed three times. All interviews were digitally audio-recorded. The interviews lasted 30-60 minutes dependent on data and what the participant wanted to share during the interview. The first several minutes of the first interview were focused on informed consent. For subsequent interviews, informed consent was reviewed and participants were reminded of their right to withdraw from further participation. The investigator emphasized to the participant she could decline to proceed in the interview at any time. A professional transcriptionist transcribed the digital recordings verbatim. Identifying descriptors, such as names, locations or family names were removed prior to analysis by the research team. Field notes and demographic data were used during analysis to add essential nuances to transcripts (Crist & Tanner, 2003). Interview location was self-selected and mutually acceptable to both participant and investigator.

Interview questions. In the first interview, the initial research statement and open-ended question was presented-see Appendix A for the Interview Guide. The opening statement and question set the tone for the interview and beginning of the research. The initial opening statement and question was: “I am interested in how first-time mothers prepare for infant feeding. When you think about preparing for infant feeding, what comes to mind for you? This employs an essential, critical incident approach, by encouraging mothers to focus on the experience in preparing for infant feeding prior to the birth of their first infant (Benner, 1994).
During the second interview, informed consent was reviewed, followed by an initial opening statement, and then open-ended questions were presented. The opening statement set the tone for the interview and expanded on the first interview of first-time mothers anticipating and preparing for infant feeding. The first question for the second interview was; “How have things been going for you since we last spoke and when you think about infant feeding, what comes to mind for you? This method is again consistent with critical incident approach, encouraging mothers to focus on the experience of initial infant-feeding sessions, the challenges, and the successes.

The third interview also revisited informed consent and used open-ended questions to encourage participants to share their story about the first six weeks of infant feeding. Six weeks was selected because (a) the postpartum period is typically six weeks, (b) infant feeding is established, regardless of method, and (c) mothers are in a routine with infant care and feeding. The initial questions for the third interview was: “I am interested in how the past six weeks have been for you. How is infant feeding going? What comes to mind for you?” This method is also consistent with critical incident approach, encouraging mothers to focus on the experience of infant feeding in the first six weeks of their infant’s life. (Please see the interview questions in Appendix A.)

Data Analysis

Research team. The research team reviewed the transcribed interview data, consistent with a Heideggerian hermeneutic approach (Vandermause, 2011). Research team members conducted each step carefully with questioning and reflection of possible prejudices or assumptions. Team members included two experts in hermeneutic phenomenology and two experts in maternal/infant nursing. Decisions regarding team members were based on expertise
and ability to participate with depth and insightful inquiry to content (Crist & Tanner, 2003). The following steps were used in text evaluation: (a) text analysis, (b) data management, and (c) interpretation management (Vandermause, 2011). (Please see the data analysis in Appendix C).

**Text analysis.** Research team members read transcripts carefully, line-by-line to identify concepts, or situations that appeared to “stand out”. During readings, team members identified emerging patterns and themes. The research team members deconstructed the text according to patterns and themes, noting areas of overlap. Using line-coded pieces of the transcript, themes and emerging patterns were identified for interpretation. Exemplars and paradigms were identified as signified by working themes to use as interpretations of the texts. Exemplars and paradigms were reviewed in their entirety and against other interpretations with consideration to overall patterns and themes. Excerpts, as labeled by line numbers in the transcripts, were categorized to keep each noted excerpt organized for further interpretation.

Essential meanings of the experience of being a first-time mother around preparing, initiating, and sustaining infant feeding in the first weeks of life were described. Patterns and themes were determined, mindful that interpretation never ends and transcripts (as summaries, patterns, and themes) can be revisited later. The goal was to seek out commonalities and differences in the texts and return to the texts as often as needed to bring forth noted patterns.

The transcripts were summarized with as much detail or support needed to reflect the truth in the text. When summaries were completed, the research team gathered to discuss findings, general patterns and themes, and impression of the transcripts. During team meetings, field notes were reviewed to add depth to the summaries and general impressions. These summaries built upon each transcript as texts were read across one another with emerging themes. Transcripts had multiple readings to promote an enriched iterative analysis.
**Data and interpretation management.** Recorded interviews used participants’ pseudonyms, and identifiers were removed and transcribed verbatim in Microsoft Word files. De-identified interviews are stored on a password-protected computer. The digital recordings will be retained for three years in accordance with Washington State University Office of Research Compliance. After three years, digital recordings will be destroyed in conformity with Washington State University Office of Research Compliance. De-identified transcripts will be kept indefinitely for possible use in future analysis. Records will be maintained in a private office with electronically password-protected software.

The master codebook linking personal identifiers to the digital recordings and transcripts is kept in a locked filing cabinet away from the digital recording and transcribed data. All electronic files were password protected in accordance with the Washington State University Office of Research Compliance. Transcribed interviews in hard copy are secured in a private, locked office in a locked filing cabinet maintained by primary and co-investigators.

**Ethical Considerations and IRB Approval**

The pilot study was reviewed by the Institutional Review Board (IRB) from Washington State University and received an exempt status. The full study was also reviewed and granted exempt status by Washington State University IRB. The presented study required additional clearance from physicians’ and midwives’ clinical practices for recruitment purposes. All sites granted approval to place flyers and recruit potential participants. All participants were self-selected and could withdraw at any time without penalty or loss of clinical services. After informed consent was obtained, participants were interviewed. An additional signature block on the consent form was added to authorize digitally recording the interviews.
**Risk and benefit.** The two known potential risks to study participants were (a) emotional distress of first-time mothers seeking viable feeding methods for their infants, (b) loss of confidentiality. Safeguards to protect against the loss of confidentially included (a) using pseudonyms in the digital and transcribed data, (b) storing data on password-protected computers and in locked offices, (c) maintaining the master list of demographic information in a separate locked filing cabinet from the narrative data, and (d) having the transcriptionist sign a confidentiality agreement.

Guidelines excluded women with high-risk pregnancy and inability to care for or feed their infants, as these issues can alter infant-feeding decisions, create unforeseen challenges in caring for and feeding infants, and complicate the interview and interpretation of data. Participants may benefit by gaining a better understanding of their infant-feeding decision-making process and practices. Benefits to society include added knowledge of how first-time mothers prepare for infant feeding, initiate, and sustain infant feeding.

**Limitations.** The study was limited by geographical area of only exploring infant-feeding preparation and feeding in Missoula, Montana. A volunteer, convenience sample is characterized by self-selection biases and is not representative of the entire population of first-time mothers.

**Strengths.** This study elicited an abundance of narrative evidence regarding infant-feeding preparation and feeding for first-time mothers. This evidence can contribute to extant knowledge and provide empirically derived knowledge about the challenges, barriers, and facilitators first-time mothers face with infant feeding. A hermeneutic study can contribute depth and increased awareness of how first-time mothers navigate the challenges of infant feeding.
CHAPTER FOUR

Findings and Interpretations

Overview and context for presentation of the findings. The presented interpretation addresses the meaning of infant feeding for first-time mothers, as constructed from hermeneutic analyses of the accounts of 12 women who were experiencing the birth of their first children. Each mother shared stories of their experiences as they prepared for, initiated and sustained infant feeding. The participants may be understood as representative voices of first-time mothers living in Northwest regions of the United States, understood from the deconstruction and iterative review of these texts, which led to commonalities within and across the transcripts of the interviews. Through the longitudinal process of three successive interviews, the mothers constructed their stories, bringing to the forefront the essence of the experience of infant feeding.

This study is not about isolating how a mother chooses to feed her infant, but, rather, sought the meaning of infant feeding for mothers in contemporary society. Currently in modern Western culture, the question asked of mothers is “are you breast-feeding or bottle-feeding?” This question was not asked during the interviews. The study explored the infant feeding phenomenon for first-time mothers in an attempt to more fully understand the experience and meaning of infant feeding.

Each of the 12 participants was interviewed before giving birth to explore a deeper understanding of preparing for infant feeding. Each mother brought to the interview thoughtful reflection and descriptions of influences of family members, friends, online resources, professional recommendations and stories shared by other women. After birth, 11 women were interviewed again at approximately 1 week and again at approximately 6 weeks. The focus of
interviews was not centered on time elements of before and after, but rather specific touch points of pivotal aspects of the infant feeding relationship for a first time mother and her infant.

The 12 participants allowed the research team to venture into the experience of infant feeding for first time mothers. The infant feeding phenomenon for first time mothers was explored in an attempt to deepen understanding of the meaning of infant feeding. The experiences will influence future infant feeding decisions with subsequent children and stories these women share with other women about infant feeding. As the research team examined transcripts of the interviews, each member deconstructed, or pulled apart, infant feeding experiences with hopes of pulling together (poiesis) a deeper understanding and meaning of infant feeding experiences for first time mothers (Vandermause, 2008). The participants shared what it felt like to prepare for infant feeding, initiate and sustain infant feeding in the first weeks of motherhood. Two overarching patterns emerged, which were not mutually exclusive: Tending to life: Readying to feed and Coming into motherhood: Suffering, loving, and being. Each pattern includes themes, which are congruent in nature. The study of infant feeding is not linear, and it is a formidable task to describe the meaning and experience of infant feeding in written word, which by its very nature is linear in thought. Although there is legitimacy in the methodical use of language to expose meaning, this study makes an effort to illuminate the universality of infant feeding for first time mothers through being-in-the-world during pivotal moments in their lives (Heidegger, 1962). Empirical evidence related to infant feeding exists in extant literature. However, what is missing is the in-depth understanding of infant feeding at specific touch points for first time mothers. Three phenomenological interviews were implemented to encourage mothers to describe their sense of infant feeding before birth and the first weeks after birth. Using this method of in-depth interviewing helped to uncover mothers’
stories in a microcosm of their conscious awareness. The goal was not to get answers to questions about methods of infant feeding or to evaluate the effectiveness of infant feeding, but rather to deepen understanding within a broader context. Therefore, this study can contribute to, and increase our understanding of infant feeding in the United States (U. S.). Using a phenomenological approach can help unravel the meaning of infant feeding for first-time mothers as evidenced by the two overarching patterns, Tending to life: Readying to feed and Coming into motherhood: Suffering, loving, and being. The findings will help to better understand the nuances of infant feeding in contemporary U. S. society and help health care professionals who focus on infant feeding issues to design and implement more effective ways to counsel and care for women during infant feeding experiences.

**Participant Background Information**

The participant sample consisted of 12 women living in the Northwestern United States. Participants volunteered to be in the study during their third trimesters of pregnancy and all indicated they were healthy with no known high risk factors. The names used are self-chosen pseudonyms to maintain confidentiality. The participants ranged from 20-34 with the average age of 28.4 years. All of the participants were in committed relationships and 75% were married. Participants classified themselves as Caucasian, non-Hispanic ethnicity. All participants graduated from high school, with 75% completing some college education, and 41.7% achieving graduate level education. All participants preselected breastfeeding as their method of choice for infant feeding prior to recruitment or interviews. Twelve participants completed the first interview and 11 completed interviews two and three. One mother was lost to attrition despite two attempts to follow-up. After disclosing their willingness to participate in the research study and providing written informed consent, participants were asked questions
examining the experience of infant feeding. The primary question asked was: “*when you think about infant feeding, what comes to mind for you?*” This question was posed to encourage participants to share their stories about infant feeding, both before and after birth. The purpose was not to test participants’ stories for cultural or societal norms, but rather to have a more in-depth understanding of the lived experience of mothers and the meaning they make of these experiences.

The 12 participants were recruited over a period of five months. Recruitment flyers were placed in clinic waiting rooms and childbirth education environments. Age, education, marital status, income range, gravida status, mode of delivery, employment after maternity leave and ethnicity were collected as demographic information. Mothers were asked about their pregnancies to ensure low risk status; none was removed from the study based on health status. Each interview took place at a location of the mothers choosing to promote comfort and a sense of ease in sharing her story. The touch points of each interview were carefully selected, not to enhance understanding of infant feeding experiences along the continuum of time, but rather to grasp the temporal possibility of *being-in-the-world* for first time mothers as they experienced nourishing their infants.

The first interview occurred on average at 36.2 weeks gestation with a range of 32-41.7 weeks. The mean of the second interview was 1.4 weeks after birth with a range of 1-2.8 weeks. The final interview took place at 6.5 weeks after birth with a range of 6-8 weeks. Of the 11 who completed all interviews, 64% had a vaginal birth and 36% underwent unplanned cesarean births. All participants declared breastfeeding as the method of choice during the first interview and all mothers were continuing to offer human milk to their infants at the final interview.
**Brief Images of the Mothers**

Anne is a 27-year-old, married woman with high school education. The first interview took place in a public café at 32 weeks gestation. She subsequently had a vaginal birth without complications. The second interview took place at 1.4 weeks after birth in her home and third interview at 7 weeks at her home.

Lexy is a 20-year-old, unmarried woman with some college education and no final degree. She is employed full-time. The first interview took place in a public café at 40.5 weeks gestation. She had a vaginal birth two days later without complications. The second interview took place within her home at 1.8 weeks after birth and the final interview at 7 weeks.

Mary is a 24-year-old, married woman who completed her associate’s degree. She is employed full-time. The first interview took place in a semi-private public place at 37.5 weeks gestation. She had a vaginal birth with postpartum hemorrhage. The second interview took place at 2.8 weeks after birth in a public café and the final interview at 7 weeks via telephone due to inclement weather.

Sophia is a 28-year-old, unmarried woman with one year of college education. She is employed full-time. The first interview took place in a semi-private location within a health care setting at 32.7 weeks gestation. She did not participate in the second or third interview. Two attempts were made to contact Sophia via telephone with messages left; however, no return calls were received. No information is available regarding pregnancy outcome.

Allison is a 31-year-old, married woman with graduate level education. She is employed part-time. All of the interviews took place within her home, with the first at 37.2 weeks gestation. She had an unplanned cesarean birth. The second interview was at 2 weeks and the final at 7 weeks.
Anita is a 34-year-old, married woman who completed her undergraduate degree. She is employed part-time. All interviews took place in a public café with the first at 35.5 weeks gestation. She had an unplanned cesarean birth with postpartum hemorrhage. The second interview took place at 1.1 weeks after birth and the third at 6.5 weeks after birth.

Nettie is a 30-year-old, married woman with graduate level education. She is employed part-time. The first interview took place in a public café at 36.5 weeks gestation. Her birth was an uncomplicated vaginal birth. The second and third interviews took place within her home at 1 week and 6.4 weeks after birth.

Sam is a 33-year-old, married woman with graduate education. She is employed part-time. All interviews took place in a public café with her husband in attendance. The first interview took place the day before Sam’s scheduled induction at 39.6 weeks gestation. She gave had a vaginal birth without complications. The second and third interviews took place in a public café at 1.8 weeks and 8 weeks after birth.

Annette is a 25-year-old, unmarried woman with an undergraduate degree. She is employed full-time and the first interview took place in a public café at 36.0 weeks gestation. She had an uncomplicated vaginal birth. The second and third interviews took place within her home at 1 week and 6 weeks after birth.

Jill is a 34-year-old, married woman who completed her graduate degree. She is employed part-time. The first interview took place in a public café at 32.7 weeks gestation. She had an uncomplicated vaginal birth. The second and third interview occurred at 1 week and 6 weeks after birth in her home.

Kate is a 29-year-old, married woman with an undergraduate degree. She is self-employed part-time within her home. The first interview took place at a public café at 39.0
weeks gestation. She had an unplanned cesarean birth without complications. The second and third interviews took place within her home at 1.2 and 6 weeks.

Alice is a 29-year-old, married woman who completed her associate’s degree. She is currently in school and employed part-time. The first interview took place at a public café at 36.3 weeks gestation. She had an uncomplicated vaginal birth. The second interview took place at 1.2 weeks and third interview at 6 weeks via the telephone at the participant’s request.

**Overarching Patterns and Themes**

**Overarching pattern one. Tending to life: Readying to feed.** The participants described their intent to prepare for and accept their infants into their lives. The overarching pattern, *Tending to Life: Readying to Feed* emerged from the analysis of transcripts. An overview of each of the themes is presented. For each of the themes, mothers shared their stories of preparing for infant feeding through listening to stories about infant feeding from friends, mothers, in-laws, and siblings. Frequently, mothers spoke of gathering evidence about infant feeding, along with advantages and disadvantages of methods, through online resources, books and professional recommendations. Many mothers described taking infant feeding classes, asking lactation consultants and medical providers about infant feeding.

Before birth, women prepared for the birth of their infants. Participants sought information and guidance from chosen sources to help guide decision making. All women declared their intent to offer human milk to infants before birth, and all women who participated in the second and third interviews were still offering human milk to their infants at the conclusion of the study. Frequently, the participants’ spoke of being concerned they would not be able to provide for their infants and may have to resort to using commercially prepared infant formula.
The first theme, *Call to nourish*, was manifested in some manner in all interviews. All the women expressed a deep desire to breastfeed their infants, despite fears of not being able to provide enough milk or the potential risk of infants’ insufficient weight gain. In order to circumvent these fears, women depended on support from professionals and peers for encouragement and direction. They wanted to know how to feed and what to expect. Still, there was often conflict between infant feeding intentions and stories participants heard from other mothers who had significant challenges with offering human milk to their infants.

In the second theme of this pattern, *Fearing failure: Using formula*, women described or implied fear of interference by family and health care professionals about their infant feeding experiences, and the need for potential supplementation with formula. Frequently mothers spoke of formula as unacceptable for their infants and the social stigma associated with bottle-feeding (Knaak, 2010).

The third theme, *Making enough milk*, revealed participants concern over perceived milk supply. Despite data that suggests the majority of women will make sufficient amounts of milk for their infants, women continue to be concerned about low milk supply (Lowdermilk, Perry, & Cashion, 2010).

Many participants described concerns about initiating infant feeding, and whether or not they would be able to nourish their infants. Furthermore, they described trepidation and fear over whether they would be sustain success in feeding their infants. Each of the presented themes will be discussed in detail with supportive exemplars to illuminate the points of discovery within participant’s stories. (See Figure 1)
Theme 1. Call to nourish. Language precedes the ability to interpret meaning and understanding (Heidegger, 1971). Through the use of language, and our own understanding of the world, we can move forward to interrupt the society and the culture that surrounds us. (Heidegger, 1971; Seidman, 2013). The lay language associated with infant feeding is filled with underlying assumptions that can create bias and distortion regarding clinical explanations of infant feeding. Lay language often clashes with the scientific language indigenous to healthcare. It may interfere with professionals’ abilities to understand the perceptions of mothers, to provide effective support and, when needed, to prescribe therapeutics. It is essential for healthcare professionals to learn how mothers convey personal meaning through their use of language. This is more in alignment with the medical sociology, anthropology, and nursing literature on explanatory models of illness and illness representations.

Every participant had prepared for infant feeding through reading books, taking childbirth education classes or seeking professional guidance from lactation consultants. In addition,
participants listened to stories of friends and family about infant feeding experiences. Intention behind infant feeding refers to her understanding of the process, benefits and challenges.

There are several infant feeding prediction tools being used currently to help better understand how a woman determines infant feeding based on the Social Cognitive Theory of Self-Efficacy (Bandura, 1994). Dennis (1999) identified maternal confidence in infant feeding decisions and used a predictability tool (Breastfeeding Self-Efficacy Scale) to predict duration of mothers who choose to offer human milk to their infants. This tool has been used in select populations and suggests women with higher levels of self-efficacy and maternal confidence are more likely to initiate breastfeeding, but this tool lacks an in-depth explanation of the multidimensional components that constitute a woman’s sense of self-efficacy. The Surgeon General, in 2011, proclaimed “A Call to Breastfeed” that encouraged women to seek out breastfeeding as the best way to nourish an infant. The premise was to strongly encourage mothers, health care professionals and employers to advocate for breastfeeding to all mothers. The findings of this study suggested that infant feeding is a call to nourish by means of providing breast milk to infants. When asked “when you think about infant feeding, what comes to mind?” all of the current study’s participants expressed in the first interview their decision surrounding infant feeding. When speaking with Anne, she describes her intent as:

You know, I’ve just always figured your body-our bodies, you know, really amazing and designed to do this. So clearly, it is there, it’s there for a reason. (Anne, l. 68-69)

I have read all the benefits, and I’ve seen the difference between breastfed kids and not breastfed kids and looked at the pros and cons. (Anne, l. 83-87)

All participants expressed their desire to offer breast milk to their infants. Lexy shared her story behind her Call to nourish, based on educational services from the community hospital:

It’s the most natural thing in the world, but it’s not, you know, as brainless as it seems like it is.” (Lexy, l. 24-25)
I took a class on it, and, um, there was just so much that I didn’t know. And I feel like if I hadn’t taken the class, I wouldn’t have been prepared. (Lexy, l. 33-35)

The findings place into question how participants are swayed by family members and friends. Nettie helped the research team to understand the pressures of preparing for infant feeding by watching her mother as a child and her friends:

I think, just the tradition of it. My mom breastfed each of us—there were four of us—till we were three, and so I just always assumed that we were going to—I would breastfeed my child, and it just something women have been doing forever. And so I just assumed that’s the road I’ll take. (Nettie, l. 26-30)

You know, there’s so much support in town, both from the hospital—it’s just such a pro, you know, breastfeeding hospital—and then the city itself, and I—almost all of my girlfriends have breastfed. I don’t know anyone who hasn’t. (Nettie, l. 337-344)

These stories are consistent with the breast-feeding and self-efficacy literature in representing infant feeding preparation as based on vicarious experiences. For example, women were more likely to offer human milk if they had witnessed breastfeeding practices (Hoddinott, Kroll, Raja, & Lee, 2010; Martucci, 2012; O’Brien, Buikstra, & Hegney, 2008). Even though all participants embraced the *Call to nourish* by offering human milk to their infants, there were also universal concerns of pain during feeding. When Sophia was asked what “comes to mind” for her regarding infant feeding, she immediately said:

Um, pain. Um, difficulty, Um, getting her to feed. (Sophia, l. 22-26)

Sophia’s story continued with more depth and gives insight to her struggles in preparing for infant feeding and wanting to have that experience with her infant:

I’m just scared it’s going to hurt. I mean— but, I mean, that goes away and, you know, if this is something that—that it’s something that you really want to do and it means that much to you like it does for me, you know, um, then you just push on through the you just keep on. (Sophia, l. 81-87)
These findings point to the participants’ concerns over intent to offer human milk and the challenges. All of the participants described a common pattern of influences from outside themselves and preparing to offer human milk as the best option. The following excerpts from Allison illustrate how all participants identified external sources of information that conflicted with their beliefs about infant feeding:

Um, it seems the most normal, natural thing to do, I guess. But, um, since I’ve been pregnant and been like taking classes and learning stuff and people have been sharing their experiences with me, it all of a sudden-breastfeeding seem like a lot more complicated. (Allison, l. 31-34)

And, I’m like, oh. You know, on the one hand, how hard can it be? Because like people have been doing it this for millions of years. (Allison, l. 39, 43)

Health care providers, methodically assess mother’s intent on how they will provide nourishment to infants. Mothers are asked early in prenatal care, “Are you breastfeeding or bottle feeding your baby?” Offering closed-ended questions does not promote a full understanding of a mother’s concerns and influences regarding infant feeding. In each of the interviews, participants represented infant feeding as a choice: either a mother breastfeeds or bottle-feeds with commercially prepared formula. When asked this question, a mother is affronted with a right choice and a wrong choice. Maternal perception of a right or wrong choice with respect to infant feeding can place mothers into the role of having a social and moral responsibility to be risk conscious (Knaak, 2010). Throughout the study, the participants were not specifically asked which method of feeding they were choosing. Nonetheless, the concept of choice presented itself in the participants’ stories as a contribution to the Call to nourish. The overarching pattern of Tending to life and its themes can guide health care providers to improve the level of care in helping mothers to prepare for infant feeding and offer insight.
**Theme 2. Fearing failure/using formula.** The trend of contemporary women making a *right* choice for infant feeding and a *wrong* choice is a new concept over the past several years with the invention of social media and the infusion of guilt into women’s decisions regarding infant feeding (Lupton, 2013; Taylor & Wallace, 2012). Infant feeding has historically been viewed as a personal decision made by women without fear of rejection or being isolated, with commercially prepared formula as viable and acceptable means to nourish an infant (Larsen, Hall, & Aagaard, 2008). Discourse has convened around how women view infant feeding and use of resources. Nearly all the participants stated or implied that using commercially prepared formula was unacceptable based on what they had learned in educational classes, from friends, and infant feeding specialists. Several studies support encouraging mothers to offer human milk as the *best* option, and discourage the use of infant formula unless there is no other viable option. These concepts are consistently seen in literature describing ‘Baby friendly hospital practices’ with recommendations to not use infant formula unless there is medical indication. As healthcare providers, assumptions are made that evidence-based literature presented to mothers will transmit in a positive way.

The theme of *Fearing failure/Using formula* described unique problems when coping with the challenges of infant feeding. When participants were asked to share their stories about infant feeding after birth, the act of disclosure (unconcealment) participants struggled with and the notion of making *right* choices regarding the use of supplemental infant formula surfaced. Sam, like most mothers in this study, found the idea of supplementing with formula a sensitive issue requiring reflection and careful decision-making:

> Well, the nurse we saw was not our nurse, we did not get to talk to the doctors, because it was just a weight check; so it was for free, you know, drop in. And she said, ’well, she’s above birth weight, but because she is so little’ –which frustrates me, because they have to be some babies in the third percentile. (Sam, l. 1041-1044)
Sam continued with her reluctance to consider supplementing her breast milk with formula, even with concerns for her baby’s health. Is Sam’s unwillingness related to information gleaned through preparing for infant feeding? When many mothers entered into motherhood and thought about providing for their infants, they were presented with a stressful predicament of dissonance between what is taught and what may actually happen in the early weeks of infant feeding. This dissonance left mothers confused, frustrated and, at times, fearful of having to use formula supplementation for their infants well-being. Sam continued to describe her disconnect with medical professionals at a follow-up weight check recommendation:

And they are still talking about supplementing, and I was like, ‘she’s just a little baby!’ And so we were pretty jaded, so we actually have not done a weight check since then. (Sam, l. 1049-1051)

And so that was really frustrating to me, because it is really important for me to keep breastfeeding, and they are already talking about, you know, supplementing, and she is gaining as much as she should. And everything I’ve read, she was. (Sam, l. 1092-1096)

The formula is a synthetic thing, you know, you should only use it if you have too. And for them to pull that trigger that fast, I was really surprised that they did. (Sam, l. 1102-1108)

Sam, like many participants, shared the frustration of being advised to offer their infant’s supplementation formula against current thinking of breast is best. Current literature exemplifies images of happy breastfed babies and smiling mothers content with infant feeding and motherhood. This may not be truly reflective of reality. Kate described her struggle with providing for her infant and the suggestions made by health care professionals to consider formula supplementation:

But things are looking up, we’re rounding the corner. And I’m glad that we didn’t have to-that no one, no one, like made us supplement with formula or anything, because I really, I really didn’t want to do that; I really wanted to just breastfeed her. (Kate, l. 571-573)
Participants described fearfulness of using formula for infant feeding. Before giving birth, Lexy portrayed a negative view of formula and the impact on the baby and to the environment:

You know-to being thousands of diapers out of the landfill to being thousands of cans of formula in the landfill. I’m not like supporting the factories. But the chemicals that are being put in the formula that we’re feeding our children. I just have a problem with it. But, um, yeah, I think our culture is raised on fear a lot.

(Lexy, l. 220-225)

Participants described negative experience over the recommendations regarding formula as by infant feeding specialists, with Nettie explaining the potential use of formula:

Thursday-the day we’re going home-the lactation nurse came back, and was like, ‘Oh, well, I don’t like the way this is looking. Let me get a syringe; let me go get a pump. You’re going to start pumping your colostrum, you’re going to syringe feed him at the same time you are nursing him. If we have to talk about supplementing, we will’. It was just kind of all over the place, and it was awful.

(Nettie, l. 533-538)

I didn’t feel like I came home positivity. I left the hospital and cried in the car, and I just felt really overwhelmed. (Nettie, l. 564-565)

Regardless of whether participants wanted to exclusively breastfeed, all of them felt formula was a last option. The perceived eagerness of medical professionals to suggest supplementation was in contradiction to preconceived ideas of infant feeding for these participants. All participants had prepared using a multitude of resources, including visiting with lactation specialists, taking childbirth education classes or discussing their feeding plan with family and friends. Current childbirth education reifies the benefits of breastfeeding, enumerating the number of times a day an infant should be brought to breast, counting soiled diapers and focusing on an infant’s latch, position and demeanor. Further, education highlights the disadvantages of formula use with increased risk of respiratory infections, childhood obesity and lower IQ scores (Abrahmans & Labbock, 2011; American Academy of Pediatrics, 2003,
2011; Bartick & Reinhold, 2010). The established policies of using supplementation are not presented to mothers in childbirth education classes or within the clinical setting (Hancock & Brown, 2010). Therefore, having infant feeding specialists suggest the use of supplementation was distressing for participants. The following excerpt from Annette summed up the participants’ concerns about supplementing after giving birth:

Yeah, he’s doing really good, and he’s up to four ounces from our doctor’s appointment on Thursday, so he is up to six-fourteen, so that’s good. He’s getting back closer to his birth weight. So that was good; they were happy to see that, because they said with-if he lost another ounce, then I would have to start supplementing, and I didn’t want to do that, so I was really glad that he, he came and breast milk came, and he had such a good time latching on. So, he did good. (Annette, l. 357-362)

For healthcare providers, there is an assumption to intervene when there is an indicator, such as weight loss or insufficient weight gain, so definitive data is sought, often disregarding the effect on the mother. Participants expressed suffering when approached with the possibility of supplementation. They voiced concern and conflicting feelings about what the right choice was for their infants and themselves. They struggled over what they envisioned the first weeks of infant feeding would bring. In 2002, women viewed formula as the standard method to feed infants and breast milk was a healthy alternative (Stuebe & Schwarz, 2010). These participants may represent a shift in thought to breast milk as the standard way to nourish an infant in the first weeks or months of life and formula as a less desirable alternative. Participants identified surprise when supplementation was suggested. They described a conflict when being told supplementation with formula was a consideration and the expressed relief when formula was not utilized. The current thinking of breast is best conveys a prevailing tendency to view formula as the last option to nourish an infant. This direction of health care recommendation imposes upon reality and participants are reluctant to hear anything else (Fiumara, 1990).
Through the interpretive process, a third theme emerged: *Making enough milk*. This theme further describes the struggles of mothers trying to navigate infant feeding.

**Theme 3. Making enough milk.** Milk production appeared as a significant concern to all participants. The interviews revealed early the concerns surrounding milk production. Physiologic changes during pregnancy prepare the breast for lactation. In Lactogenesis I, before birth, the breasts prepare for lactation through the production of colostrum. This is facilitated by increased production of the hormone prolactin in pregnancy and a surge of prolactin with the expulsion of the placenta. Lactogenesis II, which occurs at about three to five days after birth, copious amounts of milk are produced (Lowdermilk, Perry, & Cashion, 2010). Researchers suggest an infant’s first feeds are approximately one teaspoon on the first day after birth, with the average feed at three days after birth at approximately 45-75 ml of transitional breast milk. Full milk production occurs in approximately three to four weeks with an average milk production of 750 ml/24 hours (Lowdermilk, Perry, & Cashion, 2010).

Participants expressed concern about making sufficient milk for their infants. Lexy describes her concerns early in pregnancy and her solutions to circumvent low milk production:

So, uh-and like I’ve been making colostrum from six months and I’ve actually been pumping my colostrum since six months pregnant, and so, um (lactation consultant) is not worried about me at all. She’s like, ‘you’re going to probably engorgement, but you will have enough supply’. I don’t have to worry about supply or anything like that. (Lexy, l. 72-80)

After Lexy gave birth, her concerns manifested themselves, creating despair and anguish of not being able to meet her baby’s needs:

I decided to pump and put it in a bottle because my baby lost six percent of her body weight in just one day. I wanted to know how much milk she was getting. Daddy was glad because he felt like he could help me and was empowered to be able to feed her, but I felt like such a failure as a mom…I mean, I can’t even provide the basic needs of milk for my baby. (Lexy. l. 470-474)
These stories described the fears of not making sufficient milk. Researchers and health providers need to take notice and develop goals to determine why mothers feel incapable of making enough milk to provide for their infants. Transcripts revealed concerns over milk production by family history. Anne shared her concerns through her learning of her own mother’s experience:

   My mom’s milk actually dried up after a car accident, so my aunt nursed me. (Anne, l. 39-40)

   The most negative thing I have heard was my mom being like, ‘Well, let’s hope you can’. (Anne, l. 123-124)

When asked about challenges she may have, Anne shared her concerns about her own abilities to provide for her infant:

   Um, I think maybe just not being confident. You know, you hear a lot of that like the supply and demand, and the confidence comes from that, or lack thereof, that can come if you feel like you are nursing all the time. (Anne, l. 165-168)

Anne continued to describe concerns about insufficient milk supply, influenced by her friend’s stories, which influenced her perceptions about her own milk supply:

   I’ve got a girlfriend how, um, that it made her feel like she just didn’t have enough milk because she was having to nurse all the time. (Anne, l. 177-179)

   So, I am hoping that I’ll be able to make enough, do enough. (Anne, l. 194-195)

Participants sought help and support from a variety of sources, including lactation specialists, nurses, family and friends. Each participant viewed support as a means to encourage them to continue offering breast milk to their infants. As milk supply is a physiologic manifestation, the phenomenon of maternal confidence in milk supply is guided by experiences and expectations. Grassley and Nelms (2008) described how a woman’s confidence in herself guides her infant feeding decisions. Women who were confident that their bodies would produce milk were more likely to plan to offer human milk and sustain infant feeding with breastfeeding. However, all the participants shared stories of fear, trepidation that their bodies would not be able to produce
sufficient milk. Sam shared her story of worrying about milk production and her ability to have adequate milk supply:

I guess probably the big thing would be if my milk production isn’t as much as the baby would need. So, I’m hoping that I don’t have any problems with milk coming in, and being able to pump. (Sam, l. 226-228)

Participants continued to express worry, stress and fear their bodies would betray them and not make enough milk to provide for their infants. Allison considered past experiences of friends to influence her sense of maternal confidence:

Everyone keeps telling me how hard it is. I think it’s going to be totally fine and-but everybody says it’s so hard. So I guess I’ll just wait and see if that actually turns out to be true or-I guess the one thing that I would think was pretty disappointing I’ve got friends that, um, like they just never felt like or legitimately never had enough milk. And it became so stressful for them. (Allison, l. 264-269)

The stories of the participants implied or explicitly described concerns about being able to provide ample amounts of milk. In summary, milk production was an overriding phenomenon in this study. Women told stories of their concerns and associated infant well-being with their own ability to make milk. Nurses, lactation consultants and maternal/infant experts rarely meet mothers prior to birth to discuss at length concerns surrounding infant feeding. Current practice is to ask mothers, early in pregnancy, infant feeding preferences, however, time is not allotted to expand on what concerns and influences mothers are experiencing. None of the mothers expected low milk supply, but all anticipated the possibility of low milk supply. Mothers all struggled in the first days with concerns about supply. The mothers’ perceptions of milk supply were gauged by infant health status. If their infants were not gaining sufficient weight or health care providers showed concern, mothers attributed concerns to their inability to provide for their infants.
Studies have addressed the challenges of infant feeding and maternal coping skills in times of adversity, including determination, optimism, goal setting, support, and faith in ability to make milk (Hegney, Fallon, & O’Brien, 2008; O’Brien, Buikstra, & Hegney, 2008). Participants presented their own challenges with infant feeding, perceptions of adequate milk supply and abilities to overcome adversity in the first weeks of infant feeding. The following excerpt examines this concept. Alice shared her story of infant feeding challenges in the first weeks. She had an unplanned cesarean birth and initial issues getting her baby to nurse from the breast. After several visits with the lactation specialist, the use of nipple shields, pumping and putting the milk into a bottle, she described her experience:

Yeah, it’s been a lot. I am so happy he breastfeeds now. It’s amazing and wonderful and such a stress reliever that I don’t have to worry about pumping and bringing the pump along and getting bottles ready for him and trying to get him to nurse and not being successful with that and then having to go ahead and feed him with a bottle. Now, I just pop him on and feed him wherever we are. (Alice, l. 430-435)

The findings of the first overarching pattern, *Tending to life: Readying to feed*, described the challenges and expectations of preparing for and sustaining infant feeding. All the participants revealed their experiences of concern about making enough milk, the struggles of initial milk supply, and resolution by the third interview. The findings leave one wondering if these indwelling thoughts and feelings can be verbally expressed at all. The mothers highlighted the fact that their preparation for infant feeding was a form of establishing a sense of identity of who they were as mothers. The question of whether mothers suffered after the feeding experience was left unanswered by this study. Clarifying women’s feelings of doubt in their abilities to provide for their infants would require further research. Understanding mothers who are concerned about being able to sufficiently provide for their infants nutritionally are important findings from and illuminate points for health care providers to grasp in prenatal and postnatal
care. These findings call attention to the second overarching pattern, *Coming into motherhood: Suffering, loving, and being*.

**Overarching pattern two. Coming into motherhood: Suffering, loving, and being**

Participants described within their stories the emergence of becoming a mother through bonding with their infants and learning infant cues that led to caring for and protecting. Each of the participants described commonly found themes reflective of desires to become mothers and regain a sense of identity of self, but also to adjust to being identified as a mother in contemporary society. Transforming, or *coming into motherhood*, is not a cognitive process, but rather a pre-conscious event causing a shift in one’s life. Infant feeding is not simply a technical task, but part of the transition to motherhood. The infant feeding relationship between mother and infant is an integral part of the everyday experience of living with a new baby (Marshall, Godfrey, & Renfrew, 2007).

All participants shared stories of struggling to identify what motherhood is before the birth of their first infant and the realization of motherhood by the third interview. This is consistent with the Mercer’s theoretical framework of becoming a mother. Mercer suggested mothers in the first stage are committing to the pregnancy and preparing for delivery (Mercer, 2004; Mercer & Walker, 2006). Participants shared stories in preparing for infant feeding and birth by attending classes, asking medical professionals, family and friends for guidance. In the second stage of Mercer’s theory, mothers experience attachment and learning to care for their infants (Mercer, 2004; Mercer & Walker, 2006). Finally, in the third and final stage of maternal attainment, mothers incorporate motherhood into their identity (Mercer, 2004; Mercer & Walker, 2006).
The first theme, *Suffering for my baby*, is noted predominantly during the second interview with stories of the birth experience, initiating feedings and learning how to navigate the first days of becoming a mother. The second theme, *Falling in love by learning*, is presented in all three of the interviews with participants sharing their points of discovery in learning how to care for and anticipate their infant’s needs. Finally, the third theme, *Being back in the world: feeding in public*, participants reveal concerns, fear of judgment when going back into the world and nourishing their infants in the final interview. Each of the themes is presented in detail with exemplars to illuminate participant’s stories. (See Figure 2)
Theme 1. Suffering for my baby. The theme of suffering was described by mothers through their sharing of challenges and coping with sleep deprivation, pain and feeling overwhelmed with the physical demands of infant feeding. These concepts were connected in their stories. The theme, Suffering for my baby, was expressed in all of the stories as part of recovering from birth, but also, involved connecting with their babies and trying to understand the complexity of Coming into motherhood. Allison described her feelings of anticipated sacrifice and suffering:

I kind of feel like I’m resigning myself to like all I’m going to do is breastfeed. That what everyone tells me. I should just accept it now, but I’m not looking forward to it. But like once there is sort of a routine established and I can predict when she’s going to want to feed-you know, pump and let somebody take one feeding so I can go, you know, to Pilates for something? (Allison, L. 427-432)

I’m really not looking forward to it. I feel like it’s something you just have to tolerate. (Allison, l. 440-441)

Allison felt ‘homesick’ for her previous life before pregnancy and expressed doubt in her ability to bond with her baby through infant feeding. Participants described some form of suffering when considering infant feeding. Annette anticipated pain with infant feeding, but contemplated the risk of pain for the possibility of bonding with her infant:

I think it’s like I’ve heard it’s such a good bonding experience (Annette, l. 48)

She continued sharing her trepidation of how infant feeding would be for her:

Um, I’m really nervous about like it hurting just ‘cause of the one girl that I know that told me it hurt really bad. (Annette, l. 172-173)

Participants believed that breastfeeding was a painful activity. The story of pain and sacrifice associated with infant feeding was a strikingly common thread. Motherhood was considered an exciting event; at the same time; mothers were very aware of the anticipated struggles of infant feeding. Anita shared her concerns:
Interviewer: So with all that you are thinking about, what comes to mind for you as we talk about infant feeding?
Anita: Problems
Interviewer: Okay, we have not talked about that.
Anita: I guess there are so many issues that a woman can have, it’s not necessarily that the baby doesn’t latch right, but you can have issues with your breast where could be painful to breastfeed. (Anita l. 114-121)

Prior to birth, all participants contemplated the possibility of suffering and sacrifice. For each participant concerns revolved around pain, sacrifice and sleep deprivation. The events of initiating and sustaining infant feeding were not necessarily the same for each participant; however, the similarities were consistently part of each participant’s story. In the beginning, stories of anxiety and fears about infant feeding were salient with all the participants. The idea of suffering as a sign of being a good mother presented in all the interviews. For Sophia, she expressed a common thread to provide for ones’ infant, to give of oneself, despite the pain and suffering:

Sophia: I’m definitely going to breastfeed.
Interviewer: Okay.
Sophia: But my mom didn’t’ breastfeed, and she-and I didn’t know that until I was older kind of thing. And um, I don’t know. When I heard that, it kind of like make me mad a little.
Interviewer: Why?
Sophia: Because-that’s just something that-it’s like giving yourself to your child. You know? And it’s not just giving yourself physically, but its like giving yourself emotionally and like you know? I just want to have that with my daughter. But, um, I’m just scared it’s going to hurt. (Sophia. l. 59-68, 75-76)

The middle story, or second interview, became the pivotal connection between mother and infant, despite the suffering. Participants recognized a connection and ability to respond to the needs of their infants’ transformed participants. Allison described the moment she realized her suffering for her infant as she was giving birth:

The one thing I can say is that I really was, like, laying on the bed, sucking in the oxygen, trying to get some oxygen for her, and I was like—it was kind of strange to be like, ‘Wow, I’d rather you just cut me open and do surgery’. It was sort of like-like a first moment of
really feeling like a mom, and like, ‘I really don’t care. Just keep her safe and get her out of there, you know’. I don’t care if I wanted a natural birth; it seems very irrelevant right now. (Allison, l. 807-814)

So in the recovery room, they brought her to me. I think she kinda of latched on, I hardly remember, but it was nice that I had kind of thought, ‘this doesn’t; have to be perfect or anything, as long as she kind of gets a chance to get oriented.’ (Allison, l. 831-833)

Allison described her determination before the birth to not allow motherhood to interfere with her ability to maintain independence with social activities, exercise and ingestion of alcohol when she went out for dinner. After birth, she tentatively accepted the challenges, but spoke of the adjustments to motherhood and realizing there was a loss of self-related to her prior lifestyle.

She described in her first interview grieving for the loss of her prior life during her pregnancy, but realized she needed to prepare for changes. She described wanting to go for a run and have a beer:

I know I can’t go running for the first six weeks or maybe longer, but all I want to do is like get back to running. And I joke about like if I could just give this baby to somebody else for two hours, I would just go for a run and drink a beer, and I’d be like, ‘I’m fine’.

(Allison L. 399-404)

Mary described the transformation from the first interview to the final interview in how she viewed her role in feeding her baby. She described suffering for her baby in each of the three interviews. In the interview before birth, Mary described in detail her concerns and fears of infant feeding. This was based on stories from other mothers within her support system and experiences of a lactation consultant:

I’ve had, like, the dreams that I’ve had of it being bad, just because I want it to work so bad. And then I hear dreams of, like, people that are set to do that and it just not working out. And one of my mom’s good friends, she is a lactation nurse, and she’s had two kids and has definitely wanted to do that, and it hasn’t worked out for her. I’m not exactly sure why, but just that – I think, I think it might be a latching thing, I don’t know. Everyone says if you try really hard from early on, you shouldn’t have any problems (Mary, l. 180-186)
Her journey continued after birth with pain and infant feeding challenges. Like Nettie’s experience, Mary found herself in transition in the first days after birth with painful feedings and challenges with latch. She described her interaction with the lactation nurse in the hospital before discharge:

Mary: The worst – it was so bad the first five days or whatever. Terrible.
Interviewer: Okay, let’s talk about that. What happened?
Mary: Just really painful. Well, the lactation nurse came in that next day and said she had like a really narrow mou – palette in her mouth, so like, the way her tongue was, like, grazing on me was, I guess – she’s like, “That’s why it hurts so bad.” So they got me breast shield, and I used that a little bit, but then she was like, “You can get clogged milk ducts from that, so start pumping right away when you get home.” And that was really overwhelming for me, because I’m like, “I didn’t want to do that, I don’t want to use a breast shield, I didn’t plan on that,” I was about to just cry every, like, two hours that it came up, because I’m like – I really wanted to feed her, but it was so painful in the hospital. (Mary, l. 519-532)

Mary continued her story by describing the resolution of pain and adaptation to meet her own needs and the needs of her baby. Her story shared the introduction of the first bottle. In all the interviews, mothers described adapting to meet the needs of the baby, but also the evolution of the mothering role:

Oh, yeah, we’re still breastfeeding, and I pump once or twice a day, and about, yeah, a week from tomorrow, we, we’ve been doing the bottle at night – giving her the bottle, so yeah. She’s – my mom was – gave her first bottle, and she was really hungry when we were – when we, when we gave it to her, and she didn’t really figure out what to do with it; [chuckles] she kind of was screaming. So I took her, and started breastfeeding her to calm her down, and then I switched the bottle into her mouth, and she drank it right up. (Mary, l. 1011-1018)

Prior to birth, all participants expressed a common thread of willingness to suffer for their infants. The events of birth and initial latch further exemplified the struggle and transformation of maternal progression through stages of maternal attachment through suffering. The relationship between mother and infant were consistently part of each participant’s story. Fleming (2012) suggested women are willing to suffer for their infants, when they believe it is
best for the baby. This current study corroborated the phenomenon of *suffering for baby* as one infant feeding specialist and maternal/infant health professionals must understand to be common for women. Even mothers with profound mental health problems will consider giving up the custody of their children, which causes them much suffering, if they feel it is in their child’s best interests (Vandermause, Severtsen, & Roll, 2012).

**Theme 2. Falling in love by learning.** The theme of falling in love by learning and connecting between a mother and infant was intertwined with infant feeding. Participants described the hopefulness of being able to bond with their infants through the act of feeding. The act of nourishing one’s infant is more than providing nutritional substance; it is also diffused with the social, emotional and cultural meanings of motherhood (Marshall, Godfrey & Renfrew, 2007). In falling love with infants, mothers placed the infant in the family context. In the second and third interviews, participants described a strong sense of emerging identities of themselves, but also of their infants. Participants described learning the nuances surrounding infant feeding. A paradigm case, (Benner, 1994), Nettie, described her learning her baby:

> And then at night, when we start to wind down, we do the same thing for each feeding. So, I will go into his room, and we change his diaper, and then he nurses for a little bit on one side, then I’ll try burping him and cuddling, and see if he’s hungry for more. If he is, then we go to the other side, which-normal he falls asleep during it. And then I’ll wait for him to get into a good sleep, we cuddle, we read a book, I listen to NRP on my iPhone, you know, anything to pass the time. And then when he’s nice and tired, I swaddle him, take him back into our bedroom, and put him in the co-sleeper next to our bed. And then he’ll sleep for anywhere from forty-five minutes to three hours. I set my alarm for three hours, because I don’t want him going longer than that. (Nettie, l. 615-627)

Nettie felt connected with her infant and captured the intrinsic bond of motherhood that she was living through. Kate also described bonding with her infant after birth and the experience of intertwining infant feeding with being needed by her infant:
I think just between all that one week of her not getting fed enough, basically, I think really kind of was a bad time for when we were establishing our, ‘I understand what you need, and there it is’ kind of thing. When makes me sad, that we went through that. But I think we had to kind of start over, at a later point, and it seems to me, like, she needed to know that, you, if she was, if she was crying hard and was hungry, then we knew to feed her. (Kate, l. 582-588)

Anne further described learning her baby’s cues and distinctions:

There’s been a couple of people, you know, that I talk to, or tell them, you know, I’m breastfeeding, and they are like, ‘Oh are you getting enough sleep?’, and I’, like, ‘Oh yeah, you know, she’s got a routine where she’s like forty minutes, forty minutes, forty minutes, three hours—it tends to be a rhythm. And they are like, ‘Wow, forty minutes? I think you should be supplementing with formula, because she’s just eating too much. You must not be making enough.’ And I am like, yeah, she’s got three chins. I beg to differ. Clearly she is getting enough. If she is gaining weight, you know and being healthy, then I think I’m fine. (Anne. l. 946-955)

The participants’ retelling of their stories revealed a common thread of associating with their babies in the context of we. Statements such as ‘We changed his diaper’ (Nettie, L. 617), ‘We have a great routine’ (Nettie, l. 602) exemplified this connection. Nettie and the other participants had many references to the embodiment of self, where a mother’s body and her baby are referenced as we or our. Stories surfaced of an inseparable connection between a mother’s body and baby, implying a form of ‘falling in love’ as part of the embodied experience of infant feeding. The concept of embodiment between mothers and infants is central to understanding the way mothers feel and think about their infants (Lupton, 2013). Mothers viewed their infants as an extension of themselves and expressed an interrelated bodily response. From a phenomenological perspective, mothers and infants are intertwined from pregnancy through early childhood and separation from one another can be difficult to individuate (Longhurst, 2005; Young, 1990). Breastfeeding is considered an embodied experience with mother and infant conjoined in a literal sense during the infant feeding experience (Lupton, 2013).
Embodiment of mother and infant goes beyond the act of feeding. Infants require many acts from parents throughout the day, including learning infant’s cues, understanding needs and physical care of the infant. The physical needs of the infant create an opportunity for intimacy and affection such as cuddling, rocking and kissing (Lupton, 2013). This concept of embodiment shifts to intercorporeality between mother and infant. She learns about her infant and by the very act of caring for and feeding, she falls in love with her infant. Mothers within the study identified their own experiences as those of their infant. Through the act of feeding, mothers were intimately connected with their infants. The concepts of mother and infant were inseparable, each body’s being-in-the-world being shaped by the other (Wynne, 1997).

Theme 3. Being back in the world/feeding in public. Throughout the interviews mothers sought out a desire to seek normalcy during the changes they faced during pregnancy and birth. They depicted thoughts and feelings when faced with infant feeding in public. Despite the legal protection of infant feeding in public, women were still concerned with how they would be judged and perceived by others. Participants described feeling physically uncomfortable and possibly seen by observers. The concepts of feeling uncomfortable were reflected in their stories. Allison presented her experience of how she coped with feeding in public:

I’m a private person. I don’t-I’ve never really fed her in public, and I don’t really feel like I would be that comfortable doing it. Even though I have friends that do it; I don’t think anything of that. But for me, I don’t know if I would. It would be easier now that she doesn’t choke and sputter, and I don’t have to help her very much; she pretty much latches on and eats you know. But even-you know, I have one of those, like capes. I really don’t feel comfortable feeding with a lot of people around. So, maybe it’s not that she not comfortable eating, it’s-I don’t know-if I’m really going to do this for a year or longer, I feel like I’m going to have to get comfortable with that. (Allison, l. 1883-1899)

Feeling in public was a main thread for participants completing the interview series. Anita described her methods to avoid feeding in public:
Anita: I would say there are some thing that are more difficult than I had thought. For example, going to the store.
Interviewer: Okay, let’s talk about that.
Anita: Well, it’s an event. You kind of have to plan for it, you have to make sure she’s-
for me, I have to make sure she is fed prior to, because I don’t, I don’t want her to be on
the road, hungry, crying, so I always feed before I go anywhere, and then she typically
sleeps for about two and a half, three hours after that. (Anita, l. 731-738)

Each participant struggled with reentry into the world as a new mom and the implications of
infant feeding. Sam described her struggle with feeding in public:

I always have my Hooter Hider with me-I-still, part of me worries about what other
people think, because I know that it is such a hot topic-that some people really just don’t
think you should be doing that, you know, whether you’re covered or not. And I’m one of
those people that care what other people think, even though you shouldn’t. So, that might
add a little stress, but I would, I would do it. But at the same time, I would be looking
around to see if anybody was watching me. (Sam, l. 1485-1492)

All of the participants shared concerns of transitioning from the safety of home into the
public world. Media in Western culture present breasts as sexual, rather than the primary means
to nourish an infant. Lexy described her interaction with coworkers about infant feeding:

Like, one of my bosses sons when I came back to work was like, ‘You got some big tits
now’. I was like ‘thank you for commenting’ and then like all the time they are just
joking about my breast milk, like ‘can I have some?’, or ‘we should make a milkshake
and feed it to somebody’; I mean is should be funny, but it not to be me because it is kind
degrading. (Lexy, l. 929-934)

The very act of infant feeding can be challenging for women to navigate within society. Breasts
continue to be considered sexual objects for gratification and amusement. The sexualization of
breasts may lead women to internalize sexual objectification of their bodies and change social
patterns during the feeding experience (Johnston-Robledo, Wares, Frickers, & Pasek, 2007).
The majority of participants were reluctant or even refused to feed their infants in public. This
sexualization of culture is a topic of concern and has been studied extensively in the both popular
literature and media (Gill, 2012). Currently discussions have emerged central to the feminist
debate of sexual empowerment by women choosing to offer their infants human milk.
Participants expressed strong commitment to offer their infants human milk; however, when having to feed outside the home, the majority sought ways to avoid public feeding out of fear of comments or judgment from strangers. According to Li, Rock, and Grummer-Strawn (2007), 37% of people surveyed believed mothers should breastfeed in private only and 48% believed breastfeeding in public was acceptable. Work by Fredrickson and Roberts (1997) postulated through objectification theory that in Western culture a woman judges herself based on the views of an outside observer. Further argument exemplifies women in contemporary society are uncomfortable with bodily functions such as childbearing and lactation, which may lead women to view themselves as inferior or incompatible with physical attractiveness (Roberts & Waters, 2004).

**Summary**

Coming into motherhood for participants involved moving from the unknown to a new reality. The participants shared stories of restructuring goals, behaviors and responsibilities. The events for all the participants were seen across interviews. In the first interview, participants described concerns, fears and senses of maternal confidence that they were capable of nourishing and providing for their infants. In interview two, mothers were struggling with pain, fatigue and uncertainty over how to navigate the first feedings. Finally, in interview three, mothers described adapting, assimilating and creating a new reality for themselves and their world. Mothers struggled to return to a sense of normal, within a changing family. These findings coincided with the theoretical frameworks of Mercer in *Becoming a Mother*. The structure of their stories had a beginning, middle and end seen across the three interviews and across the texts of all participants.
The maternal/infant relationship was evident for all the participants with each interview, strengthening as the interviews progressed. They began their stories with fear and uncertainty, but shared their journey of connecting with their infants through feeding. None of the participants reported they would not continue to offer human milk to their infants, which was striking considering that 40% of new mothers change their infant feeding method within the first weeks after birth. These experiences repeated across the texts of all mothers in the study and showed the phenomenon of infant feeding as one that evolved as a unique human experience with identifiable characteristics.

Two overarching patterns, Tending to life: Readyng to feed and Coming into motherhood: Suffering, loving, and being, that emerged through analysis of the transcribed interviews, can help health care providers understand the complexity and meaning of infant feeding for first time mothers in the early weeks after birth. Mothers were able to verbalize and put into language their concerns, fears and struggles in coming into motherhood. The act of feeding is more than a physical manifestation of skills, but an integral part of personal, cultural and societal expectations of mothering in contemporary society. Participants struggled with what they envisioned infant feeding would be like before giving birth by listening to the stories of other women who had gone before them. For most of the participants, these stories were very negative and lacked positive perceptions of infant feeding. Despite the negative stories participants heard about infant feeding, mothers deliberately chose to offer human milk to their infants at birth and beyond. The experience of initial feedings was surrounded with uncertainty, pain, suffering, and adaptation to meeting the needs of infants. In the final interviews, the mothers continued to offer human milk to their infants and described the infant feeding
experience with feelings of accomplishment, bonding and learning how to be mothers. This study has implications for education, practice, policy and research, discussed in Chapter Five.
CHAPTER FIVE

Implications

The purpose of this study was to examine the meaning for first time mothers as they prepare for and nourish an infant. A mother’s decision to feed her baby is influenced by family, friends, health care professionals, society, and media. Although great strides have been made in improving infant feeding recommendations and scientific evidence of offering human milk, there is still need for improvement on the delivery of best practice guidelines. The decision to choose human milk or formula is faced with scrutiny and controversy within contemporary society, becoming a public decision filled with moral overtones. It is salient to consider the implications of best practice guidelines and the emotional impact on mothers navigating the challenges of infant feeding for the first time. All of the women were transformed and expressed both positive and negative experiences pertaining to infant feeding.

The implications of this study can be identified within the two overarching patterns and six themes described in chapter four. The two overarching patterns, *Tending to Life: Readying to Feed* and *Coming into Motherhood: Suffering, loving, and being* have profound implications in clinical practice, education, policy and research. The implications of how to advance the recommendations of infant feeding science, while addressing the impact of generalized best practice guidelines, are presented below.

**Clinical education.** Currently, lactation education includes information regarding breast anatomy, function and troubleshooting breastfeeding problems. The focus on troubleshooting breastfeeding challenges insinuates infant feeding is fraught with difficulties for mothers and infants. This can contribute to nurses viewing a woman’s body as incapable of making enough milk and in need of scientific interventions. This may include recommending supplementation
with formula, pumping the breasts to enhance milk production, or adding supplemental nursing systems to increase the amount of volume an infant receives at each feeding. Supplemental nursing systems can include the use of syringes and flexible tubing to reduce infant workload at the breast. As suggested in extant literature, all maternal/child nurses should be educated about current evidence-based infant feeding to reduce discrepancy in how information is disseminated to women (Magri & Hylton-Mcguire, 2013). It is vitally important for nurses and lactation specialists to consider all of the evidence about a woman’s situation while promoting well-being for both mother and infant. Lack of awareness can result in mothers feeling overwhelmed, depressed and isolated from a healthy transition to motherhood (Watkins et al., 2011; Humphries & McDonald, 2012).

Infant feeding education should include and reinforce normal anatomy and physiology of milk production to encourage lactation nurses to be less likely to aggressively intervene unless all other options have been satisfied. Participants expressed frustration with lactation specialists who were viewed as aggressive and not listening to their needs or perceptions. For several participants, suggestions were made to consider supplementation as a course of action. This prescription was contrary to mothers who did not want to consider supplementation except as the last resort.

Educational needs of infant feeding specialists must include the proper use of and timing of commercially prepared formula for appropriate infant nutrition. Careful consideration needs to be made to help mothers understand all options, including methods to promote exclusive use of human milk without supplementation. Lactation specialists need to be advocates for mothers and empower women to feel confident in being able to take care of their infants. The lactation nurse can be instrumental in helping mothers achieve sense of confidence in themselves and their
ability to nourish their infant. If lactation nurses are solely focusing on troubleshooting, they will often miss the opportunity to elicit a mother’s thoughts and feelings about what she expects or intends.

Lactation nurses must change their approach with women in the early stages of infant feeding. The focus needs to be on establishing trust and empowering women to feel confident in their abilities to nourish their own infants, even when challenges arise. Lactation specialists and nurses need to be aware of what is being taught in childbirth education classes, as well as understanding the fear women are feeling as they prepare for infant feeding. An example of nurse optimism would be a new mother who is experiencing the first day of infant feeding. The nurse focuses on empowering a mother to understand how her body works and listening to her concerns and anticipated infant feeding strategies. With each subsequent interaction, nursing and other health care providers and lactation specialists can offer positive reinforcements, education and help so mothers can understand areas of concerns.

All health care professionals caring for childbearing women need to cease asking close-ended questions as they assess infant feeding intent. The most common question asked during infant feeding assessments is, “Are you breastfeeding or bottle feeding?” With current best practice recommendations, this can be perceived by mothers as a question with a right or wrong answer. The question needs to be changed to “How are you planning to feed your baby?” as well as “How are feedings going for you and your baby?” Open-ended questions are typically non-judgmental, allowing a mother to express freely what she feels is best for her and her baby. It also gives her the opportunity to express any concerns she may have. Within this study, lactation consultants were viewed as overtly assertive and eager to intervene. Lactation education needs to refocus on empowering women, not seeking validity of their role by intervening even when
not indicated. For the participants who were encouraged to supplement, all continued to exclusively breastfeed without any known untoward outcomes for themselves or their infants at the third interview. Nonetheless, women expressed suffering fear of using formula, and felt unsupported in their views on infant feeding.

Additional education needs to be provided to mothers regarding the use of formula as a supplementary feeding method without placing prejudice. In hospital settings, the mothers in this study were not provided with any known education regarding formula supplementation. All mothers need to receive information regarding best practice, but also education about alternative infant feeding methods (McNeil, Labbock, & Abrahams, 2010). Providing this education would lessen the perception of failure or inadequacy experienced by mothers as evidenced by the stories of these women.

**Public Education.** Education needs to be offered during high school matriculation regarding the challenges and demands of pregnancy, childbearing and infant care to all students. Health education needs to include infant feeding, current recommendations of offering human milk, safe formula use, and breast health care for the well-being of women and their infants. Participants were hesitant or fearful of feeding in public and enduring the responses from strangers, in part due to the sexualization of breasts within Western culture. High school is a formative time in a woman’s life. Offering education and open dialogue regarding the primary function of how breasts can provide for infant needs requires expansion of health curricula. Health teachers need to be educated on the current recommendations and implications of best practices of infant feeding. This will allow young adults to view infant feeding more openly and potentially reduce judgmental behaviors of taunting women who choose to breastfeed in public settings or in settings with other individuals. The participants in this study were educated, but
still lacked basic knowledge about women’s health, their bodies, and infant feeding. All of the participants who presented the challenges of feeding their infants in public shared stories of fear and feeling judged by strangers.

**Nursing practice.** Communicating with new mothers about infant feeding presents unique challenges. Currently in practice, health care providers will ask women about which method of infant feeding is being considered, without asking about concerns the women may have regarding infant feeding methods. Clinical practitioners do not encourage teaching women about feeding options, but, rather, tend to only encourage breastfeeding. Nurses and lactation specialists need to change the language of their assessments and interventions when working with mothers. The term ‘not enough milk’ or ‘we may need to supplement’ has profound effects on mothers and reduces their sense of maternal confidence, especially when stated soon after birth (Wright & Cordes, 2009). Using such language reinforces a negative viewpoint of women’s bodies and is noted in extant literature as being associated with early weaning and depression (Watkins, 2011). If it is deemed necessary to use such language, the woman can immediately be taught options for infant feeding including techniques to enhance the production of human milk. Women can be given an accurate vision of what to expect and be educated to handle possible challenges, such as, painful breasts, low milk production, and personal frustration.

Current extant literature suggests that if women are given the opportunity to provide human milk with supportive assistance and instruction, the vast majority of mothers and infants will successfully establish breastfeeding (Wright & Cordes, 2009). Inappropriate supplementation can undermine confidence, reduce milk production, and sends negative messages to mothers. In addition, nurses need to focus on building a trusting nurse-mother relationship that grows over time as lactation continues. A trusting relationship is essential
anytime a nurse guides or coaches a mother through a period of transition, such as breastfeeding, with its known critical points where mothers often get stuck. For example, at the end of the study, none of the participants were using supplementation and were continuing to offer human milk to their infants, exclusively. The mothers considered themselves successful because they surmounted and adapted to the challenges along the way. Participants sought out support and recommendations from a variety of sources. Most important, they wanted to feel confident in how they were nourishing their infants.

There are circumstances where formula supplementation is recommended. These include maternal illness, congenital defects of the infant that do not allow feeding at the breast, contraindicated maternal medications, significant dehydration, and delayed lactogenesis II past day five after birth or maternal preference (Wright & Cordes, 2009). Women need to know how to use formula safely and correctly if required or preferred. Mothers in this study were fearful of formula use to the point that participants were reluctant to use formula unless there was no other option. One mother refused to take her infant in for a weight check for fear of being told she should offer her infant supplemental formula for inappropriate weight gain of her infant. This is a further example of how the interpretation of best practice can have a potentially negative effect on individuals. Mothers need to feel heard, but also understand why recommendations are being suggested. Nursing practice needs to include not only breastfeeding education and advocacy, but also how to safely use formula as an alternative infant feeding option without feeling like a failure as a mother.

This study illuminated how current views of infant feeding created discourse for women on a personal level. Participants felt persuaded by informational bias, moral overtones and restrictive construction of choice (Knaak, 2010; Wolf, 2007). Contemporary societal demands of
infant feeding have created a homogenous pro-breastfeeding discourse. Alternative choices about infant feeding, such as actually using formula, tend to be interpreted as acts of moral defiance, rather than as a health promoting activity when human milk is unavailable.

**Policy.** Hospital policies surrounding infant feeding need to be examined since they provide the context for professional practice. Mothers in this study described how nurses could have intervened differently to help women to feel more confident in themselves and trusting of health care professionals. Hospital policies and practices, such as those endorsed by Baby Friendly Hospital Practices are becoming the standard. Health policies need to promote normal, healthy birth and lactation. Yet, the majority of women felt lactation nurses were eager to intervene with technology, rather than helping women to understand how to maintain infant feeding without overwhelming them. There are situations where interventions are needed; however, participants did not feel they could trust the recommendations of health care professionals if the recommendations differed from what they had initially been taught. What we know from this study is the majority of the mothers were encouraged to offer supplemental formula to their infants. These mothers sought validation of their own abilities to care and provide for their infant. Participants felt formula use was a personal reflection on their inability to provide for their infants nutritional needs. There has been a shift for women in thinking about formula as potentially harmful and reflective of a mother’s inability to provide for her infant. This creates a conflict between mothers and health professionals. Policy change needs to state the functional use of formula as an alternative nutritional supplement when human milk is not available to meet the needs of the infant, without viewing formula as a harmful substance. Mothers need to understand the benefits of human milk, but also when formula use may be necessary without feeling personally ineffective to nourish one’s infant.
Nurses and other health care providers can intervene differently with childbearing populations. Mothers are in a vulnerable state during childbearing and require patience and others’ awareness of the normal transitions of motherhood. Mercer (2004) suggested mothers who seek guidance in the early stages after birth and within the postpartum period are more independent in their mothering and beliefs. Nurses need to be supportive, empowering and nonjudgmental to women’s view of childrearing unless safety issues are at risk. Validation of suffering and taking time to speak with mothers is a basic tenet of nursing care. However, lactation nurses were not identified as being helpful, rather being seen as intrusive and assertive. With current trends toward ‘breast is best’, nurses and lactation specialists need to be sensitive to the needs of the mother before promoting one infant feeding method over another. Hospital polices which address how infant feeding information and care is provided should be examined to determine the most effective and sensitive care is, in fact, being provided.

Research. There is significant extant knowledge surrounding infant feeding; however, research is lacking about the commonalities of infant feeding across populations through interpretive studies. Heideggerian hermeneutics allows research findings to speak to nurses and health care professionals caring for women during infant feeding experiences. As revealed in the stories of the participants, evidence-based practices are often implemented without consideration of the effect on recipients. Additionally, studies need to explore changing perceptions of formula in society and how alternative methods can nourish infants. Revealed through women’s stories is a deep separation of the right way to feed an infant and the wrong way. The opportunity to conduct further research on infant feeding in contemporary society is timely. Each generation presents unique cultural and societal values. Findings demonstrated a shift from past generational viewpoints of infant feeding, with formula seen as a viable option, to a more
divided perspective of how infant feeding influences a person’s view of being a good mother.

Research exploring the effects of formula supplementation and depressive symptoms in mothers has limited investigation. The first weeks after birth are a critical time for mothers and infants. Women who are unable to maintain original infant feeding decisions may be more susceptible to grief and suffering as described in the transcripts. Watkins et al. (2011) suggested women who modify infant feeding decisions after birth are more likely to suffer depressive symptoms. A pre/post quasi-experimental study exploring depressive symptoms in mothers in third trimester and then again at 12 weeks using the Edinburgh Depression Scale may offer information about the development of depressive symptoms in women who use supplementation formula during the breastfeeding experience.

**Conclusion**

A Heideggerian hermeneutic approach was used to explicate and illuminate common infant feeding experiences of 12 first-time mothers in the Northwestern United States. The stories that emerged from these interviews identified and examined infant feeding concepts for first time mothers. Nursing practices were revealed that might have contributed to reducing maternal confidence to provide for one’s infant. The stories of the participants may change the perception of the role of lactation nurses in U.S. hospital settings. By sharing their experiences, these mothers gave nurses and other health care providers an opportunity to reflect on how infant feeding intervention can affect a new mother.

Two overarching patterns emerged that were not mutually exclusive: Tending to life: Readying to feed and Coming into motherhood: Suffering, loving, and being. These patterns and their associated themes were used to understand the nature of infant feeding for first time mothers where maternal perceptions of infant feeding and health care intersect. The interview
data provided narrative text from these participants, which allowed the research team to develop a deeper insight into the current state of infant feeding in contemporary society. Lactation specialists and maternal/infant health professionals can be instrumental in promoting congruence among lactation specialist, childbearing nurses and medical providers to help guide maternal confidence and trust between mothers and healthcare professionals.
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Appendix A

Interview Guide

How you choose to feed your baby is not the focus of these interviews. The focus is the experience of infant feeding and what that experience is like for you. We would like to know as much as we can about your experience so that we can think about ways to help other first time mothers in these circumstances. I will be recording the interview and I will tell you when I start the recording.

I’ll ask an opening question and then we’ll talk about your experiences as you tell me about them. Feel free to think for a while, take as much time to think as you like, and just get comfortable. When you have said all you want to say, I’ll ask some basic questions about your age, education, and where you live. Then we will stop. The interview will then be typed word for word and any possible identifiers (your name, the names of others, places, anything unique that could identify you) will be removed.

If it’s OK with you, I will contact you again about one week after your baby is born (as indicated by due date) and about six weeks after birth (as indicated by due date) for a final visit for a similar conversation. If you would prefer to contact me after your baby is born, you are welcome to do so! The decision of future contacts for discussions regarding infant feeding will be made at the first interview.

You will be able to say “no” at that time if you don’t want to talk about these experiences at any time during the interview process.

Interview one: Do you have any questions at all about the process? I am interested in your experiences as a first-time mom while you prepare for the birth of your baby and how you will prepare for feeding. I would like to begin by asking you…when you think about preparing for infant feeding, what comes to mind for you?

Interview two (one week after birth): How have things been going for you since we last spoke and when you think about infant feeding, what comes to mind for you?
Interview three (six weeks after birth): I am interested in how the past six weeks have been for you. How is infant feeding going? What comes to mind for you?

Possible subsequent inquiries for interviews:

- Tell me more about that…
- What comes to mind for you when you think about feeding your baby?
- What was that like for you?
- Did anything else come up around that?
- Is there anything more you remember?
- Was anything else going on?
- Others have told me about…. Is that anything like your experience?
- What stands out for you about that situation?
Appendix B

Research Flyer

Research Study
WSU Institutional Review Board has reviewed and approved for human subjects participation

Volunteers needed
First-time mothers

What does it mean to prepare for infant feeding?

As you think about what you will need to do to prepare to feed your baby once he/she is born, what stands out for you? Will you share your story?

Confidential audio-recorded conversations with a nurse researcher and all names are removed.

You will be given a token of appreciation for your time.

Please contact Carrie Miller at Washington State University College of Nursing to learn more or schedule an interview. Confidential private telephone: xxx-xxx-xxxx or email: cwmiller@wsu.edu
Appendix C

Analytic Process

Steps in analyzing text (de-identified and line coded transcripts with assigned pseudonyms):

1) Read the transcript carefully, start to finish.
2) Reread the text line by line.
3) Make notes about concepts or situations that stand out.
4) Review notes and observe the general categories, noting frequency of related ideas, position in text, response to interview questions, style of response (halting, stuttering, slang, affect conveyed).
5) Reread line-by-line with repeating ideas in mind.
6) Devise rudimentary list of emerging categories.
7) Review transcript with these categories in mind.
8) Revise categories or make comments, ideas for naming themes.
9) Write a summary of the transcript with as much detail or support as time allows, including a basic summary of events, and/or a summary of emerging categories or themes, and/or interpretations, any or all with as much textual support (line references, exemplars) as time allows.

These summaries will build with each transcript. After several transcript analyses, summaries and interpretations will combine. As texts are read across one another and across summaries and interpretations, themes revise and naming themes will become part of the iterative process. During this process, repeated readings of transcripts and developing interpretations are done. As research team members or others review transcripts, their interpretations are added to the developing summaries and interpretations, and the iterative analysis is enriched.

Managing data:

1) After several transcripts are analyzed, working themes are created and storage units set up using preferred software or paper files.
2) Text is deconstructed according to themes, noting areas of overlap.
3) Verbatim, line-coded pieces of the transcript are chosen for their representation of the ideas/emerging categories identified in the interpretations.
4) Excerpts (labeled by pseudonym and line locations) are placed into storage units that exemplify or represent ideas signified by the working themes; excerpts may be placed in more than one storage unit.
5) All written interpretations are collected and filed together as interpretations.

Managing interpretations:

1) As new transcripts are analyzed, all written interpretations are reviewed
2) Storage units are reviewed in their entirety and considered against interpretations.
3) Consideration is given to relationships among ideas; overall patterns that represent all ideas and/or themes and subthemes that describe essential meanings are renamed
4) Patterns and themes are determined, always subject to revision, and writing begins
5) Written results include a summary and interpretation of each theme

Vandermause, 2011