THE MOTHER'S LIVED EXPERIENCE OF BREASTFEEDING IN THE FIRST 4 WEEKS POSTPARTUM: A HEIDEGGERIAN HERMENEUTIC PHENOMENOLOGICAL ANALYSIS

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Submitted to the faculty of the University Graduate School
in partial fulfillment of the requirements
for the degree
Doctor of Philosophy
in the School of Nursing,
Indiana University

April 2021

Accepted by the Graduate Faculty of Indiana University, in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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DEDICATION

I would like to dedicate this dissertation first and foremost to my husband, Charles, and my children, Alexandra and Charlie. The three of you have supported me throughout the many ups and downs of this extremely long journey. Thank you and I love you! Alex and Charlie, my hope is that in some way this will be an inspiration to you.

I also would like to thank my mom, Stephanie, and dad, Mark, for instilling in me the importance of a college education and a strong work ethic. Both of you have contributed to my success in different ways due to your unique experiences throughout life.

Finally, this dissertation is dedicated to all first generation college students. You too can succeed at whatever level of college degree you set your mind too. Seek professors and others who understand the uniqueness of being the first person in your family to go to college. Let them help you navigate the college or university system so you can be successful and achieve your goal.

ACKNOWLEDGEMENT

I would like to express my deepest appreciation to my committee, Dr. Deborah Stiffler, Dr. Jennifer Bute, Dr. Carol Shieh, and Dr. Linda Wallace.

Dr. Stiffler, I am extremely grateful for your willingness to be the chair of my committee. I am thankful for the numerous hours you spent reading my dissertation and providing feedback. Your expertise, encouragement, and patience throughout the duration of my dissertation was exactly what I needed to be successful.

Dr. Bute, you were instrumental in providing me with a better understanding of health communication through working with you during my independent study, as well as the advanced health communication course. I enjoyed learning about a field I previously had limited knowledge about.

Dr. Shieh, thank you for the many years you have invested into my PhD education. You have provided me with valuable advice on everything from narrowing my topic to writing the dissertation itself. I'm glad you were a part of the finished product!

Dr. Wallace, you have held many roles in my life: Professor, colleague, friend, and research advisor. I have been blessed to have you alongside me throughout my many years in academia as a graduate student and faculty. I am truly grateful for the many ways you have invested in me as a person.

Stacy Ann Rosales

THE MOTHER'S LIVED EXPERIENCE OF BREASTFEEDING IN THE FIRST 4 WEEKS POSTPARTUM: A HEIDEGGERIAN HERMENEUTIC PHENOMENOLOGICAL ANALYSIS

The benefits of breastfeeding are widely known and documented, yet breastfeeding rates at six months have remained well below desired levels. In order to fully understand the breastfeeding experience in the early postpartum period and all the intricacies involved, researchers need to provide mothers with the opportunity to talk about their experiences during the time when there are the most difficulties and when they are most likely to discontinue, the first four weeks postpartum.

The purpose of this study was to more fully understand, in their own words, the experiences of mothers who began breastfeeding their infant after birth and may or may not have been breasting at four weeks postpartum. A single research question guided this study: What are the lived experiences of breastfeeding mothers during the first four weeks postpartum? Eight mothers who delivered in the past four to six weeks were interviewed. Data were analyzed using a Heideggerian hermeneutic phenomenological approach. This method was chosen because it allowed the researcher to conduct interviews and explore the lived experience of breastfeeding mothers and to uncover the concealed meaning within the phenomena. This methodology provided a richness that might not be possible through description alone.

The narratives shared by the mothers demonstrated that initiating breastfeeding and sustaining it in the early postpartum period was a complex process. Each mother's breastfeeding experience was unique to her but also similar to someone else's. The

overall constitutive pattern of Getting the Hang of It was selected and consisted of four themes and nine subthemes. The four themes included: Physical Experiences, Emotional Complexities, Infant Involvement in Breastfeeding Process, and Support. These themes and their subsequent subthemes provide insight into the complexities experienced by mothers in order to acquire the skills they needed to breastfeed their infants.

Breastfeeding mothers, who have had favorable and unfavorable experiences, are willing to share a wealth of information. Health professionals should encourage mothers to talk about their experiences and listen to what they are saying. Through listening they can provide mothers with the resources and support needed to meet their breastfeeding goals.

Deborah Stiffler, PhD, RN, CNM, Chair

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LIST OF ABBREVIATIONS

AAP	American Academy of Pediatrics
ACOG	American College of Obstetricians and Gynecologists
ADA	American Dietetic Association
BMI	Body Mass Index
CBCS	Carolina Breast Cancer Study
CDC	Centers for Disease Control and Prevention
HHS	U.S. Department of Health and Human Services
IgA	Immunoglobulin A
IGAB	Interagency Group for Action on Breastfeeding
ODPHP	Office of Disease Prevention and Health Promotion
PHI	Protected Health Information
RSV	Respiratory Syncytial Virus
SIDA	Swedish International Development Cooperation Agency
SIDS	Sudden Infant Death Syndrome
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
WHO	World Health Organization
WIC	Women, Infant, and Children Program

Chapter 1: Introduction

The American Academy of Pediatrics recommends that new mothers exclusively breastfeed for at least six months, and of the 81.1% of mothers who initiate breastfeeding after birth, only 22.3% are exclusively breastfeeding at six months (Centers for Disease Control and Prevention [CDC], 2016). However, 51.8% continue to breastfeed at six months while also providing supplementary feedings and complimentary foods (CDC, 2016). Studies have shown the first four weeks are the most significant in whether a new mother continues to breastfeed her infant (Bonuck et al., 2005; Brand et al., 2011; CDC, 2017; Ertem et al., 2001). If the new mother experiences difficulties during this period she is more likely to wean her infant and exclusively formula feed (Brand et al., 2011; Lewallen et al., 2006). If breastfeeding during this period is successful, the new mother may be more likely to continue to breastfeed, either exclusively or in combination with formula supplementation, for a longer duration.

The purpose of this study was to more fully understand, in their own words, the experiences of mothers who began breastfeeding their infant after birth and may or may not be breasting at four weeks postpartum. I chose to conduct a Heideggerian hermeneutic phenomenological study of the lived experience of mothers 1) breastfeeding at the time of hospital discharge or two days after home birth and 2) subsequent feeding experiences during the first four weeks postpartum in order to hear from the mothers why they may choose to continue breastfeeding, or instead discontinue.

Background and Significance

The early postpartum period is a critical time in establishing successful breastfeeding patterns, plus it is a time of transition and stress. At birth the rate of any

breastfeeding is 82.5% and by one month postpartum that rate has dropped to 78.2% (CDC, 2017). The CDC does not provide an exclusive breastfeeding rate at birth, but at seven days it is 65.1% and at one month that rate has dropped to 59.6% (CDC, 2017). Demirci and Bogen (2017) identified latching, perception of inadequate milk, pain, infant falling asleep while breastfeeding, and infant feeding too much as the most common breastfeeding concerns mentioned by first time mothers in their study. Of these concerns all but one peaked at two weeks postpartum with latch difficulties peaking at one week. Primiparous mothers have been found to be particularly vulnerable to discontinue breastfeeding in the early postpartum period due to various breastfeeding difficulties (Wagner et al., 2013).

The importance of breastfeeding has been noted at a national level since at least the late 1990s when Healthy People 2000 replaced the Prevention Profiles, which monitored the 1990 National Health Objectives (National Center for Health Statistics, 2001). Healthy People has continued to demonstrate the importance of breastfeeding by increasing the number of breastfeeding objectives from two with Healthy People 2000 to five with Healthy People 2010, and eight with Healthy People 2020. The breastfeeding related goals identified by Healthy People 2020 are: 1) increase the proportion of infants who are ever breastfed; 2) increase the proportion of infants who are breastfed at six months; 3) increase the proportion of infants who are breastfed at one year; 4) increase the proportion of infants who are breastfed exclusively through 3 months; 5) increase the proportion of infants who are breastfed exclusively through 6 months; 6) increase the proportion of employers that have worksite lactation support programs; 7) reduce the proportion of breastfed newborns who receive formula supplementation within the first 2

days of life; and 8) Increase the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies (Office of Disease Prevention and Health Promotion [ODPHP], 2017). The American Academy of Pediatrics (AAP) is another national organization that recognizes the importance of breastfeeding for the health of children. The AAP 2012 policy statement notes numerous benefits for the infant who is exclusively breastfed for at least four to six months (AAP, 2012). Two significant benefits of breastfeeding include a reduction in the severity of respiratory syncytial virus (RSV) and non-specific gastrointestinal infections. Respiratory syncytial virus is a highly contagious virus that is easily spread and is one of the leading causes of infant morbidity and mortality in developed countries (Dixon et al., 2010). Each year there are an average of 100,000 to 126,000 infants under the age of one year admitted to the hospital for RSV (CDC, 2014). Infants who are bottle-fed or breastfed for less than four months are more likely to have severe RSV disease with supplemental oxygen use and the possibility of mechanical ventilation, as well as longer hospitalizations (Bachrach et al. 2003; Chatzimichael et al., 2007; Dixon et al., 2010). Numerous components are present in breast milk that inhibit binding of bacteria and viruses in the gastrointestinal tract and provide passive immunity to the infant (Chung et al., 2007). This passive immunity is present for as long as the infant breastfeeds.

The AAP 2012 policy statement also notes several maternal benefits (AAP, 2012). These include decreased risk of maternal breast cancer, decreased postpartum blood loss, as well as cardiovascular benefits. Breastfeeding has been found to have a protective effect against certain types of breast cancer, especially when continued for a longer duration, which is typically a cumulative lifetime of at least 12 months of

breastfeeding (Chung et al., 2007; Faupel-Badger et al., 2013; Galukande et al., 2016; Pechlivani & Vivilaki, 2012). In a more recent analysis of data from the Carolina Breast Cancer Study (CBCS) the researchers found ever breastfeeding and a lifetime breastfeeding duration of ≥4 months was associated with a reduced risk of breast cancer for woman younger than 40, but not for women over the age of 40 (Chollet-Hinton et al., 2016). Breastfeeding can prevent postpartum hemorrhage because as the infant suckles at the breast it causes the pituitary gland to release oxytocin. This release of oxytocin stimulates uterine contractions minimizing postpartum blood loss, as well as aiding in involution of the uterus (Callaghan et al., 2010). Currently 11.4% of maternal deaths are related to hemorrhage (CDC, 2019). Cardiovascular benefits increase the longer the mother breastfeeds. Breastfeeding for a cumulative amount of 13 to 23 months has shown to result in a significant reduction in hypertension (OR: 0.89; 95% CI: 0.84–0.93), hyperlipidemia (OR: 0.81; 95% CI: 0.76– 0.87), cardiovascular disease (OR: 0.90; 95% CI: 0.85–0.96), and diabetes (OR: 0.74; 95% CI: 0.65–0.84) when compared to never breastfeeding (Schwarz et al., 2009).

Beyond the extensively noted infant and maternal benefits of breastfeeding, there can also be a significant economic impact from the personal to the national level. At the population level potentially $13 billion per year could be saved if 90% of mothers breastfed exclusively for six months (Schanler et al., 2013). This estimate only considers the overall cost of pediatric illness and does not factor in missed workdays in order to care for sick children or adult deaths from childhood diseases such as asthma. One study found that hospitalization charges for all infants with infectious disease admissions,

which included respiratory and gastrointestinal, totaled nearly $690 million (Yorita et al., 2008). Encouraging and supporting breastfeeding is a wise investment for businesses too.

> The return on investment has been calculated that for every $1 invested in creating and maintaining a mother-friendly worksite and lactation support program (including a designated pump site, privacy, availability of refrigeration and a hand-washing facility, and appropriate maternal break time), there is a $2 to $3 return on investment (Schanler et al., 2013, p. 37).

Numerous well-known organizations promote breastfeeding as the best food source for infants, these include: The World Health Organization (WHO), AAP, American College of Obstetricians and Gynecologists (ACOG), and American Dietetic Association (ADA). The ODPHP has continued to note the importance of breastfeeding by retaining breastfeeding goals for Healthy People 2020 and making them more stringent. One goal is to increase the proportion of infants who are breastfeeding at six months from 43.5% (2007-2009) to 60.6% (ODPHP, 2017). Exclusive breastfeeding has been targeted with an increase in the proportion of infants who are exclusively breastfeeding at three months from 33.6% (2007-2009) to 46.2% and at six months from 14.1% (2007-2009) to 25.5% (ODPHP, 2017). The first four weeks postpartum are critical for establishing successful breastfeeding. On average 11-18% of mothers wean or stop exclusive breastfeeding during this time (Cameron et al., 2010; Sheehan et al., 2006). This is consistent with the results of an intervention study conducted previously by Bonuck et al. (2005) that found "the steepest decline in breastfeeding occurred between 2 and 6 weeks, when rates decreased by 15% and 10% in the intervention and control groups, respectively" (p. 1418). For this reason, efforts to sustain breastfeeding during this time are paramount to have an effect on duration at later time periods.

Establishing successful breastfeeding in the first four weeks postpartum sets the stage for continued breastfeeding success and can result in more women meeting their breastfeeding goals, as well as the goals set by Healthy People 2020. Semenic et al. (2008) describes breastfeeding as a "multidimensional health behavior shaped by a complex interplay of biological, psychological and social factors" (p. 429). The postpartum period is a time of change, which can result in stress and hinder establishment of breastfeeding. During this time, the mother is experiencing physiologic changes due to fluctuations in hormones, her body recuperating from childbirth, and returning back to its pre-pregnancy state. To add to the stress during this period the mother infant dyad is learning to breastfeed. Breastfeeding is actually a learned process (WHO, n.d.) that comes easily for some mother infant dyads, but not others. This might be contrary to what most mothers anticipate, since breastfeeding can be seen as instinctual or natural and not learned. Due to shortened lengths of hospital stays lactogenesis II, or copious milk secretion, has not occurred in most mothers. Lactogenesis II occurs on days two or three up to day eight postpartum and is the process where milk volume increases rapidly due to a rapid drop in progesterone after the delivery of the placenta (Powers, 2016). For this reason, the mother's full milk supply has not yet been established prior to discharge and neither has effective breastfeeding.

Barriers to breastfeeding are numerous and have remained consistent over time with little variance across nations, races, ethnicities, economic status, age, parity, or delivery type. The 2011 Surgeon General's Call to Action to Support Breastfeeding identified seven barriers to breastfeeding: 1) knowledge; 2) social norms; 3) support; 4) embarrassment; 5) lactation problems; 6) employment and childcare; and 7) health

services (U.S. Department of Health and Human Services [HHS], 2011). An eighth category, media and marketing practices, was added based on identified barriers that did not fit into the categories created from the Surgeon General's report (Labbok & Taylor, 2008). Additional barriers have been identified with the most commonly occurring being returning to work, perception of insufficient breast milk, difficulty breastfeeding, lack of support, breastfeeding in public, availability of formula, and cultural norms.

There is a paucity of both qualitative and quantitative research investigating breastfeeding in the first four weeks postpartum. Researchers have focused their attention on breastfeeding duration to meet the standard of six months without regard to the most important time when breastfeeding is being established during the first four weeks. After reviewing 67 randomized and quasi-randomized controlled trials (56,451 mother-infant pairs) Renfrew et al. (2012) found that all forms of extra breastfeeding support, such as one-on-one and group support provided by professional and lay supporters, showed an increase in duration for any form of breastfeeding (risk ratio (RR) for stopping any breastfeeding before six months 0.91, 95% confidence interval (CI) 0.88 to 0.96). Other studies of breastfeeding support have not only found an increase in duration, but a significant increase in duration (Bashour et al., 2008; Carlsen et al., 2013; Chen, 1993; Fallon et al., 2005; Tahir & Al-Sadat, 2013). Bashour et al. (2008) and Tahir and Al-Sadat (2013) reported a significant positive effect on the duration of exclusive breastfeeding ($p < 0.05$). Carlsen et al. (2013) and Fallon et al. (2005) reported a significant positive effect on exclusive and partial breastfeeding ($p < 0.05$ & $p < 0.01$ respectively). Chen (1993) reported significant positive results for multiparous breastfeeding mothers ($p < 0.05$). Although the intervention studies reported an increase

with respect to breastfeeding duration, an in-depth interview could have added richness to the data. Quantitative measures limit the participants to predefined responses, whereas a qualitative approach allows the participant to talk specifically about what her breastfeeding experience was like. Breastfeeding is a complex biopsychosocial experience and to provide effective support it needs to be understood in her particular context. Qualitative studies in and of themselves can be used prospectively to inform the development of an intervention study or retrospectively to determine why the intervention worked or not. Bottorff (1990) provides an eloquent explanation for the need of qualitative breastfeeding research when she wrote, "In decontextualizing women's experiences of breastfeeding, we lose sight of the fullness of life and, therefore, risk losing the meaning we hope to capture" (p. 202). Since 1990 some qualitative breastfeeding research has been performed, but the quantity is still sparse and lacking in the first four weeks postpartum.

Problem Statement

Exclusive breastfeeding for the first six months of an infant's life and complimentary feeding until at least the first year of life has been proven to provide substantial benefits for both infant and mother. The benefits of breastfeeding are widely known and documented in both lay and professional literature, yet breastfeeding rates at six months have remained well below desired levels. In order to fully understand the breastfeeding experience in the early postpartum period and all the intricacies involved, researchers need to provide mothers with the opportunity to talk about their experiences in their own words during the time when there are the most difficulties.

Purpose Statement

Despite all of the research that has been conducted with regard to the initiation and duration of breastfeeding, understanding the lived experience of breastfeeding in the early postpartum period is greatly lacking in the literature. Understanding what mothers experience that either encourages them to continue breastfeeding or wean provides valuable information for researchers wanting to develop interventions that enhance breastfeeding duration or other health professionals who are providing assistance to breastfeeding mothers or those wanting to breastfeed. The early postpartum period is the timeframe when breastfeeding is established and where either success or weaning occurs.

The purpose of this study was to more fully understand, in their own words, the experiences of mothers who began breastfeeding their infant after birth and may or may not be breasting at four weeks postpartum.

Research Question

The following research question guided this study: What are the lived experiences of breastfeeding mothers during the first four weeks postpartum?

Summary

Breast milk provides infants with optimal nutrition for their first year of life and has been proven to have numerous health benefits for both infant and mother, yet breastfeeding rates at six months and one year have failed to meet standards established by Healthy People 2020. Mothers' can face a tremendous number of barriers while trying to establish breastfeeding in the early postpartum period and some persevere while others wean. Understanding what occurs during the critical period when breastfeeding is being established will provide insight into how to assist mothers to overcome the various

barriers and persevere. Hermeneutic research of the lived experience will deepen understanding of trying to establish breastfeeding in the early postpartum period.

Chapter 2: Review of Literature

Literature Search Strategies

A preliminary review of the literature was conducted utilizing Cumulative Index to Nursing and Allied Health Literature (CINAHL) Plus with Full Text, MEDLINE, Ovid Nursing Database, and SocINDEX. The search was conducted using the following search terms: Breastfeeding, attitude, promotion, duration, attrition, discontinuation, barriers, communication, father, spouse, significant other, husband, and various combinations of these terms. In order to gain a better perspective of breastfeeding in the first four weeks postpartum some searches were limited using age groups: Infant and Newborn and birth-1 month. A final search technique utilized was reviewing the reference lists from studies that were pertinent to the topic of the search.

Breastfeeding Defined

Breastfeeding is inconsistently defined, which can be a source of confusion when trying to search the literature. These inconsistencies have been noted as early as 1991 and as recent as 2012 (Labbok & Starling, 2012; Noel-Weiss et al., 2012). Breastfeeding is a general term used to define feeding an infant breast milk as either a primary or partial source of nutrition and can also be defined as feeding the infant directly from the breast or feeding expressed breast milk from a bottle. Two predominately used sets of breastfeeding definitions used internationally come from Interagency Group for Action on Breastfeeding (IGAB) and WHO. The IGAB is an ad hoc working group of representatives from United Nations International Children's Emergency Fund (UNICEF), United States Agency for International Development (USAID), Swedish International Development Cooperation Agency (SIDA), and WHO. The IGAB defines

six types of breastfeeding: 1) Exclusive; 2) almost exclusive; 3) full; 4) full breastmilk feeding; 5) partial (high, medium, or low); and 6) token (Labbok & Starling, 2012). The WHO also defines six types of breastfeeding: 1) Breastfeeding; 2) exclusive breastfeeding; 3) predominant breastfeeding; 4) full breastfeeding; 5) complementary feeding; and 6) bottle feeding (Labbok & Starling, 2012). The types of breastfeeding and definitions of each group can be found in Table 1.

"Inconsistencies among definitions and categories call into question data generated from studies, comparisons across studies, and the value of current evidence as a guide to practice" (Thulier, 2010, p. 628). The inconsistencies noted are not detrimental to only research, but also to mothers' understanding of the terms, specifically exclusive breastfeeding. For the purposes of this study the WHO term breastfeeding is being used, which is receiving breastmilk directly from the breast or expressed breastmilk given through the use of a bottle.

Table 1

IGAB and WHO Breastfeeding Definitions

Interagency Group for Action on Breastfeeding (IGAB)	Definition	World Health Organization (WHO)	Definition
Exclusive	No other liquid or solid is given to the infant.	Breastfeeding	Receiving breastmilk (direct from the breast or expressed).
Almost Exclusive	Giving vitamins, minerals, water, juice or ritualistic feeds given infrequently in addition to breastfeeds.	Exclusive Breastfeeding	The infant has received only breastmilk from their mother or a wet nurse, or expressed breastmilk, and

Interagency Group for Action on Breastfeeding (IGAB)	Definition	World Health Organization (WHO)	Definition
			no other liquids or solids with the exception of drops or syrups consisting of vitamins, mineral supplements, or medicines.
Full	Including exclusive and almost exclusive.	Predominant Breastfeeding	The infant's predominant source of nourishment is breastmilk. Infants may also receive water and water-based drinks, fruit juice, oral rehydration solutions and other drops, such as vitamins, but they cannot have any food-based fluid.
Full Breastmilk Feeding	Receiving expressed breastmilk, in addition to breastfeeding.	Full Breastfeeding	The combination of exclusive and predominant breastfeeding.
Partial (High, Medium, Low)	Mixed feeding, designated as "high", "medium", or "low" based on proportion of feedings that were breastfeeding.	Complimentary Feeding	The child has received both breastmilk and solid (or semisolid) food.

Interagency Group for Action on Breastfeeding (IGAB)	Definition	World Health Organization (WHO)	Definition
	Partial breastfeeding of expressed milk would not be considered a breastfeeding session for the calculation of the levels within partial.		
Token	Minimal, occasional, and irregular breastfeeds (for comfort or with less than 10% of the nutrition thereby provided).	Bottle Feeding	Receiving liquid or semisolid food from a bottle with a nipple/teat.

Breastfeeding Benefits

The literature is replete with evidence of the benefits of breastfeeding for the infant and mother. The number of benefits for the infant outnumber those for the mother, but nonetheless they are still important for maternal health. This section will discuss both infant and maternal benefits of breastfeeding.

Infant

The benefits of breastfeeding, especially exclusive breastfeeding, results in a decreased risk of developing certain illnesses and diseases, such as acute otitis media, atopic dermatitis, non-specific gastroenteritis infection, and childhood leukemia, as well as resulted in a reduced risk of hospitalization due to lower respiratory tract diseases in

infants less than one year of age, overweight and obesity in adolescence and adulthood (Horta et al., 2013; Ip et al., 2007), and decreasing the risk of sudden infant death syndrome (SIDS) (Ip et al., 2007). In a systematic review of the long-term effects of breastfeeding Horta et al. (2013) also found there is strong evidence of a positive causal effect of breastfeeding on IQ.

Two significant benefits of breastfeeding include a reduction in the severity of RSV and non-specific gastrointestinal infections. Still et al. (2017) conducted a systematic review and found that evidence suggests "in high-income counties (HIC) the risk of acute respiratory infections and diarrhoea is also substantially reduced when an infant is breastfed exclusively" (p. 1). Respiratory syncytial virus is a highly contagious virus that is easily spread and is one of the leading causes of infant morbidity and mortality in developed countries (Dixon et al., 2010). Each year there are an average of 100,000 to 126,000 infants under the age of one year admitted to the hospital for RSV (CDC, 2014). Breastfeeding for less than four months has been shown to result in more severe RSV disease with supplemental oxygen use and the possibility of mechanical ventilation, as well as longer hospitalizations (Bachrach et al., 2003; Chatzimichael et al., 2007; Dixon et al., 2010).

Numerous components, like Ig A, are present in breast milk that inhibit binding of bacteria and viruses in the gastrointestinal tract and provide passive immunity (Chung et al., 2007). The benefits that antibodies in breast milk provide and their ability to protect infants against RSV has been widely noted in the literature, yet breastfeeding duration goals set by Healthy People 2010 were not met. The ODPHP continued to note the

importance of breastfeeding by retaining breastfeeding duration goals for Healthy People 2020.

Maternal

The AAP 2012 policy statement notes several maternal benefits (AAP, 2012). These include a decreased risk of breast and ovarian cancers, postpartum blood loss, as well as cardiovascular benefits. Breastfeeding has been found to have a protective effect against certain types of breast cancer, especially when continued for a longer duration (Chung et al., 2007; Faupel-Badger et al., 2013; Ip et al., 2007; Pechlivani & Vivilaki, 2012). A meta-analysis conducted by Chowdhury et al. (2015) found when reviewing high-quality studies that breastfeeding for >12 months was associated with a 23% lower risk of developing breast carcinoma (OR 0.77, 95% CI 0.72–0.83). The same meta-analysis also found a 30% reduction in the risk of ovarian carcinoma for mothers who had ever breastfed when compared with those who never breastfed (OR 0.70, 95% CI 0.64– 0.77).

Breastfeeding can prevent postpartum hemorrhage because as the infant suckles at the breast it causes the pituitary gland to release oxytocin. This release of oxytocin stimulates uterine contractions and this process minimizes postpartum blood loss, as well as aids in involution of the uterus (Callaghan et al., 2010). Currently 11.4% of maternal deaths in the United States are related to hemorrhage (CDC, 2019).

Schwarz et al. (2009) examined data collected from the Women's Health Initiative to determine cardiovascular benefits. The data reviewed consisted of five cardiovascular risk factors identified at the baseline clinic visit, as well as the incident cardiovascular disease over the 7.9 years the women were followed. They found that an “increasing

duration of lactation was associated with a reduced prevalence of cardiovascular risk factors including hypertension, diabetes, and hyperlipidemia, even after adjustment for sociodemographic variables, lifestyle variables, family history, and BMI category ($p<0.01$)" (Schwarz et al., 2009, p. 4).

Breastfeeding Duration

The recommended duration of exclusive breastfeeding by the AAP is about six months with continued breastfeeding for one year or longer as mutually desired by mother and infant (AAP, 2012). The six-month breastfeeding goals set by Healthy People 2020 have yet to achieve fruition with 81.1% (goal 81.9%) of mothers ever breastfeeding, 51.8% (goal 60.6%) breastfeeding at six months, 44.4% (goal 46.2%) exclusively breastfeeding through three months, and 22.3% (goal 25.5%) exclusively breastfeeding through six months (CDC, 2017; ODPHP, 2017).

Thulier and Mercer (2009) found in their literature review that breastfeeding duration is influenced by numerous demographic, biological, social, and psychological variables. Demographic variables identified include race, age, marital status, level of education, socioeconomic status, and receiving support from the Women, Infant, and Children (WIC) program. Research conducted by Haughton et al. (2010) confirmed older maternal age was significantly associated with breastfeeding duration ($p = .001$). A recent study using logistic regression analysis revealed yet again that maternal age was the most significant predictor of longer breastfeeding duration (Dunn, Kalich, Fedrizzi, & Phillips, 2015). Dunn, Kalich, Fedrizzi, and Phillips (2015) also reaffirmed that higher educational level attainment (associate degree or higher) was a significant factor in a breastfeeding duration of at least six months ($p = .04$). Biological variables associated with a decrease

in breastfeeding duration include insufficient milk supply, infant health problems, maternal obesity, physical challenges, maternal smoking, parity, and method of delivery (Thulier & Mercer, 2009). Social variables include maternal work, support from significant others, inconsistent professional support, and appropriate professional support (Thulier & Mercer, 2009). As recent as 2015 maternal employment status was confirmed to still have a significant negative effect on breastfeeding duration with only 15% of full-time and 30% of part-time mothers continuing to breastfeed for six months or more compared to 55% of mothers who identified as other, such as unemployed or stay at home (Dunn, Kalich, Fedrizzi, & Phillips, 2015). Another variable that can be seen as a social factor and has an effect on breastfeeding duration is if the mother was breastfed as a child (Dunn, Kalich, Fedrizzi, & Phillips, 2015; Haughton et al., 2010) or had a family member who breastfed (Haughton et al., 2010). Psychological variables include prenatal maternal intention, maternal interest, and maternal confidence (Thulier & Mercer, 2009). Additional variables that influence breastfeeding duration and are psychological in nature include beliefs about breastfeeding ($p = 0.003$-0.04 depending on belief), mother is less likely to agree formula is as healthy as breast milk ($p = 0.002$), and beliefs that breastfeeding is difficult to learn ($p = 0.03$) (Dunn, Kalich, Fedrizzi, & Phillips, 2015).

Breastfeeding Barriers

Barriers to breastfeeding can be described as reasons why a mother stops breastfeeding, but they are not always identified as such in the literature. Breastfeeding barriers are numerous and can be categorized in a variety of ways. The HHS (2011) published a report entitled *The Surgeon General's Call to Action to Support Breastfeeding*. This report identified seven barriers to breastfeeding: 1) knowledge; 2)

social norms; 3) support; 4) embarrassment; 5) lactation problems; 6) employment and childcare; and 7) health services. The barriers identified in the Surgeon General's report will be used as categories for the barriers identified in the literature. An additional category of barriers is negative messages about breastfeeding in media and marketing practices (Labbok & Taylor, 2008).

Knowledge

From a qualitative, exploratory study utilizing focus groups McFadden and Toole (2006) found that women lacked knowledge about certain aspects of breastfeeding. A literature review by Whalen and Cramton (2010) confirmed that mothers who lacked breastfeeding education had a shorter breastfeeding duration. While mothers knew breastfeeding was best for the infant, they lacked knowledge of the specific benefits of breastfeeding (Dunn, Kalich, Henning, & Fedrizzi, 2015; McFadden & Toole, 2006). Mothers and fathers also lacked knowledge about how to manage potential breastfeeding problems (Tohotoa et al., 2009). Since breastfeeding is seen as a natural process mothers expect it to be easy and the actual reality can in many cases be different (Debevec & Evanson, 2016; Mozingo et al., 2000; Williamson et al., 2012). This difference was attributed to breastfeeding education that was not as realistic as it needed to be (Debevec & Evanson, 2016; Goodman et al., 2016), as well as images of breastfeeding as natural or straightforward (Williamson et al., 2012).

Mothers were not the only individuals who lacked breastfeeding knowledge. Health care providers, such as nurses, obstetricians, and pediatricians, also lacked appropriate breastfeeding knowledge. This knowledge deficit may be due to a lack of or

insufficient breastfeeding education and training (Sriraman & Kellams, 2016; Strong, 2013; Wallis et al., 2011).

Social Norms and Psychosocial Factors

Social norms are "expectations about how different people will evaluate our behavior and our willingness to be guided by their evaluation" (Glanz et al., 2008, p. 172). Psychosocial factors include personal attitude and emotional state. Attitudes about breastfeeding can have a positive or negative effect on breastfeeding duration. Attitudes about breastfeeding come from many sources and can include a mother's significant other, family, friends, and health care providers (Sriraman & Kellams, 2016; Thulier & Mercer, 2009). Mothers who have learned about and been exposed to breastfeeding through their family are more likely to look at breastfeeding favorably, as well as believe they are able to be successful at it (Kearney, 1988). On the converse, certain attitudes can have an adverse effect on breastfeeding and include: 1) positive attitude toward bottle feeding; 2) time demands of breastfeeding combined with demands of family members; and 3) feminist attitude: "personal control of life choices for women may be in conflict with a professional stance that favors one feeding choice and rejects others" (Kearney, 1988, p. 101). In addition to attitudes, emotional states can influence breastfeeding (Kearney, 1988). Emotional stress caused by breastfeeding difficulties can result in breastfeeding cessation (Kearney, 1988). From a community or social networks perspective women who discontinued breastfeeding prior to 6 months may have been in an environment in which breastfeeding was not the social norm (Dunn, Kalich, Fedrizzi, & Phillips, 2015; Kim et al., 2017a).

Support

The Surgeon General's report (2011) identified poor family and social support as barriers to breastfeeding. Neifert and Bunik (2013) conducted a literature review that confirmed inadequate family and social support were still barriers. Prior to the Surgeon General's report and the literature review by Neifert and Bunik (2013), Labbok and Taylor (2008) utilized a conceptual framework that looked at the impact of certain factors on exclusive breastfeeding. One obstacle or constraint identified was limited social, economic, and political support. On days three through 12 after birth there is a shift of support away from hospital professional support to support of family and friends. When the mother's significant other and family are supportive of breastfeeding the rate of exclusive breastfeeding is increased. Clifford and McIntyre (2008) found in their literature review that the father of the baby, family, and friends are central for providing support and advice, with the father being most influential. In a study of mothers' participating in WIC of Hartford, Connecticut, they identified their mother as the main person they would go to if they had difficulties, followed by maternal relatives (Haughton et al., 2010). They also found that contrary to other studies spouses were not a common source of support for mothers when they were experiencing breastfeeding difficulties. If the mother's main support person is her significant other and he is not supportive of breastfeeding it can result in stress. Breastfeeding is an intimate experience between a mother and child and in some cases a woman's spouse or significant other may become jealous of the infant (Kearney, 1988). This jealousy can lead to the mother having negative feelings toward her significant other, which can lead to marital stress (Kearney,

1988). This stress can make breastfeeding seem difficult, which as mentioned previously can result in breastfeeding cessation.

Professional support of health care providers or lack of support can also have an influence on breastfeeding duration (Debevec & Evanson, 2016; Dunn, Kalich, Henning, & Fedrizzi, 2015; Gill, 2009; Kearney, 1988; Teich et al., 2014). Debevec and Evanson (2016) conducted a literature review that found when support was helpful it improved the mother's confidence and knowledge, but when health care providers' behavior was perceived as disengaged, judgmental, or presumptive it had a negative influence on breastfeeding. Additional reasons why health care providers do not provide mothers with appropriate breastfeeding support is the health care provider may have a knowledge deficit, as well as they may feel uncomfortable telling a mother how to feed her baby (Sriraman & Kellams, 2016), or they may lack the cultural background and competency to provide effective support (Besore, 2014). Health care providers, specifically nurses, may lack the appropriate amount of time to assist a newly breastfeeding mother (Strong, 2013) and once the mother infant dyad is discharged from the hospital there is lack of continued support (Goodman et al., 2016). Even if professional support is available to mothers there may be limited third party payment, which can make support unobtainable (Labbok & Taylor, 2008).

Embarrassment

In American culture breasts are viewed as sexual objects (Besore, 2014; Danawi et al., 2016; Dunn, Kalich, Henning, & Fedrizzi, 2015) and not for their biologic purpose, which is to produce milk and feed a child. This can result in a "conflict between sexuality of breasts and functionality of breasts for feeding" (Kim et al., 2017a; Sriraman &

Kellams, 2016, p. 716). These perceptions can result in embarrassment (Gill, 2009; Hedberg, 2013; Hogan, 2001; Neifert & Bunik, 2013; Shannon et al., 2007), discomfort (Dunn, Kalich, Fedrizzi, & Phillips, 2015), reluctance to breastfeed in public (Otoo et al., 2009), and feelings of inappropriateness (Glover et al., 2009) when breastfeeding in front of others and in public. These perceptions are not just limited to the United States though, as research has found mothers in Africa (Otoo et al., 2009), Canada (Hogan, 2001), and New Zealand (Glover et al., 2009) experience the same emotions.

Lactation Problems

The most common lactation related problems noted in the literature are nipple pain (Bergmann et al., 2014; Besore, 2014; Cohen et al., 1999; Dunn, Kalich, Fedrizzi, & Phillips, 2015; Gill, 2009; Haughton et al., 2010; Hawley et al., 2015; Hedberg, 2013; Hogan, 2001; Li et al., 2008; Otoo et al., 2009), difficulty in latch-on (Besore, 2014; Dunn, Kalich, Fedrizzi, & Phillips, 2015; Gill, 2009; Jones et al., 2015; Li et al., 2008; Teich et al., 2014), and insufficient milk supply (Bergmann et al., 2014; Besore, 2014; Desai et al., 2014; Dunn, Kalich, Fedrizzi, & Phillips, 2015; Dunn, Kalich, Henning, & Fedrizzi, 2015; Gill, 2009; Hawley et al., 2015; Hedberg, 2013; Hmone et al., 2016; Hogan, 2001; Jones et al., 2015; Kair & Colaizy, 2016; Li et al., 2008; Neifert & Bunik, 2013; Nguyen et al., 2011; Otoo et al., 2009; Sutton et al., 2007; Teich et al., 2014; Wambach et al., 2016; Yimyam, 2003). Nipple pain in the early breastfeeding period is typically related to mechanical issues such as inadequate infant latch and and/or poor suck (Powers, 2016). If these circumstances are allowed to continue it can result in blistering, cracking, and bleeding of the nipple. An infection can result from an organism that enters the mother's body through a blister or crack. Infection is usually the cause of

sudden or late pain with candidiasis being the most likely cause (Powers, 2016). In a survey of mothers who received the WIC services in southern New Hampshire, Dunn, Kalich, Fedrizzi, and Phillips (2015) found that mothers who breastfed for less than six months were more likely to report pain as an issue for stopping when compared to mothers who fed for at least six months (24% versus 2%; $p < 0.01$).

Latch-on is another issue that can be related to the baby and/or mother. In some cases the mother's nipple is too large for the infant to take in the nipple and adequate breast tissue (Powers, 2016). In this circumstance, the mother will have to express her milk and feed it to the infant and wait for the infant's mouth to grow larger (Powers, 2016). Another latch issue is related to the mother's nipple being flat or inverted, as well as having large breasts (Powers, 2016). In these circumstances the mother can be taught methods to assist with latch.

The final lactation issue is related to the infant's nutrition and specifically the mother's milk supply. Mothers experienced fear, uncertainty, and worry regarding their milk supply being insufficient (Gill, 2009; Hedberg, 2013; Hmone et al., 2016; Wambach et al., 2016) and did not trust their body to produce enough (Dunn, Kalich, Henning, & Fedrizzi, 2015). These emotions can lead mothers to have a perceived insufficient milk supply. In a study conducted by Dunn, Kalich, Fedrizzi, and Phillips (2015) 62% of mothers in the study who discontinued breastfeeding prior to six months reported too little breast milk as a reason for stopping breastfeeding as compared to 42% of mothers who breastfed for at least six months ($p = 0.01$). The baby's behavior can also contribute to mother's perceived insufficient milk supply. Mothers may misinterpret normal infant behavior as being hungry (Neifert & Bunik, 2013), so they discontinued breastfeeding

because the milk did not seem to satisfy their infant (Cohen et al., 1999; Kair & Colaizy, 2016; Li et al., 2008).

The problems listed above are universal and not exclusive to the United States. Literature reviews and research has found that mothers in Africa (Desai et al., 2014; Otoo et al., 2009), Canada (Hogan, 2001; Sutton et al., 2007), Honduras (Cohen et al., 1999), Myanmar (Hmone et al., 2016), Thailand (Yimyam, 2003), and Vietnam (Nguyen et al., 2011) experience the same issues.

Employment and Childcare

Returning to work has been identified as a barrier to breastfeeding (Besore, 2014; Dunn, Kalich, Henning, & Fedrizzi, 2015; Gill, 2009; Goosen et al., 2014; Hedberg, 2013; Hmone et al., 2016; Kim et al., 2017b; Nguyen et al., 2011; Thet et al., 2016). Women who were employed full-time (Dunn, Kalich, Fedrizzi, & Phillips, 2015) or returned to work prior to the infant was six months old were less likely to continue breastfeeding beyond six months (Hmone et al., 2016). Returning to work might hinder breastfeeding success for several reasons: 1) lack of paid maternity leave; 2) brief maternity leave; and 3) lack of workplace support for the breastfeeding mother (Labbok & Taylor, 2008). When returning to work mothers may not have access to a breast pump due to a lack of insurance coverage or inadequate insurance coverage (Dunn, Kalich, Henning, & Fedrizzi, 2015) and they are costly when purchasing out of pocket (Kim et al., 2017b). Once in the workplace the mother may lack time to pump or there may be inadequate pumping facilities available (Hedberg, 2013).

Health Services

Numerous health care system and provider obstacles and constraints can have an effect on breastfeeding success and include: 1) limited provider awareness, knowledge, skills, practices and self-awareness; 2) unnecessary use of medical interventions during labor and delivery; 3) insufficient attention to immediate skin-to-skin contact at birth and evidence-based breastfeeding support practices; and 4) insufficient numbers of providers skilled in both clinical and social support (Labbok & Taylor, 2008). The health care provider issues related to knowledge and support have been identified above in the knowledge and support sections. Because of health care providers' knowledge deficit, inappropriate maternity care practices may be implemented within the health care setting. Inappropriate breastfeeding practices within the health care setting include unnecessary formula supplementation (Nguyen et al., 2011; Wallis et al., 2011; Whalen & Cramton, 2010), pacifier use (Whalen & Cramton, 2010), separation of mother and infant (Sriraman & Kellams, 2016; Teich et al., 2014), and reliance on personal or clinical breastfeeding experience when a nurse lacked adequate breastfeeding education (Strong, 2013). Additional practices within the health care facility that can have an adverse effect on breastfeeding include a perceived lack of structural support from hospitals by the way of breastfeeding assistance while in the hospital (Kim et al., 2017b), lack of timely follow-up after hospital discharge (Neifert & Bunik, 2013), inadequate availability of banked donor human milk (Neifert & Bunik, 2013), and delayed intervention for breastfeeding difficulties (Neifert & Bunik, 2013).

Within the community various breastfeeding barriers have been identified. Initial barriers a mother may encounter are a lack of access to health care (Danawi et al., 2016)

and in the case of immigrant mothers, a general lack of health services information (Besore, 2014). After breastfeeding is initiated, support is needed to help maintain it. Even though breastfeeding support after initiation is essential, some mothers have felt there was a lack of community-based postnatal support, such as information on where to go for breastfeeding assistance after discharge (Goodman et al., 2016). Labbok and Taylor (2008) also identified that public health programming in support of exclusive breastfeeding outside of WIC are rare, and there are limitations within WIC. The WIC program is seen as contradictory by some mothers though, as the program supports breastfeeding on one hand, but also promotes formula (Hedberg, 2013; Neifert & Bunik, 2013; Teich et al., 2014).

Social, economic, and political factors. Labbok and Taylor (2008) identified "limited community, political, legislative, and regulatory awareness of the public health impact and concomitant limited attention to action" (p. 5) as obstacles and constraints to exclusive breastfeeding. The obstacles and constraints identified in their report to the U.S. Breastfeeding Committee are the same factors described under other headings in the breastfeeding barriers section and include: 1) lack of societal awareness and support; 2) limited third party payment; 3) rarity of public health programming in support of exclusive breastfeeding outside of WIC, and limitations within WIC; 4) lack of paid maternity leave/brevity of any leave; and 5) lack of workplace support. Additional political barriers have been identified in the literature. A literature review conducted by Nguyen et al. (2011) to investigate sub-optimal infant and young child feeding in Vietnam identified "a lack of political will and coordination in enforcement and compliance of the Code on marketing and usage of infant formula" (p. 370). In the

United States Dunn, Kalich, Henning, and Fedrizzi (2015) conducted focus groups of field-based professionals to collect perceptions on factors that determine a woman's decision to breastfeed. Two of six focus groups "identified knowledge around breastfeeding laws as well as the enforcement of those laws and health insurance coverage as being both barriers and contributors to breastfeeding" (p. 13).

Media and Marketing Practices

This category was not identified by the Surgeon General, but it is one that has been noted in the literature. Labbok and Taylor (2008) identified several media and marketing practices that can have an adverse effect on exclusive breastfeeding: 1) aggressive marketing of formula to mothers through hospitals and clinicians' offices; 2) creating public misperceptions; and 3) lack of media representation in television and cinema of exclusive breastfeeding as normative behavior.

Formula marketing has been identified in literature reviews and research studies as a barrier to breastfeeding in the United States and at least two other countries (Dunn, Kalich, Henning, & Fedrizzi, 2015; Gill, 2009; Nguyen et al., 2011; Susiloretni et al., 2015). A literature review conducted by Gill (2009) found that Hispanic mothers in the United States identified receiving formula samples from the hospital as a barrier to breastfeeding. The most common barrier identified by all six focus groups of field-based professionals (physicians, midwives, lactation consultants, registered nurses, WIC nutritionists and peer counselors, childcare providers, La Leche League leaders, and social support agency staff) was the availability of free formula samples from hospitals or through direct mailings to the home (Dunn, Kalich, Henning, & Fedrizzi, 2015). Marketing of infant formula is not exclusive to the United States but has also been

identified as a barrier to exclusive breastfeeding in Indonesia (Susiloretni et al., 2015) and Vietnam (Nguyen et al., 2011). The focus group study conducted by Dunn, Kalich, Henning, and Fedrizzi (2015) also found that four of six focus groups identified limited positive portrayals of breastfeeding in the media, such as in television and movies, as being barriers to breastfeeding.

Summary

Extensive research on breastfeeding has resulted in thousands of articles studying the various aspects of this feeding method. The benefits of breastfeeding have been demonstrated for both infant and mother, especially when it was for a longer duration.

In the same light numerous barriers were noted. Breastfeeding barriers were universal across the board and not confined to one group of mothers. Despite the universality of the barriers, there were mothers who persevered and continued to breastfeed while others succumbed to them and weaned. This is one area that was not as extensively investigated in the literature, especially from the mothers' perspective of the lived experience.

Chapter 3: Methods

Research Design and Method

As I was looking at the breastfeeding experiences of mothers in the early postpartum period, I determined interpretive phenomenology was appropriate for this study because I believe researchers cannot separate or bracket themselves from the phenomena of interest. Interpretive phenomenology allows the researcher to use their experience with the phenomena to conduct interviews and interpret the data that provides a richness that might not be possible through description alone. Eight mothers who delivered in the past four to six weeks were interviewed with a follow up interview as needed to verify information and interpretations. The methodology and evaluation strategies are described in this chapter.

Methodology

This study utilized a Heideggerian hermeneutic phenomenological approach. A hermeneutic phenomenological approach "is essentially a philosophy of the nature of understanding a particular phenomenon and the scientific interpretation of phenomena appearing in text or written word" (Streubert & Carpenter, 2011, p. 84). The interpretation is designed to "unveil otherwise concealed meanings in the phenomena" (Spiegelberg, 1975, p. 157). The hermeneutic phenomenology used was based on the philosophy of Heidegger. Heidegger's philosophy is considered to be interpretive and will be discussed in more depth below. Heideggerian hermeneutics was used to better understand the lived experience of breastfeeding mothers in the first four weeks postpartum.

Historical and Philosophical Perspectives of Phenomenology

"Hermeneutics and phenomenology are human science approaches which are rooted in philosophy" (van Manen, 1990, p. 7) and are considered to be both philosophies and research methodologies (Laverty, 2003). It has been argued that phenomenological and hermeneutic phenomenological traditions lend themselves to a methodology, as opposed to a method. Laverty (2003) states "a methodology is not a correct method to follow, but a creative approach to understanding, using whatever approaches are responsive to particular questions and subject matter" (p. 28). Laverty (2003) goes on to say a "methodology uses good judgement and responsible principles rather than rules to guide the research process" (p. 28). The proceeding paragraphs will describe the principles that guide phenomenology and specifically Heideggerian hermeneutic phenomenology.

Phenomenology is considered to have two main approaches: descriptive and interpretive (Sloan & Bowe, 2014). When discussing phenomenology, the names of two German philosophers will always be mentioned: Edmund Husserl and Martin Heidegger. Husserl is considered to be the father of modern-day phenomenology, which began with the publication of his book in 1900 titled *Logical Investigations* (Smith, 2016). Husserl's form of phenomenology is considered to be descriptive but may also be known as transcendental (Sloan & Bowe, 2014) and examines subjective or lived human experience (Lopez & Willis, 2004). His examination focused on understanding beings or phenomena and "on the structure of experience, the organizing principles that give form and meaning to the life world" (Laverty, 2003, p. 27). A key component of Husserl's philosophy was bracketing, which is examining and acknowledging any preconceptions or beliefs held by

the researchers and participants in order to achieve objectivity (Lowes & Prowse, 2001). In this way observers (researchers) "take a global view of the essences discovered, i.e. settling for generic descriptions of the essences and phenomena without moving to a 'fine-grained' view of the essences and phenomena under investigation" (Sloan & Bowe, 2014, p. 1294).

The second important person known historically with regard to phenomenology is Martin Heidegger. Heidegger studied phenomenology under Husserl, but "challenged some of his assumptions about how phenomenology could guide meaningful inquiry" (Lopez & Willis, 2004, p. 728). Heidegger's form of phenomenology is considered to be interpretive, which may also be known as hermeneutic phenomenology or existential phenomenology (Sloan & Bowe, 2014). Hermeneutic phenomenology has both descriptive (phenomenology) and interpretive (hermeneutic) elements in it. Heidegger's philosophy emphasized 'Dasein', which is "translated as 'the mode of being human' or 'the situated meaning of a human in the world" (Laverty, 2003, p. 24) or simply 'being-in-the-world'. Participants' experiences and interpretation of being-in-the-world are learned through ones' environment (Lopez & Willis, 2004; Lowes & Prowse, 2001). An individual's environment includes language, history, and culture (Lowes & Prowse, 2001) and is a part of who they are and shapes their everyday perspectives. "Heideggerian phenomenologists propose that all knowledge originates from people who are already in the world and seeking to understand other people who are already in the world" (Lowes & Prowse, 2001, p. 474). For this reason, bracketing is not used in Heideggerian hermeneutic phenomenology. If the researcher brackets themselves, they are no longer 'being-in-the-world' with the participant. 'Being-in-the-world' is thought to

be the most important characteristic of hermeneutic phenomenology because the researcher (interpreter) needs prior understanding of the phenomenon (Lowes & Prowse, 2001), nor can they separate themselves from the world in which they live (Lopez & Willis, 2004). This prior understanding, which can be described as presuppositions or expert knowledge, on the part of the researcher are valuable guides to inquiry and, in fact, make inquiry a meaningful undertaking (Lopez & Willis, 2004). The utilization of this philosophy acknowledges that the researcher "can only interpret something according to their own beliefs, experiences, and preconceptions" (Lowes & Prowse, 2001, p. 474). In the case of this study, I have a background in mother/baby nursing care, which included assisting and educating mothers on breastfeeding their newborn. In addition to professional experience with breastfeeding I have personal experience with being unsuccessful at breastfeeding.

Another important concept of Heidegger's hermeneutic phenomenology is coconstitutionality. Coconstitutionality is where "the meanings that the researcher arrives at in interpretive research are a blend of the meanings articulated by both the participant and researcher within the focus of the study" (Lopez & Willis, 2004, p. 730).

Lopez and Willis (2004) best described the difference between descriptive and hermeneutic phenomenology when they stated:

> The hermeneutic phenomenologist, rather than seeking purely descriptive categories of the real, perceived world in the narratives of the participants, will focus on describing the meanings of the individuals' being-in-the-world and how these meanings influence the choices they make (p. 729).

In other words, the focus of hermeneutic phenomenology "is on understanding the meaning of experience by searching for themes, engaging with the data interpretively,

with less emphasis on the essences that are important to descriptive phenomenology" (Sloan & Bowe, 2014, p. 1296).

The Hermeneutic Interview

The interview is a fundamental source of information for qualitative research, including hermeneutic phenomenology. In the hermeneutic interview "the interviewer seeks to uncover what it means to be as it shows up or reveals itself through story" (Vandermause & Fleming, 2011, p. 369). Contrary to Husserlian philosophy, Heideggerian philosophy believes the "interviewers' backgrounds, prior knowledge and preconceptions of study phenomena are interconnected with the research" (Lowes & Prowse, 2001, p. 475) and are an integral part of the interview process. A Heideggerian phenomenological interview is co-created by both the interviewer and respondent and results in a product created by the interaction of the two individuals where the responses of one influences the other (Lowes & Prowse, 2001). "Co-participation by interviewers and participants enables a deep understanding of the phenomena under study to emerge, and this has the potential to add to the richness of data collection and analysis" (Lowes & Prowse, 2001, p. 476). Interviewers also need to recognize and record their preconceptions and the effect they might have on the interview and the participants' responses (Lowes & Prowse, 2001). This documentation was achieved through the use of a reflective journal. Spence (2016) described a reflective journal as a "dialogical relationship between self (researcher) and other (literature and raw data) through the use of question and possible answer [and in this way] the researcher is tracking the dialectical nature of his or her thinking" (p. 839), which provides a decision trail. This journal may also contain field notes, which are a written account of observations made during an

interview that are not always obvious from an audio recording (Vandermause & Fleming, 2011).

Pseudonyms

"Naming of participants in a hermeneutic study is important because of the attention to language and meaning particular to such a study" (Vandermause & Fleming, 2011, p. 370). "Pseudonyms may be chosen to protect the participant's identity, but they may also be symbolic relative to the phenomenon of interest" (Vandermause & Fleming, 2011, p. 370). In this study, I asked mothers to choose their own pseudonyms. If the mother could not decide on a pseudonym or did not want to pick her own, I chose one for her.

Participants

This study utilized purposive and snowball sampling to recruit eight postpartum mothers. Inclusion and exclusion criteria are as follows.

Inclusion criteria included mothers who:

1. Delivered a singleton term infant at 37 weeks or later with no complications.
2. Delivered within the past four to six weeks.
3. Were able to complete the initial interview prior to the end of their 6th week postpartum.
4. Reported they were breastfeeding at the time of hospital discharge or two days after a home birth and may or may not be currently breastfeeding.
5. Were over the age of 18 years.
6. Spoke and understood English.

Exclusion criteria included mothers who:

1. Were under the age of 18 years.
2. Delivered multiple infants at the same time (for example twins or triplets).
3. Delivered an infant at a gestation of less than 37 weeks.
4. Delivered an infant that required care other than that provided in a normal newborn nursery (care provided in special care nursery or neonatal intensive care unit).
5. Was discharged from the hospital formula feeding only or began formula feeding immediately after a home birth.
6. Delivered more than six weeks ago.

Laverty (2003) described the aim of participant selection is:

> To select participants who have lived experience that is the focus of the study, who are willing to talk about their experience, and who are diverse enough from one another to enhance possibilities of rich and unique stories of the particular experience (p. 29).

Although not stated as such, Laverty's description of the aim of participant selection is actually purposive sampling. Purposive sampling is used in qualitative research and "this means the inquirer selects individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon in the study" (Creswell, 2013, p. 156). Snowball sampling was also used in addition to purposive sampling. Snowball sampling is where participants are asked to refer other participants for the study (Polit & Beck, 2004).

For Institutional Review Board purposes, the sample size chosen for this study was up to 20 mothers, although Crist and Tanner (2003) stated a sample size "is considered adequate when interpretations are visible and clear, new informants reveal no

new findings and meanings from all previous narratives become redundant" (p. 203). Creswell (2013) identified phenomenological research that used from one to 325 participants, he goes on to say that "Dukes (1984) recommends studying 3 to 10 subjects, and one phenomenologist, Riemen (1986), studied 10 individuals" (p. 157).

Data Collection

Mothers were recruited using flyers, social media, and word of mouth. Flyers with a brief description of the study and the contact information for the researcher were posted in the community (e.g. health care provider offices and on campus) in Indianapolis, Kokomo, and surrounding areas in central Indiana (see Appendix A). Study information was also placed on social media and passed word of mouth, so mothers outside of central Indiana could be included. Mothers who were interested in the study could call, text, or email the researcher. When a mother self-identified, the researcher contacted the potential participant to determine eligibility. If a mother met eligibility requirements and would like to take part in the study, a date, time, interview type (in-person, Skype, or telephone), and location was scheduled for the first interview. If the mother was not yet four weeks postpartum, but otherwise met inclusion criteria, an interview was scheduled for a date when she was four to six weeks postpartum. Prior to the interview, as part of the recruitment process the researcher discussed with the mother the phenomenon of interest and emailed or mailed her a copy of the study information sheet. By providing the mother with the study information prior to the interview "this allows time for the participant to think about the experience more deeply" (Vandermause & Fleming, 2011, p. 370).

Prior to beginning the first interview the study information sheet was reviewed again with the participant. Exempt research is not subject to the formal informed consent

requirements, so for this reason only the study information sheet was reviewed with the participants. During this review the purpose, procedures, risks and benefits, and confidentiality were explained, and mothers were re-assured their participation was voluntary and confidential and they could decline to proceed with the interview at any time. After review of the study information sheet a few demographic questions were asked about ethnicity, race, delivery type, number of children, previous breastfeeding experience, and her infant's birth weight and length. The interview then proceeded with the question listed below (see Appendix B for the complete interview guide). The other statements or questions listed were used as probes. Additional questions were focused on the mothers' experience by asking open and reflexive questions and probes (Vandermause & Fleming, 2011).

1. Tell me about your breastfeeding experience from the time you left the hospital (or 2 days since delivery in the case of home births) until now.
    a. Tell me more about that…
    b. Tell me about a breastfeeding experience that sticks out to you.
    c. Others have told me about… Was that like what you experienced?
    d. Additional probes will be based on information the participant shares

The use of open-ended questions and probes were used to ensure the mother, as opposed to the researcher, was determining the content discussed (Phillips & Cohen, 2011).

The initial interview lasted from 26-65 minutes depending on what the mother wanted to share about her breastfeeding experience and was digitally recorded using the

researcher's password protected iPhone. Upon completion of the interview mothers were asked to refer any mothers they know who met inclusion criteria by giving them a flyer and/or the researcher's contact information or referring them to the social media post. Mothers were not required to provide the researcher with names. As a token of appreciation mothers who took part in the study were offered a total of two Walmart gift cards, one after each interview. The gift card after the first interview was in the amount of $20 and the gift card after the second interview was in the amount of $10. If the interview was in person the mother was given the gift card immediately, otherwise it was mailed within three business days. After the first interview, the mothers were asked permission to contact them via telephone for a follow-up interview (if necessary) with the purpose of clarifying any information or interpretations from the first interview.

The interview recordings and any recorded field notes were transcribed verbatim by the researcher or a professional transcriptionist as soon as possible after the interview had occurred. When the researcher conducted transcription, it took place in a private room with the door closed. All data were uploaded to a Box @ IU health account, which is a password protected secure cloud storage and collaboration system. Box Health data accounts are approved to store and share protected health information (PHI). Box Health Data Accounts are set up, monitored, and audited by Clinical Affairs IT Service. The only individuals with access to this account and data were the researcher and her research committee. Once a recording was successfully uploaded, it was deleted from the researcher's password protected iPhone. The researcher verified the accuracy of the transcriptions by reading the transcript while listening to the interview. Printed transcripts were formatted with wide margins in order to write notes, as well as lines and pages were

numbered. The transcripts were de-identified by the researcher. De-identification included removing names and locations, as well as any other information that might allow identification of the mother. When names were removed from transcripts they were replaced with the mothers' preferred pseudonym or the pseudonym given to them, other names were replaced with a generic identifier or name. Each participant was given a study ID number so that names, contact information, and any other identifiers were not linked to the recordings or transcripts. Recruitment was through self-referral, so mothers had the option not to participate without consequences.

Data Analysis

Data were analyzed using a Heideggerian hermeneutic approach. Various ways have been described in the literature to conduct hermeneutic data analysis, but for this study the data analysis process described by Cohen et al. (2000) was utilized. Cohen et al. (2000) described the analysis process as having four steps: 1) immersing oneself in the data through careful reading; 2) data transformation or reduction; 3) thematic analysis; and 4) writing and re-writing.

Data analysis began with the researcher immersing herself in the data through reading each transcript in its entirety several times to get an understanding of the whole. The purpose of this immersion is to establish "some initial interpretation of the data that will drive later coding of the data in subsequent phases of analysis" (Cohen et al., 2000, p. 76). In this initial interpretation, the researcher identified the essential characteristics in the data from each interview.

The second phase was data transformation or reduction. Initially the researcher had to discern relevant information from non-relevant. Interviews were re-organized to

place discussions of like topics together, eliminate digressions, and simplify language (e.g. removing words like "you know"). After this process has occurred the transcripts were read line-by-line and coded, which was necessary for thematic analysis. Thematic analysis occurred after reading the transcript in its entirety.

The third phase of analysis was thematic analysis. Once the researcher had an understanding of the overall text, the transcript was read line by line and pertinent information was underlined or highlighted and a tentative theme was assigned. Themes may have more than one component, which may be called subthemes, categories, or elements of the major theme (Cohen et al., 2000). Exemplars were also identified at this time and extracted from the text. Exemplars are "bits of textual data in the language of the informant that capture essential meanings of the themes" (Cohen et al., 2000, p. 80). By extracting the exemplars with similar themes, it allowed for side by side comparison.

The fourth and final phase was writing and re-writing. Cohen et al. (2000) described writing and re-writing as a reflective process which included "movement from identification and comparison of themes to a coherent picture of the whole" (p. 81). During this phase, the researcher wrote memos or summaries of her understanding of the mothers' experiences, which had been represented through themes and exemplars.

It should be noted that although each phase is listed as distinct, the phases can overlap because of the circular process of examining narratives, which is known as the hermeneutic circle. The hermeneutic circle is where "understanding is achieved by our interpreting within a circular process, in which we move from a whole to the individual parts and from the individual parts to the whole" (Debesay et al., 2008, p. 58). In this circular process, the researcher used the individual mother's breastfeeding experience to

get a better understanding of breastfeeding as a whole and then used the understanding of the whole experience to look in more depth at individual experiences. This process could keep going, but the researcher continued with the hermeneutic circle until she felt her interpretation reflected what the essences of the mothers' experiences were. "The process helps the researcher to understand the statements in relation to the larger context of the individual's experience" (Phillips & Cohen, 2011, p. 241). As part of the analysis process a reflective journal, which included field notes, was also used to provide depth to the interpretation. The researcher used the transcripts and her knowledge and experiences with breastfeeding, as well as her knowledge of the mother and what occurred during the interview to provide an interpretation of the experience.

Research Committee

The research committee consisted of the researcher (SR), who as mentioned previously has a background in mother/baby nursing care, which included assisting and educating mothers on breastfeeding their newborn. Additional members included faculty members who have experience in midwifery (DS), maternal-child nursing (CS), health communication (JB), and pediatric nurse manager (LW). All four faculty members have experience with various qualitative methods.

Establishing Rigor and Trustworthiness

The quality of the methods, data, and final product were ensured by using the four criteria outlined by Lincoln and Guba (1985): Credibility, dependability, confirmability, and transferability.

Credibility was confidence in the truth of the findings (Cohen & Crabtree, 2006) and involved activities that demonstrated the quality of being trusted, convincing or

believable (Lincoln & Guba, 1985). Credibility was not only reliant on the procedures used to generate and analyze findings, but on the self-awareness of the researcher throughout the research process (Lowes & Prowse, 2001). Credibility was enhanced by the use of three procedures. First, starting with the third phase of the analysis process (thematic analysis) SR would periodically meet with DS. During these meetings interpretations were discussed. If there were any uncertainties with interpretations they were discussed until consensus was achieved. Second, reflective journals were used to provide documentation of the researcher's (SR) thought process during data analysis. The journals provided a decision trail that Laverty (2003) describes as a necessary component of demonstrating credibility. Third, direct quotes from the mothers were used when possible to ensure the "perspectives of participants are represented as clearly as possible" (Fleming et al., 2003, p. 119).

Dependability was concerned with demonstrating the findings were consistent and could be repeated (Cohen & Crabtree, 2006). Dependability was enhanced through an in-depth description of the methodology in order to allow the study to be replicated (Shenton, 2004). This criterion was also established through the memos or summaries written during the writing and re-writing phase and through the reflective journals, as they demonstrated the decision process.

Confirmability was the extent to which the research findings were shaped by the participants and not the researcher (Cohen & Crabtree, 2006). Confirmability was achieved through the use of an audit trail, previously mentioned as a decision trail. An audit trail chronicles the thought process of the researcher and research team during the analysis process. "Clear connections between how the research moved from raw data to

interpreted meanings are made through detailed examples" (Streubert & Carpenter, 2011, p. 93). The reflective journal served as a means to document the thought process of the researcher and the research team throughout the data collection and analysis period.

Transferability was demonstrating the findings were applicable in other contexts (Cohen & Crabtree, 2006). Although some researchers believe transferability is not possible in qualitative work because the findings are "specific to a small number of particular environments and individuals" (Shenton, 2004, p. 69), Lincoln and Guba (1985) argue against that. Lincoln and Guba (1985) believed that transferability was made by the reader, as long as sufficient contextual information was provided (Shenton, 2004). Transferability was enhanced through the use of thick descriptions. Shenton (2004) describes thick descriptions as the "provision of background data to establish context of study and detailed description of phenomenon in question to allow comparisons to be made" (p. 73).

Summary

Breastfeeding rates at six months and one year have failed to meet standards established by Healthy People 2020. In order to increase these rates, the early postpartum period needs to be investigated from the mothers' perspective, as this is the timeframe when breastfeeding is being established. Heideggerian hermeneutic phenomenology is valuable for providing an understanding of the meaning of lived experience of learning to breastfeed in the early postpartum period.

This study contributed to the literature by examining the establishment of breastfeeding in the early postpartum period. This study was unique in the fact that it examined not only mothers who were successful at establishing breastfeeding, but also

mothers who were not successful. Understanding both perspectives provided insight into how to assist mothers to overcome the various barriers and persevere.

Chapter 4: Findings

Heideggerian hermeneutic phenomenology is used to explore the lived experience of individuals and to uncover the concealed meaning within the experience. Heideggerian hermeneutic phenomenology is a methodology which is comprised of both descriptive (phenomenology) and interpretive (hermeneutic) elements. The researcher was able to gain an understanding and knowledge of what it was like for mothers breastfeeding their infants in the early postpartum period. This was achieved through the process of interviewing and interpreting the narratives of eight mothers as they revealed their experiences of establishing breastfeeding (See Table 2 for demographics). Upon completion of the initial coding the researcher reviewed codes created during the line by line process and began placing like or similar content into broad categories. This resulted in 26 themes. The researcher then returned to each theme to determine which participants were coded to each theme and provided a sense of what was said. Based on this review the researcher was able to determine which themes were most meaningful. Throughout this process the hermeneutic circle was used. The researcher used each individual mother's breastfeeding experience to get a better understanding of breastfeeding as a whole and then used the understanding of the whole experience to look in more depth at individual experiences. This resulted in the 26 themes being condensed to one constitutive pattern with four themes and nine subthemes (See Figure 1). "At any time during the hermeneutical analysis patterns may emerge. A [constitutive] pattern is present in all the interviews and expresses the relationship among the themes; it is the highest level of hermeneutical analysis" (Diekelmann, 2001, p. 56). van Manen (1990) defines a theme as "the experience of focus, of meaning, of point" (p. 87).

Figure 1

Constitutive Pattern, Theme, Subtheme

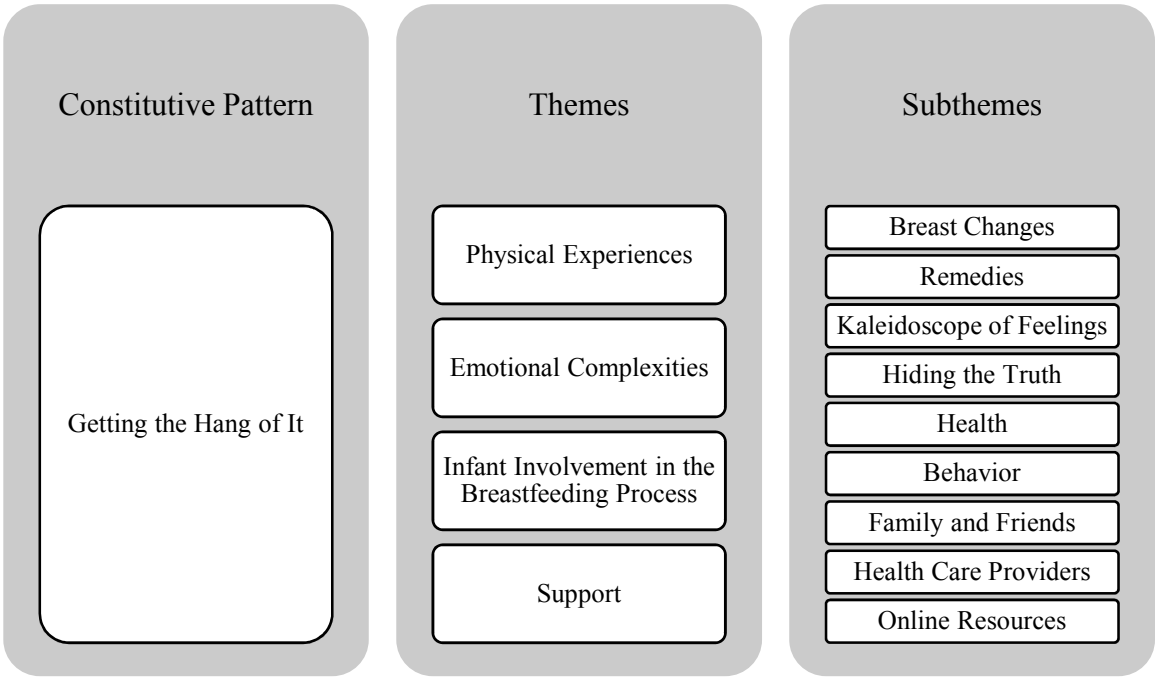

Table 2

Demographics

Demographic Characteristic	n	%	Participants' Pseudonym
Race			
Non-White	0	0	
White	8	100	
Ethnicity			
Hispanic	0	0	
Non-Hispanic	8	100	
Age			
< 21	0	0	
21-23	2	25	Brooke & Faith
24-26	2	25	Amelia & Helena
27-29	0	0	

Demographic Characteristic	n	%	Participants' Pseudonym
30-32	2	25	Caitlin & Erin
33-35	2	25	Danielle & Gwen
>35	0	0	
Delivery Type			
C-Section	1	12.5	Erin
Vaginal	7	87.5	Amelia Brooke, Caitlin, Danielle, Faith, Gwen, & Helena
First Child			
No	2	25	Brooke & Caitlin
Yes	6	75	Amelia, Danielle, Erin, Faith, Gwen, & Helena
First Breastfeeding Experience			
No	2	25	Brooke & Caitlin
Yes	6	75	Amelia, Danielle, Erin, Faith, Gwen, & Helena

The constitutive pattern **Getting the Hang of It** emerged during the hermeneutic circle process. This pattern is made up of four themes: *Physical Experiences*, *Emotional Complexities*, *Infant Involvement in Breastfeeding Process*, and *Support*. **Getting the Hang of It** was succinctly described by Amelia using the analogy of learning to ride a bike:

> I was telling myself I know that breastmilk is better and just to get through the first few days, I know it'll get easier once I get the hang of it, it's just something new like learning how to ride a bike, you just have to get through the pain and falling to make sure you're able to ride and go through with it. Once I got the hang of it that was good.

Breastfeeding, like riding a bike, is not an innately known process, but is something you must get the hang of and is learned over time. **Getting the Hang of It** encompasses the myriad aspects of establishing breastfeeding in the early postpartum period from physical and emotional experiences to infant aspects and support.

Physical Experiences

The first theme is *Physical Experiences*. This theme consisted of two subthemes: *Breast Changes* and *Remedies*. Mothers who made comments in this theme talked about how their breasts changed related to lactation, as well as how having an infant feed from their breast caused nipple trauma. The mothers also spoke about the remedies they used to treat the breast changes and nipple trauma.

Breast Changes

Breasts go through a myriad of changes in preparation for lactation that start during pregnancy and continue into the early postpartum period. The mothers described the physical changes their breasts experienced regarding their milk coming in (engorgement, leaking), as well as the physical changes of having an infant feed from their breast (blisters, bleeding, etc.). Lactogenesis II, or copious milk secretion, typically occurs two to four days postpartum (Gresh et al., 2019). A condition known as engorgement can occur during this time, as the breast milk supply is being established. Engorgement is defined as "firm, diffuse, painful overfilling of the breast that occurs due to infrequent or ineffective removal of milk from the breasts" (Mass, 2004, p. 676). Mothers discussed engorgement by name and described leaking, soreness, pain, knots, fullness, and heaviness. Amelia described soreness and how her breasts felt like they were going to explode from the fullness, "Whenever I left the hospital, I was feeding him

probably every 2 to 3 hours, it was very sore, my breasts were very engorged, they felt like they were going to explode but I pushed through it." Faith agreed that engorgement felt like her breasts were going to explode, she also went on to describe what it felt like once the milk was out. "Yes, I feel that my boob would probably explode, yes. I felt like I needed to pop it so it could all just come out. Yes but once I did [breastfeed], the relief was amazing" (Faith). Faith also described heaviness and pain that was associated with engorgement. "It feels like I have this huge weight on my chest, extremely huge weight, but it's so painful." To make light of her situation, Brooke described her engorged breast as a super boob:

> My left side, I refer to it as my super boob [laughing a little]. It produced, I pumped out eight ounces, four ounces two separate times, just hours apart, and fed her on that side all day, I mean not all day, but you know, for each feeding, and still had plenty left over. I was pumping out four ounces just to get comfortable, because it was so full and hard [laughing a little] and very uncomfortable.

The physical changes that occurred from having an infant feed from their breasts were also mechanical in nature. When an infant latches inappropriately it can result in nipple trauma (Berens, 2015). The mothers described the ramifications of this trauma: rawness, blisters, bleeding, and pain. The experience of pain was described in different ways. Erin described the pain she experienced, "I was just in so much pain, it was unbearable. It was very sharp feeling, kind of like a wound getting ripped open again, like every time." Whereas Amelia stated, "It hurt to the touch, like whenever he was sucking it felt like blood coming to the surface." She also described the pain as feeling like a bee sting. Erin described how she made the decision of which breast to feed her infant from when she was having intense pain:

> Yeah, it was probably Sunday night, the first, four or five days after he was born. It was a middle of the night feeding and I had gotten up with him, and I kind of picked the lesser of the two boobs that were really hurting the most, and I remember like latching him on and him sucking that first couple of minutes, and I was just like tears streaming down my face.

Brooke described how her nipples became raw from her daughter cluster feeding:

> There was one night, she had cluster fed like all night long. I think she had been nursing, other than like a couple five-minute breaks, for like two hours straight, and so I was really sore and raw and my husband was like you have plenty in your stash, just give her a bottle [laughing a little].

A cluster feeding is where an infant takes longer to feed, an upwards of 30 minutes, and then wants to feed again a short time later (Tong-Miller & Bernstein, 2019). Cluster feedings tend to occur in the early weeks and months after birth, if the infant is sleeping for longer periods of time, and during growth spurts (Tong-Miller & Bernstein, 2019). Two mothers described bleeding nipples, one related to her infant latching directly on her nipples and the other related to the use of a nipple shield. Erin described her nipple trauma, “One of my nipples was actually bleeding” and she went on to include her nipples were scabbed. Another mother, Danielle, described how she was given a nipple shield while in the hospital to help her baby latch. Unbeknownst to her she was given the wrong size, which resulted in nipple trauma:

> I was using one (nipple shield) that was too small, and then when I went and bought a bigger one, because I'd never breastfed before, so what I thought was normal, because everyone says it kind of hurts in the beginning, was not normal, and the right one actually got a little bit, I don't know, beat up and bled a little bit.

Blisters were another consequence of improper latch. According to Faith the first week was probably the worst with the blisters:

> Yes, because I think with her sucking and me not having her latched on properly, she gave me those blisters and they probably, each one, that time

> period probably, I had blisters probably the whole week I would say but they weren't so painful to where I couldn't latch her on.

Gwen talked about how she thought she had blisters too because her infant had such a powerful latch:

> But, no, I didn't have, I did have a couple of like little blisters though, so like really tiny pinpoint blisters from when he would nurse and he was pinching so hard that he was like, I don't know if he was like pulling a duct, I don't know. The tip would be, it kind of was like a blister. I don't know if it was or not but little swollen bumps that looked like they were filled with either blood or something white so maybe, yeah.

Remedies

When discussing the breast changes they experienced, several mothers also discussed the remedies they used to treat these conditions. A couple of the mothers discussed the remedies they used to treat engorgement, which consisted of milk expression, frozen peas, and warm compresses. More mothers discussed what they used to treat their nipple trauma. A variety of medicinal preparations were used to aid in healing of nipple trauma. The medicinal preparations included: lanolin, other skin salve and balm for blisters, chapping, and cracking; coconut oil for dryness and pain; and a vinegar and water preparation to help take the sting out. Four mothers, Amelia, Faith, Gwen, and Helena, spoke specifically of using lanolin for the nipple trauma they experienced. Faith described how the use of lanolin in combination with breast milk affected her overall breastfeeding experience:

> I got, they weren't awful blisters but yes, they would be, they would look kind of yellowish blisters kind of. They were little but I would put some lanolin on it and some of my breast milk or colostrum in the beginning and that would take it away that day. I wouldn't have them very long. Only one time I got a red blister but it went away really quickly as well. Thankfully that has helped my breastfeeding experience.

She later went on to discuss how she used the breast milk to help specifically with healing and the lanolin to help with nipple protection. Helena discussed her use of coconut oil for dryness, which subsequently helped with pain:

> It [pain] usually was only at the beginning and it would help if I sometimes would put nipple cream of coconut oil on like right before I fed her. Then it wasn't dry and so that helped when it was painful.

In additional to medicinal preparations mothers utilized other methods to deal with nipple trauma, specifically milk expression and the use of a nipple shield and/or shell. Milk expression helped with pain because the infant was not latching onto the nipple and the mother or other family member could feed the infant using a bottle. "I dealt with it [pain] by hand expressing, and even pumping, because that was less painful than having him actually latch on, and then just suffering through" (Erin). She went on to discuss how she fed her infant with the expressed milk and subsequently she used a nipple shield while her nipples healed:

> I was crying, it hurt pretty bad, so at that point we had fed him from a bottle at least once, and we had also fed him from like a medication syringe a little bit as well, and then Monday at the appointment, the nurse that we met with gave me a nipple shield, and so we started using that, just to relieve me of all the pain that I was experiencing and give my nipple areas a chance to heal, and then she kind of coached me and gave me some more tips on breastfeeding, making sure that he was latching properly. I used it until they were fully healed, pretty much until, because I was scabbed, so I pretty much used it until the scabs came off, so I would say it was probably a solid week-and-a-half before I started having occasional moments where I would use it less, and really, I would say probably for the first three weeks, I would say 90 percent of the time I was using a shield.

Erin was not the only mother who used a nipple shield to help with pain. Gwen discussed how a lactation consultant had recommended she try a nipple shield, which did help her not be in as much pain.

Some of the mothers also identified the source for the remedy to treat their breast engorgement or nipple trauma. Sources identified were both professional and personal in nature and included nurses, lactation consultants, a mother, and a mother-in-law.

Emotional Complexities

The second theme is *Emotional Complexities* and encompasses two subthemes: *Kaleidoscope of Feelings* and *Hiding the Truth*. Breastfeeding is an emotionally complex experience that has both ups and downs. The emotions of breastfeeding can be amplified by hormone fluctuations, sleep deprivation, pain, and adjusting to a new way of life.

Kaleidoscope of Feelings

A kaleidoscope is an optical instrument that contains loose bits of colored material between two flat plates and two plane mirrors so when it is moved there is an endless variety of changing patterns (Merriam-Webster, n.d.). When thinking about it from a metaphorical perspective it can apply to the experience of breastfeeding. Each change during the breastfeeding experience can bring a new sense of accomplishment or a challenge.

Sense of Accomplishment. A sense of accomplishment included how the overall breastfeeding experience was going or how the mother felt about a particular aspect of the experience. Breastfeeding had brought seven of the mothers a variety of positive feelings about their experience so far and enhanced their sense of accomplishment.

A few of the mothers spoke positively of their overall breastfeeding experience. Brooke stated she has had "a totally uneventful breastfeeding experience", whereas Danielle stated "Yeah, it has been going pretty well. I think I have had a pretty easy time of it." Danielle and Helena described their overall breastfeeding experience as going well.

Helena also commented how even though her overall breastfeeding experience has been good, it did take "a little while to get the hang of it" and it's "a learning experience". This reinforces the constitutive pattern of **Getting the Hang of It**.

Not all mothers reflected positively on their overall breastfeeding experience, but instead reflected on certain aspects. Gwen put her experience in a positive light by focusing on the benefits for her infant and herself:

> The way that they [infants] learn is you teaching them and even if it hurts the benefits for me I would eventually try to remind myself that the benefits of him having the breast milk outweighed the discomfort that I was feeling physically or emotionally or mentally. You're tired and you're exhausted but I know that this is the best thing for him and it's good for me because it also helps my hormones regulate, it helps me with the weight. There's lots of long-term benefits as well health wise, reduces the risk of diabetes, heart disease and things like that.

Faith and Amelia spoke to the thought of how wondrous breastfeeding was with regard to being able to provide nutrition for their infants. "And just knowing that I was able to provide for him, was just amazing" (Amelia). "I just think breastfeeding is such a cool thing in and of itself that everything she's getting, she's living because of me basically but I knew that I was feeding her and I wanted her, I don't know" (Faith).

Mothers also used words, such as happy, champion, queen, proud, joy, satisfaction, and blessing, to describe how they felt about themselves after a particular breastfeeding experience or where they were in their breastfeeding journey at that point in time. Gwen was feeding her infant pumped breast milk because he would not latch, which was disheartening for her. She described how she felt after one experience where he actually fed from her breast:

> I almost cried. I was so happy. I felt like a champion, like a queen, like I did it and I know it's not about me but it's something that I wanted so much to be able to breastfeed him. I felt like I did, like I was able to kind

> of have a little bit of that bonding moment that I wanted to so much. It for me was very comforting. I don't know if it was for him but he did fall asleep at the end of it and I had pulled his shirt up so his belly was against mine. I was trying to let him have the skin to skin contact. It felt great to me. I don't know if it did to him; I hope it did.

When she spoke about this experience, I could hear how proud she was and the sense of accomplishment she felt in this one feat, having her infant actually latch to her breast and feed.

Erin also felt pride because she was able to make it through a rough period, where she was having a lot of pain, and continue to breastfeed:

> I guess I'm definitely proud that I've been able to get through it, and I got through that week of being in a lot of pain. I'm proud of myself for pushing through it. Now I feel like, I'm just really proud that we got through that hard time.

Beyond feeling happy, like a champion and queen, as well as proud, Faith described how she experienced joy and satisfaction from breastfeeding:

> There's a lot of joy in it too. When she's satisfied, I'm satisfied and just going back to that feeling of knowing that she's depending on me, it gives me a lot of joy to know that I can help her as a mom.

Danielle spoke about her breastfeeding experience as being blessed compared to what it could have been. This was despite the fact that she had to use a nipple shield for breastfeeding because she has flat nipples. Erin and Helena gave more specific examples of blessings with regard to their breastfeeding experience. Both mothers talked about their milk supply, with Helena stating how she felt blessed she was able to produce enough milk to feed her infant:

> So, I have really enjoyed being able to do that [share positive experiences] and I feel very blessed and thankful that I'm able to produce enough to feed her and not worry about if she's getting enough or not. I know some women don't have that, the ability to feel that way. So, I'm thankful for that.

Whereas the blessing for Erin came by the way of the resources provided to help her be successful:

> A lot of times, if you can make it past the first month, I feel like at least with people that I've talked to, you'll do pretty well and be successful with it moving forward, so I definitely felt really lucky that my milk had come in and after that week or so period of just kind of trying to figure it out and failing for a little bit, having those resources at the hospital really, really helped, so that was like a huge blessing, for sure.

A sense of accomplishment was achieved when the mothers' expectations of the overall experience were met or if certain aspects were met. This was evidenced by the various achievements they spoke about.

Challenges. As a contrast to the sense of accomplishment associated with breastfeeding, mothers described challenges too. The challenges mothers felt were mainly inward thoughts related to various perceptions of how their experience was going at a given point in time. Several of the mothers identified the same challenges: frustration, tiredness, and cannot do it; whereas other challenges were only discussed by one mother but deserve mentioning.

Mothers experienced frustration for various reasons: latching issues, infant not wanting to feed directly from the breast, people offering advice that had already been tried, and trying to figure out what the infant wanted. Erin's frustration was related to the fact that her infant had a strong suck, but no matter how many times she unlatched and re-latched she still could not get him on the breast correctly. His incorrect latch resulted in pain, which lead to an acceptance of this situation which she described as her "cross to bear" at that point in time:

> Then there was some frustration at one point, because I just felt like even if I was unlatching him, I couldn't, I still couldn't get him on the right way,

> but his suction was so good, he was at least on. He wasn't coming off, so there was some frustration, but then there was like, I'm trying to think what the word would be. I don't know. I don't know, I just kind of felt like okay, this is just what I'm going to have to deal with right now. Just kind of an acceptance that this is my cross to bear. I'm just going to have to be in pain until I can meet with someone in a couple days, and then getting to the hospital, I think feeling so much better once I had the nipple shield.

Dictionary.com (2020) defines the phrase *cross to bear* as a burden or trial one must put up with, the definition goes on to state it alludes to the cross carried by Jesus to his crucifixion. Her using this saying could imply she was willing to endure pain for her child, just as Jesus endured the pain of crucifixion for his children (human beings). Faith's frustration also resulted from latching issues, but for another reason:

> I know I can definitely feel frustration. Even now sometimes I feel frustration. When she's flustered and she won't latch but she's so hungry that she wants to latch but she's flailing her arms and kind of moving her mouth everywhere and I can't get her on, that's really frustrating. I can feel frustration.

Gwen's situation was different, but still resulted in frustration. She described frustration because her son did not want to feed directly from the breast, which resulted in the need for her to pump and feed him using a bottle:

> I would still do the work and it was very frustrating to keep offering and feeling, not I would say feeling rejected but yet kind of. You know that your infant is not intentionally rejecting you because he's an infant and he can't, he doesn't have that capacity yet at this point to be malicious.

She went on to describe that her frustration was not only because she would keep offering and he would latch, but it was because she had milk which should have satisfied him: "So, yeah, it was very frustrating. He would have the boob in his mouth and milk leaking into it and still not go for it." Beyond frustration she touched on another challenge she experienced during this time, rejection. Her frustration of her infant repeatedly not wanting to feed from her breast lead to a feeling of rejection. Although she

knows this is not intentional behavior on the part of her son, it is still a feeling she is experiencing that contributes to her breastfeeding experience. Gwen also described sometimes feeling frustrated when someone would offer advice with regard to a breastfeeding difficulty, but it was something she had already tried. She feels, especially for new moms, that it is more helpful to just have someone to talk to who will listen and not necessarily offer advice. Frustration can lie in not knowing what an infant wants or needs, which was described by Helena: "I think at times there's been times where I sometimes have been frustrated just kind of figuring out sometimes what she actually needs." Infant cues can be hard to interpret, especially for first time parents.

A second challenge mothers described was being tired. Lack of sleep, which can include less total sleep and more nighttime waking hours, is common in the first four weeks postpartum (Badr & Zauszniewski, 2017). This was confirmed by Amelia, Caitlin, Danielle, Erin, Faith, and Grace who stated they were tired and/or exhausted and discussed the causes and consequences of this, as well as what they would do in order to get some sleep. Danielle, Faith, and Helena discussed how their tiredness was a result of their infants wanting to feed frequently, especially at night. "I feel very tired sometimes, especially at night when I'm not getting that much sleep and she wants to eat. That's exhausting" (Faith). Helena described an experience she had in the early postpartum period, which she later learned was cluster feeding:

> I would get a little more overwhelmed by it [referring to breastfeeding during the first week after delivery] and part of that was just being tired and exhausted from labor and just kind of figuring that out and the lack of sleep and things. There was like one night the first week that she was born and I think it was kind of the point where I felt really overwhelmed because she just wouldn't sleep almost the whole night. I didn't actually even get to bed until after 5:00 in the morning and that was like the first few days after she was born. So just still being super tired from labor and

> delivering her and then just her not sleeping almost for the whole night and just wanting to eat. So just kind of that first week there were a couple of nights that kind of felt that way. At that point I didn't know necessarily what it was. I was just kind of like I don't know why you keep wanting to eat. So there were some people that kind of said that was probably what it was and I asked our midwife. It's like she hasn't done it very often but I do think that there's times when I think they are cluster feedings.

Danielle did not feel like she got very tired until around the one-week mark and again around the three-week mark when her infant was cluster feeding. Her infant's three-week cluster feeding period lasted longer than the previous one, so they used a bottle with breast milk for her husband to feed their infant and she could continue to sleep. Amelia also pumped not only to relieve engorgement, but so her husband or mother could feed their son so she could take a nap because she was so tired. On the converse, Caitlin discussed giving her son formula at night so he would sleep longer between feedings:

> That [when asked about son's nighttime sleep] makes me want to use more formula at night, because he'll sleep better. That's how I got my first son to sleep really well, with formula. Because when I nurse him and if he does go back to sleep, I know he's up again in 45 minutes, but he will fall asleep sometimes from just breast milk, but then he'll wake up in 45 minutes, and then I'll be like okay, here's your formula, go to sleep for a couple of hours. I'm tired [laughs].

Erin described the effect exhaustion had on her ability to think:

> There was definitely a night where I just sat there and cried for the first couple minutes, because it hurt that bad, and I don't know why the thought never occurred to me to try to fix it, or, I don't know, I think I was just exhausted, and I was like this is what I have to do.

Gwen brought two different perspectives related to tiredness and exhaustion: maternal and infant benefits and listening versus giving advice. Despite being tired and exhausted she continued to breastfeed because it is best for her infant and helps her with

hormone regulation and weight loss. She went on to discuss emotional, physical, and mental exhaustion in the context listening versus giving advice:

> Yes, because I think there's something to be said about mothers that you as a new mom a lot of times you know what's best for your child instinctively. You start to learn your child and his cries and what they mean and you start to figure things out about what they mean and when. You don't always need advice. Sometimes you just need people, someone to support you because you're tired and exhausted, emotionally, physically, mentally. You just want somebody to support you, to encourage you that you're doing a good job and keep with it.

A third challenge mothers described was thinking they could not breastfeed. Mothers felt like they could not breastfeed for various reasons: pain, doubt, and feelings related to infant behavior. Experiences related to pain were discussed previously in the breast changes section, so the experience of pain can also result in a mother doubting her ability to breastfeed: "There was a point where I don't think I can breastfeed, I don't think I can do it because of the pain" (Amelia). Erin described how doubt in the early postpartum period made her question her ability to breastfeed:

> I think just being, I don't know if you have any children, but when you're postpartum for the first week or so, there's just a lot of doubt, even like illogical thinking, and he [husband] really helped me to get out of that. He was like you need to think, like there was one point where I was just like what if I said something about just doubting myself, and saying I don't know how I'm going to be able to do this, and he was like if that's how you feel, you're not going to be successful.

Faith described how even though her overall breastfeeding experience was good, she too doubted her ability to breastfeed in the first week postpartum. This doubt, and subsequent questioning of her ability to breastfeed, was a result of frustration because she at times was unable to latch her infant properly. Gwen described how she told her son's doctor that she was ready to give up because of his behavior when she'd try to feed from her breast:

> I'm making an effort to try to connect with him but I do really remember telling the doctor around his one month appointment like I'm at the point where I'm ready to give up. I just can't go through feeling like I'm torturing my son to give him breast milk, milk out of my boob.

Gwen described worry and anxiety, thinking about her milk supply going dry because her infant would not nurse, whereas Helena described worrying that her infant was not getting what she needed. Gwen also identified sadness and frustration related to the potential of having to stop breastfeeding:

> So being able to express that verbally that I was frustrated and feeling in that way I think that helped me a little, but it still didn't take away the sadness and the frustration, the anxiety of what if I'm not going to be able to give him my breast milk because he won't feed and I won't be able to keep up.

Gwen experienced sadness and frustration related to the 'what if' aspect of potentially not being able to provide her infant breast milk, whereas Caitlin's narrative identified sadness and frustration because of the idea of weaning:

> It's just frustrating, sad, because I'm I guess weaning off the breastfeeding idea, but I do want to keep going. Frustrating and sad, but I don't want to be so stressed out. At the same time, I'm overwhelmed. I have my toddler. He's a handful, a big handful and my mom's even here right now, and it's still, he's still a handful. I'm just trying to lower the stress and the frustration, and formula is easier and less stressful.

Caitlin had actually decided to stop pumping a couple of days prior to the interview and provide mainly formula (she had stated she would try to latch him a couple times a day if he appeared interested). Throughout the interview it was obvious she was conflicted with her decision to switch to providing her son only formula. Several times she mentioned she wanted to keep going because this son latched much more easily than her first, but numerous factors kept her from doing so. One potential reason mentioned by

her was related to support. Caitlin described an experience with a lactation consultant that resulted in her no longer seeking assistance with breastfeeding:

> Well, the first week or so, I tried to talk to the lactation consultant, but I felt like every time I talked to them, since I wasn't gung ho with breastfeeding from the beginning, because I did have a poor experience with my son, my first son, every time I talk about it, wanting to formula feed, it was all like oh, okay, you don't want to do that yet, because the latching is harder and all of that stuff, which I understand, but, I guess just talking to them I felt uncomfortable with their approach, because it's all pro breastfeeding, and I felt kind of over here, with formula and breastfeeding, and then with my previous experience, so from there, I stopped contacting them, because I made a decision that I wanted to formula feed as well, and then I never really contacted anyone else.

Brooke also discussed having some challenges related to support. Her experience was different in the fact that she found the lactation consultants to be amazing but did not quite feel like she fit in with the other moms who came to the mom's group conducted by the lactation consultants. During her interview she discussed different support methods she had used, which led to her talking about her perception of not fitting in:

> [In reference to online versus in-person support being better] I mean, I've posted at 3:00 am and had a response within minutes, so probably the Facebook group, just because it's available 24/7 and even though the consultants that run the group are amazing and friendly and I really like them, it still feels like I don't quite fit in with the moms that go there. I only know one other mom, and she doesn't go all the time. This is her second baby and she breastfed her daughter with pretty much no complications, and so I just don't feel like I fit in quite as well with that group.

Breastfeeding can be fraught with challenges in the initial postpartum period. These challenges can be actual or perceived but no matter what contribute to the emotional complexity of this experience.

Hiding the Truth

Erin discussed how she did not exactly talk about the extent of her pain and minimized what she was experiencing. Although she was the only mother who spoke about this it is something that needs to be brought to light. Erin stated, "I do remember at least one person asking me how breastfeeding was going, and it was going well for [baby's name], and I think I said that, I was like yeah, I'm just a little bit sore." She was asked by the researcher, "Was the soreness that you mentioned, was that actual excruciating pain that you were having?" She replied, "Yeah. I don't think I was elaborating, when someone would ask." She went on to say:

> I didn't, I don't really think I ever really explained like 100 percent like how sore I was. I think maybe if somebody would have asked me how are you doing? I don't know, maybe I would have spoken more about the struggles that I was having, I don't know.

This narrative demonstrates how some mothers might not express exactly what they are experiencing unless explicit questions are asked.

Infant Involvement in Breastfeeding Process

The third theme is *Infant Involvement in Breastfeeding Process* and encompasses two subthemes: *Health* and *Behaviors*. As would be expected, a majority of the mothers discussed their breastfeeding experience within the context of their infant's health and/or behavior. When mothers discussed their infants' health they related it more to the reassurances of how they knew their baby was healthy. When mothers discussed their infants' behavior they expressed unfavorable and favorable aspects.

Health

Weight gain was the main reassurance the mothers described for knowing their infant was healthy. When breastfeeding is first being established it can result in worry that the infant might not be getting what they need. This was described by Helena:

> Then there's just times too just I think sometimes being worried. I'm not worried that she's not getting what she needs now because she's gaining weight perfectly fine. I think sometimes in the beginning just getting worried if she's not, that she wasn't getting what she needed.

In an effort to provide reassurance to mothers that their breastfeeding infant is doing well lactation consultants provide times for weight checks. The weight checks are typically offered during a moms group, which Brooke described: "She is gaining weight, and I go to a breastfeeding mothers group on Wednesday where they have a scale for you to weigh the baby and make sure she's gaining, or he's gaining." Erin also described the process in more depth and how it increased her confidence:

> So Wednesday following the Monday wellness check, we met, through [Health Care System Name] there is like a moms' group that meets on [weekday morning]. The child can be like basically a day old through a year old, and there's two nurses, two lactation consultants that are there, and you basically can come in, weigh your child and feed them and then weigh them again, kind of get an idea of how much milk they're getting during the breastfeeding process, since you can't really tell how much they're getting, like you normally can with bottle feeding, and at that appointment, I talked with another one of the lactation consultants, and after that day, I felt 100 percent more confident in continuing to move forward breastfeeding.

In addition to confidence, she equated weight gain to being successful at breastfeeding: "I think within less than a week he was back up to his birth weight, which is really good, and he has been steadily gaining weight since then, so I would consider us that we've gotten pretty successful."

Gwen's experience was different in the aspect that she was not able to consistently feed her son from the breast but had to pump and feed him breast milk from a bottle. Even with this difference she still described health as her son gaining weight. She described how her milk had taken longer to come in and by the time it did her son had "lost quite a bit of weight". In addition to her milk coming in later than expected, her son did not like to feed directly from the breast, so she had started pumping. In order to try to get him to gain weight she would try to have him feed from the breast and supplement with breast milk or formula. She described this process and the reaction of her son's pediatrician:

> When we went to the next visit [after visit where she was told by NP to offer the breast first and then supplement with pumped breast milk or formula] it was nearly a week later and he had gained almost a pound. I think it was maybe five days actually later. She said what you're doing is working. What are you doing? I said I offer him the boob and sometimes he'll take a tiny bit. For the most part he just screams and I give him whatever I pump. She said well keep that up.

Although she supplemented on occasion with formula, she discussed why she preferred breast milk:

> Formula isn't bad but I prefer the breast milk for him. He likes it and he's obviously doing very well health wise with the breast milk that I've been giving him. At least I know that he's healthy starting out.

The health care provider's reassurance of an infant's health during breastfeeding can provide a mother with peace of mind that her infant is doing well. Gwen in her narrative described reassurance provided by the health care provider that her infant was doing well. Amelia described the same scenario of reassurance with the health care provider using weight as validation of her infant's health: "Your son is gaining plenty of weight, he is doing actually better than most breastfed babies, they only gained 7 to 8

ounces a week and he's gained a lot more than that in these two weeks." Gwen also described another form of reassurance her health care provider provided when at an appointment she stated she was ready to give up. He reassured her that no matter how the infant was being fed, he was being fed:

> I'm making an effort to try to connect with him, but I do really remember telling the doctor around his one-month appointment like I'm at the point where I'm ready to give up. I just can't go through feeling like I'm torturing my son to give him breast milk, milk out of my boob. He's like then do whatever you have to do, that's fine. It's okay. It's acceptable. The important thing is that he's healthy and he's fed and he is so you're doing a good job and that's okay. That was very good advice from him and I needed to hear that.

Her last sentence is a powerful reminder for health care providers, sometimes mothers just need to hear that no matter how they are feeding their infant, be it directly from the breast, pumped breast milk, or even formula, their infant is being fed.

Weight gain and health care provider reassurance were two ways mothers identified as ways they knew their infant was healthy within the larger context of breastfeeding. Unlike formula feeding and pumping, breastfeeding directly from the breast does not provide mothers with the objective quantification of how much milk their infant is taking in. Weight gain provided the mothers objective information that told them their infant was getting appropriate nutrition and was healthy. Another form of validation of their infants' health came by reassurance from their health care providers. Health care providers provided general reassurance their infant was doing well or reassured their infant was doing well and used weight gain as a reason for knowing this. Reassurance also came in the form that a fed infant is a healthy infant. Sometimes mothers just need to hear those words from a health care provider to validate their effort, thoughts, and feelings. Mothers can feel a tremendous amount of pressure to have the "perfect"

breastfeeding experience and when this does not occur it can result in the mother wanting to stop. Mothers need to hear that it is okay not to have that "perfect" experience and that giving pumped breast milk or even formula produces a healthy infant.

Behavior

Mothers described infant breastfeeding behavior that was perceived as both unfavorable and favorable. Unfavorable behavior was a way the infant acted that made the mother feel as if he or she did not like breastfeeding, that maybe breastfeeding was not going well, or made breastfeeding difficult. On the converse of that mothers also described behaviors that the mothers perceived that their infants enjoyed breastfeeding or that it was going well. Half of the mothers described both behaviors, whereas others described one or the other.

Unfavorable. Six mothers described breastfeeding behavior of their infants that could be perceived as unfavorable. The main behaviors they described were those that the mother perceived as the infant not liking to breastfeed, whereas the remaining were related to sleep or those that made breastfeeding difficult. Two of the mothers described specific behaviors their infants would display what they perceived as their infant not liking or wanting to breastfeed directly from the breast. These behaviors were screaming, crying, and pulling away from the breast. Gwen described how her son's behavior would change when she placed him at the breast:

> So when I would try to give him the breast like he could go from happy and content to I put him on the boob and he screams like he's in pain like bloody murder like really frustrated, very angry, whole face crinkled up, bright red skin.

Amelia described nearly the same behavior that her son would display: "He was pulling away and screaming and just even after five to ten minutes after he had been done

feeding he would start screaming and wanting more food." Both mothers would still attempt to breastfeed again, but with different results. Amelia did not know what else to do, so she would continue to try and latch and "then he would finally get enough and fall asleep at my boob being satisfied." Gwen did not have the same experience though and she explained the effect it had on breastfeeding experience:

> From like the first week on I did attempt to try to give him milk but it became less and less every day that I would try to offer it because of him being so hungry and he wouldn't take it. He would just scream and scream and scream.

Although Caitlin did not describe specific strong unfavorable behavior like the previous mothers, she did state there were times when she would try to put him on the breast and he would not want it.

Sleep or lack thereof was also viewed as an unfavorable infant behavior. Mothers described frequent waking and being awake for long periods of time. Caitlin described how she would give her son formula so that he would sleep for a couple of hours, otherwise if she breastfed he would only sleep for 45 minutes at a time. Gwen also described how her son would only sleep for 30 minutes to three hours at a time and when he would wake up he would be happy for a couple of minutes and then he wanted his bottle immediately. She did not feed her son formula though, she would pump and he received breast milk in a bottle because he did not like to feed directly from the breast. Helena described an experience she had in the early postpartum period where she was up for most of the night:

> There was like one night the first week that she was born and I think it was kind of the point where I felt really overwhelmed because she just wouldn't sleep almost the whole night. I didn't actually even get to bed until after 5:00 in the morning and that was like the first few days after she was born. So just still being super tired from labor and delivering her and

> then just her not sleeping almost for the whole night and just wanting to eat. So just kind of that first week there were a couple of nights that kind of felt that way.

The final unfavorable aspect described by mothers were infant behaviors that made it difficult to breastfeed, such as flailing arms, putting hands in mouth, moving mouth everywhere, and latching and popping off. Faith and Helena both described how their infants would flail their arms at times when trying to latch and how this made it difficult to breastfeed. In addition to flailing their arms, these mothers described how their infant would put their hands in their mouth (Helena) or move their mouth everywhere (Faith). Faith discussed how she felt when her infant behaved in this manner:

> I know I can definitely feel frustration. Even now sometimes I feel frustration. When she's flustered and she won't latch but she's so hungry that she wants to latch but she's flailing her arms and kind of moving her mouth everywhere and I can't get her on, that's really frustrating. I can feel frustration.

Helena sought the help of her husband with these behaviors until she was better able to deal with them on her own:

> Whenever she is getting ready to eat lately it's been a little bit better but especially the first couple of weeks she just would get like upset almost right before I would latch her on. So sometimes I'd have to have my husband kind of help hold her arms a little bit because she likes to throw them around and put them [hands] in her mouth and I'm like this isn't helping you, latch on. So there was just a lot of those. I feel like this last week it's been a little bit better and I've kind of figured out how to help her not throw her hands around as much and keep them a little more contained so we can latch better.

Brooke described an issue separate from those described by Faith and Helena, her daughter would latch on and immediately unlatch and start crying. She assumed it was because her daughter was hungry, but after posting her situation to a breastfeeding group on social media she learned it might be related to her letdown. Mothers of this group also

recommended what she could do to remedy this and afterwards she had no more problems:

> Like there was one day she was latching on, sucking for half a second, and then popping off and screaming, and I thought she was screaming because she was hungry, and they said it is probably my let down is just really fast, so she's kind of like ah, there's a lot of milk, so they suggested pumping an ounce or two out before I feed her, and the problem went away as soon as I started doing that. They are super-helpful.

Favorable. Unfavorable behaviors were not the only ones described by mothers. Six mothers described breastfeeding behavior of their infants or other characteristics that could be perceived as favorable. The behaviors they described were related to: qualities demonstrated by the infant of doing well, increasing developmental capabilities, and the actual breastfeeding process. Three qualities were explicitly described by mothers that demonstrated infant wellbeing: not crying, sleeping well, and gaining weight. Even though weight gain is not an infant behavior, it is a favorable characteristic that indicated to mothers that their infant was doing well. Erin described the favorable behaviors her son was displaying that let her know he was doing well with breastfeeding and that formula was not an option:

> It was really the only option that I felt good with, because by the time I knew I had plenty of milk, and I knew that he was getting fed, because he wasn't crying. You know when your child is not eating. They're crying constantly. They're very unhappy. He was sleeping well, taking good naps, so I knew that we had what we needed to be successful.

Sleep was also discussed by Helena, but initially it was not necessarily viewed as favorable. While discussing resources used for breastfeeding information, she talked about how her daughter was sleeping really well. Initially it was a cause for concern, but because she was gaining weight she decided to let her sleep longer than usual. These two

mothers described how their infants not crying, sleeping well, and gaining weight was a favorable indicator that their infant was doing well.

The second type of favorable behaviors described were related to increasing developmental capabilities of their infant. Gwen's breastfeeding experience was difficult from the beginning. Her infant did not want to latch to her breast, so she had to pump and give him milk in a bottle. This early experience resulted in feelings of rejection, but as her son began showing behaviors related to increasing developmental capabilities those feelings began resolving:

> Yeah, I think as my baby gets older like he's making eye contact now and he smiles a lot. Especially the first thing in the morning when he wakes up, I'll take a lot of pictures, I dress him up in some little outfits. I'm making an effort to try to connect with him but I do really remember telling the doctor around his one month appointment like I'm at the point where I'm ready to give up.

Even though Gwen was the only mother who described this experience, it demonstrated how something as simple as normal infant development can be seen as a positive sign when the early breastfeeding experience was a struggle.

The final type of favorable infant behavior was related to the process of breastfeeding itself. Mothers described behaviors and characteristics of breastfeeding related to latch, speed of eating, overall ability, behavior, and preference. Caitlin described how her son latched easily and for that reason she continued to try to breastfeed him. This mother was conflicted with regard to switching to feeding with formula only because of her son's ability to latch easily, but he did not want to latch consistently and her milk supply was questionable. Even though she was conflicted this one favorable behavior kept her going for the time being. Overall ability to breastfeed was another favorable behavior. Erin discussed how her son's ability to do everything great with

regard to breastfeeding was exciting for her. To the same extent Danielle described her daughter's ability to adapt and do well with it: "She's really pretty good, because she's been using a pacifier, two different size nipple guards, and now a bottle, and she's fine with all of it". The final two favorable behaviors included behavior and preference. Being excited to eat was how Erin described her son's behavior regarding breastfeeding. This was favorable for her because it was one less stressor. Another favorable infant behavior was noted by Faith when she talked about her daughter's preference for breast over anything. An infant wanting to breastfeed from the breast can be viewed as a favorable behavior when reflecting on the experiences of Gwen.

Support

The fourth theme is *Support* and encompasses three subthemes: *Family and Friends*, *Health Care Providers*, and *Online Resources*. Support can be classified as emotional, informational, or practical (Emmott & Mace, 2015; Thoits, 2011; Toledo et al., 2020). Emotional support can be expressions or demonstrations of empathy, love, caring, esteem and value, encouragement, and sympathy (Thoits, 2011; Toledo et al., 2020). Informational support on the other hand is providing advice or information to help solve a problem or provide guidance on a course of action (Emmott & Mace, 2015; Thoits, 2011; Toledo et al., 2020). And finally, practical support is providing help with specific tasks or material assistance (Emmott & Mace, 2015; Thoits, 2011; Toledo et al., 2020). During the course of their interview mothers identified who provided support, as well as how support was given. Support was provided in verbal and non-verbal ways and most mothers identified support that was helpful as opposed to unhelpful.

Family and Friends

All of the mothers identified at least one family member and/or friend who provided support. These individuals included husbands, mothers and/or mothers-in-law, and friends. Mothers spoke more extensively on how their husbands provided support.

Mothers discussed several ways their husbands' provided practical, emotional, and informational support with the three main being helping with feeding, listening, and encouraging words. Additional ways included caring for the infant, occupying other children, and taking time off of work. Husbands helped with feeding both directly and indirectly. Husbands provided practical support by moving their infant's hands out of the way. This was first described by Amelia and later confirmed by Helena. Amelia stated:

> Most of the time the baby would put his hands over his mouth whenever he was wanting boob, so he [husband] would help him, so he would move his hand out of the way so that I could put my boob in his mouth and get him to latch on.

Helena confirmed how husbands can be helpful by moving their infant's hands:

> [When asked about an experience that sticks out] I think it's not necessarily just one specific experience. Whenever she is getting ready to eat lately it's been a little bit better but especially the first couple of weeks she just would get like upset almost right before I would latch her on. So sometimes I'd have to have my husband kind of help hold her arms a little bit because she likes to throw them around and put them in her hands and I'm like this isn't helping you, latch on. So there was just a lot of those. I feel like this last week it's been a little bit better and I've kind of figured out how to help her not throw her hands around as much and keep them a little more contained so we can latch better. So, yeah, I think that's just kind of like the biggest thing.

Another practical support method she described was how her husband got her nursing pillow and would hand their infant to her. Although not explicit, Gwen stated her husband had taken a week off of work and because of that he helped a little with feedings at night the first week. Two mothers described how their husbands supported them

indirectly with what might seem a small gesture, but it meant enough that the mothers mentioned it during their interview. This indirect emotional support came by the way of getting up and sitting with them when they were breastfeeding at night. “My husband got up with me every three hours for the first couple of nights” (Brooke). Faith also described the feelings that went with this gesture, “He would sit with me which was really nice. I wouldn’t feel like I would be alone.”

The second main way mothers identified their husbands provided support was through listening. Listening was a way for husbands to provide emotional, as well as informational support. The mothers described how their husbands listened to them as they expressed feelings of doubt, frustration, or what Erin described as illogical thinking. In turn their husbands would offer advice on how to remedy the situation, such as unlatching and trying again (Faith), asking someone for help (Faith), or give formula (Gwen). Being able to express their feelings was helpful, but one mother described how it still did not take away all of the negative feelings. Gwen stated:

> So being able to express that verbally that I was frustrated and feeling in that way I think that helped me a little but it still didn’t take away the sadness and the frustration, the anxiety of what if I’m not going to be able to give him my breast milk because he won’t feed and I won’t be able to keep up.

The third main way husbands provided support was through encouraging words. As husbands listened to and witnessed their wives struggles with breastfeeding they provided words of encouragement as a way to provide emotional support. Amelia, Faith, and Gwen gave examples of these encouraging words. Amelia stated, “My husband was a great help, talking to me like babe you can do this, you’re his mother, God chose you for a reason, like he needs you.” Faith’s husband also provided encouragement, “I would tell

my husband I can't do this, and he was like yes, you can." Gwen described how not only her husband, but mom and best friend provided encouragement:

> I think some of the encouraging things that they've [mom, husband, best friend] told me is that you're doing a great job, there's nothing wrong with you, this is just something that's happened and maybe just agree with me like I've never seen this before. You know I haven't either.

Erin's husband used more of a reverse psychology approach in order to encourage his wife. This was not used in a negative or harsh manner though. He also provided encouraging words too. Erin stated:

> He was like you need to think, like there was one point where I was just like what if I said something about just doubting myself and saying I don't know how I'm going to be able to do this, and he was like if that's how you feel, you're not going to be successful. He was like you need to believe that you can do it. You have to believe that you're going to be able to do it, and you are doing it. You just can't see it, so there was a lot of times where he lifted me up and made me feel better, kind of brought me back to reality, like when I was crying about not having milk, but there was milk coming out.

Although not as numerous, mothers also included other ways their husbands provided practical support. Additional ways included: caring for the infant, occupying other children, and taking time off of work. Danielle and Gwen discussed how on at least one occasion their husbands took care of their infant by feeding them with a bottle during the night so they could sleep. Danielle needed rest because of her daughter's cluster feeding:

> At the three week one [cluster feeding] it lasted a lot longer. It lasted probably more than a full week, and so the one time we used the bottle, that was my husband taking care of her so I could just keep sleeping.

Gwen's husband also took care of their infant because she needed sleep, but it was not because of cluster feeding:

> I did ask my husband, even though he has to get up at 4:00 in the morning, like I physically can't wake up for every feeding tonight. I need you to take one. Because I had expressed milk I had the bottle and he did that. That allowed me to at least have a couple more hours of sleep between pumping, so that I could heal, so that I could get some more milk to give him.

Breastfeeding can be difficult enough but having a toddler and breastfeeding can add to the complexity. Brooke described how her husband provided her practical support with breastfeeding their infant, which included caring for their toddler:

> Not all babies do that [wake up when they need to eat], and so that was another thing that was helpful, knowing that I did need to wake her up, so my husband got up with me and made sure she got up and ate, and then he also keeps my two-year-old busy when I need to nurse her, so that's extremely helpful.

It was noted previously how Danielle's and Gwen's husbands helped care for their infants at night so their wives could sleep. This was made possible in part because they were able to take a week off of work when their infants were born.

Mothers and in some cases mothers-in-law (collectively will be called mothers) were also identified as individuals who provided support. Emotional and practical support provided by their mothers was similar to what their husbands provided but was not talked about as extensively. Mothers were uplifting and/or supportive, provided a listening ear, and came to stay for a few days. Being uplifting and/or supportive was simplistic in nature. Amelia described this by stating, "My mom would just talk me through it and made sure I was okay, tell me I'm doing a good job, being uplifting and supporting." Faith had a similar experience as well:

> My mom, his mom, and really close friends that were just encouraging me on my journey of being a new mom. They would just say, hey, how's breastfeeding going or ask if I was breastfeeding and I, every time I would respond, I mean I would say it was going well because it really was.

Having their mothers there to just listen was valuable for Brooke and Gwen. Brooke described her mother as a listening ear and a shoulder to cry on. Gwen's mother and mother-in-law were there to listen to her frustrations about her son not wanting to feed directly from her breast and then not being able to keep up her supply by pumping.

Friends were also identified by Amelia, Brooke, Faith, and Gwen as individuals who provided informational support. In general, these women were described as helpful and supportive but were credited with providing specific information on engorgement and breastfeeding difficulties they had experienced. Faith described how her friends' breastfeeding experiences helped her:

> Then I'm pretty sure all of my friends breastfeed but my two closest friends, they've breastfed all of their kids and they've had a great time with it too but it was good before I gave birth to know that they had difficulties too in the beginning, trying to figure it out and them telling me some horror stories of their blisters and that. It prepared me in a way and so I was grateful for that but yes, they're really encouraging too. They say the same things: you're doing a really good job, keep pushing through it.

The mothers identified various ways in which their family and/or friends provided practical, emotional, and/or informational support. All forms of support they described in a positive light and can be viewed as helpful. Practical forms of support consisted of direct ways in which a mother was helped with breastfeeding such as feeding the infant from a bottle, getting her nursing pillow or handing her the infant. In some cases practical support and emotional support were intertwined as was the case when a husband would get up in the middle of the night and just sit with his wife while she was breastfeeding. This simple act was perceived as a way to keep her from feeling alone. Emotional support also occurred singly when family and friends just listened as they expressed what they were feeling at a given point in time. Listening at times resulted in encouraging words.

Being positive and providing words of encouragement helped the mothers when they were feeling discourage. Expressing their feelings was helpful for most of the mothers but for one it still did not take away the feelings associated with the difficulties she was having and how she was unable to meet the expectations of breastfeeding she had for herself. Emotional support at times was also intertwined with informational support. In the midst of listening to the mothers express their feelings sometimes advice was given on how to remedy a problem. For the most part the advice was perceived as helpful but some advice was not. On occasion the advice was to give the infant formula, which was not viewed as helpful when the mother's goal was to exclusively breastfeed. Although not viewed as helpful, this was just a way for a husband to try and care for his wife when she was in pain or there was an inadequate amount of breast milk.

Health Care Providers

The second subtheme within the Support theme is Health Care Providers. In addition to family and friends, seven of the eight mothers identified health care providers as individuals who provided support. These individuals included physicians and nurses. Physicians and nurses provided support during individual office visits, phone calls, breastfeeding/mom's groups, or prenatal classes. A majority of support provided by health care providers was informational through answering questions, but in one mother's case it was emotional by reassuring her that her infant would be healthy no matter which way she fed him. Health care providers also provided advice on technique, which included proper latching and holding.

Amelia discussed several ways in which she was provided informational support and the impact it had:

> I took a breastfeeding class or becoming a mom class that had breastfeeding classes in it. They call and make sure you're okay, they ask how the breastfeeding is going, do you need help. And just going to the health department for checkups for the baby. When they ask you all those questions regarding how is your breastfeeding going, how is his latch, making sure he's getting a good latch and not just sucking on the actual nipple. That made a huge impact as well because I didn't know he needed to get more than just the nipple [laughing slightly]. So, once I got him to have a good latch, that's whenever the nipple pain eased.

Erin described a similar experience of how not only answering her questions, but also helping with technique helped make her successful at breastfeeding:

> I think part of this, a good contributor to the success that I've had so far is just having people that I can talk to, like professionals who can walk me through it and give me advice and, I don't know, tell me it's okay to kind of shove the kid's head on [laughing], for lack of a better word, that you just kind of have to push them on there if they're not, if they're acting like they, I don't know, that they're being shy about it, I guess would be a good word to use.

Gwen received emotional support in the form of reassurance. Her son was not wanting to feed directly from the breast, so she had to pump and provide him breast milk from a bottle. She was struggling with this until her son's one-month appointment:

> I'm making an effort to try to connect with him but I do really remember telling the doctor around his one-month appointment like I'm at the point where I'm ready to give up. I just can't go through feeling like I'm torturing my son to give him breast milk, milk out of my boob. He's like then do whatever you have to do, that's fine. It's okay. It's acceptable. The important thing is that he's healthy and he's fed and he is so you're doing a good job and that's okay. That was very good advice from him and I needed to hear that. I didn't know I needed to but I did. It's different when you try to tell yourself that than when you hear somebody else say it. So even though I was like I know I'm doing a good job, I know I'm doing the right thing, to hear somebody else say he's healthy, he's fed, you're doing a great job. It was helpful to hear the doctor say that. So hopefully other doctors do that for people too.

Sometimes support from a health care provider came in the form of being frank about the situation and what needed to be done. Erin described how a lactation consultant brought her back to reality:

> I didn't want to keep him from eating. I didn't want to have to take several attempts to get him latched on the right way. I didn't want to, I guess I thought I was doing damage to him by continuing to break the latch and upsetting him, so I would rather, at that time I would rather make sure he was eating, but when talking with the lactation consultant that Monday, she said you're really doing an injustice to him and you, because if he's not latching on right, he's not getting the proper amount of milk, and if he's not latched on to you properly, you're going to be in pain. She was like it's really a lose/lose. You're better off breaking the latch and getting him on the right way, no matter how long it takes, rather than sacrificing both of you. He's still not going to be getting the right amount of milk, and you're going to be in pain basically. She was actually kind of surprised that he was almost back up to birth weight when we were there on that Monday at the appointment. She said he probably just has his head above water. If you don't get the latch properly, then he probably won't be getting, he'll probably start to have weight issues, and that kind of, I don't know, brought me back into reality, to a sense of okay, I have to really focus on getting the latch right. I guess at the time I just didn't really think that I was, I thought I was helping, and I really wasn't, and so that was kind of a moment of like clarity too.

Contrary to the other mothers' experiences, Caitlin, did not find the emotional support she needed. She described her experience as a mother who wanted to provide not only breast milk, but formula to her son. She had attempted to breastfeed her first son, so she knew what to expect, which included a decreased milk supply that necessitated the use of formula. Her experience resulted in no longer seeking assistance:

> Well, the first week or so, I tried to talk to the lactation consultant, but I felt like every time I talked to them, since I wasn't gung ho with breastfeeding from the beginning, because I did have a poor experience with my son, my first son, every time I talk about it, wanting to formula feed, it was all like oh, okay, you don't want to do that yet, because the latching is harder and all of that stuff, which I understand, but, I guess just talking to them I felt uncomfortable with their approach, because it's all pro breastfeeding, and I felt kind of over here, with formula and breastfeeding, and then with my previous experience, so from there, I

> stopped contacting them, because I made a decision that I wanted to formula feed as well, and then I never really contacted anyone else.

Mothers discussed health care provider support mostly from an informational standpoint but included some emotional support. Informational support was viewed as helpful by the mothers because it provided them with knowledge they were lacking or problem-solving skills when they were having difficulties. This information helped decrease pain and was identified as a contributor to successful breastfeeding. Emotional support was also provided and in most cases was helpful. Emotional support by the way of reassurance was helpful when it came in the form of reminding a mother that no matter how breast milk was provided a fed baby was what was important. Being frank about a situation in which a mother thought she was doing the right thing was helpful to her because of the potential negative consequences for her infant and herself. Sometimes health care providers provide that little dose of reality that inexperienced breastfeeding mothers need to make them realize that even though they think they are doing what is best for the infant, they are not. Not every mother found the support she received as helpful. One mother had previous unsuccessful breastfeeding experience and was educated on the process and knew what needed to be done, but also wanted to provide formula supplementation. She sought more emotional support versus informational support for her decision but received information she already knew. This was not helpful to her and actually made her feel more alienated because she did not want to exclusively breastfeed. She ended up not seeking further support and eventually switched to providing her infant formula only.

Online Resources

The third subtheme within the *Support* theme is *Online Resources*. Six of the eight mothers identified social media and/or the internet as online resources used for informational support. Three specific online resources were mentioned: Facebook, Google, and YouTube. Facebook was the most mentioned online resource and was used to ask questions and read answers. Brooke liked using Facebook because it was available 24 hours a day for her to ask questions and receive an immediate response:

> I mean, I've posted at 3:00 am and had a response within minutes, so probably the Facebook group, just because it's available 24/7 and even though the consultants that run the group are amazing and friendly and I really like them, it still feels like I don't quite fit in with the moms that go there.

Danielle also had questions, but did not feel the need to explicitly ask them because of the longevity of the site:

> I've had a lot of questions that aren't really emergent questions, and I haven't actually posted any questions, because it is an older group, I think, and there's thousands and thousands of women on there, so usually you can just search a topic and eight people have already asked it and it has been answered already.

Helena used Facebook groups the same way as Danielle, she read answers to previously asked questions.

Another online resource identified was Google. Faith would use Google to look up questions she had about breastfeeding. Faith gave an example of how she used Google:

> I have Googled questions, so that has helped me too or at least given me ideas of things that I could be doing wrong or could be doing right with how much milk I'm producing, those kinds of questions. Then usually once I get some answers there, I'll ask some of my friends as well, so then I can kind of follow-up because I know Google's not always the most accurate.

Mothers discussed how online resources were helpful with providing them informational support. The online resources identified were helpful in providing both active and passive support. Active support was provided through being able to ask specific questions to other mothers on sites such as Facebook. Passive support was provided by reading information posted on Facebook, Google, or YouTube. Facebook was also helpful because the support is available 24 hours a day and because it provides a sense of belonging that some mothers might not feel from in-person groups.

Chapter 5: Discussion and Conclusions

The purpose of this study was to more fully understand, in their own words, the experiences of mothers who began breastfeeding their infant after birth and may or may not be breastfeeding at four weeks postpartum. A single research question guided this study: What are the lived experiences of breastfeeding mothers during the first four weeks postpartum? The narratives shared by the mothers demonstrated that initiating breastfeeding and sustaining it in the early postpartum period was a complex process. The complexities included: 1) experiences that were physical and emotional in nature; 2) concerns for infant health and behavior; and 3) support from several sources.

The constitutive pattern of **Getting the Hang of It** was selected because the mothers described similar physical and emotional experiences, infant concerns, and sources used for support. *Get the hang of* as defined by Merriam-Webster (n.d.) is an idiom that means to learn the skills that are needed to do (something). As described in the Findings chapter the mothers' narratives described the skills they acquired in order to breastfeed their infants. A discussion of how the themes are consistent or inconsistent with the literature follows.

The mothers' narratives reflect all of the already extensively documented physical experiences of breastfeeding in the literature. These experiences included engorgement (leaking, soreness, pain, knots, fullness, and heaviness) and nipple trauma (blisters, rawness, bleeding, and pain). In a review of literature, Berens (2015) found early nipple sensitivity and engorgement were the most common complaints, as well as some level of pain in the first two weeks. These results differ slightly from a more recent prospective, observational study conducted by Demirci and Bogen (2017), which identified for their

sample the most common problems were related to latch, pain, and perceived insufficient milk. Despite the noted differences, the theme of *Physical Experiences* and subtheme of *Breast Changes* encompasses all of the problems identified in some way by the mothers of this study.

Engorgement was another physical change identified. A Cochrane Review conducted by Mangesi and Zakarija□Grkovic (2016) described breast engorgement "as pathological overfilling of the breasts with milk, characterised by hard, painful, tight breasts and difficulty breastfeeding" (p. 6). "Primary engorgement occurs during stage II of lactogenesis, which generally occurs between the second and fourth day following birth. [Whereas] Secondary breast engorgement is the result of an imbalance between milk production and extraction" (Gresh et al., 2019, p. 764). This is consistent with the experiences of engorgement identified by half of the mothers in this study. Based on their description of the timing of the experience it seems as if two of the mothers experienced primary engorgement and two experienced secondary. No matter which form of engorgement experienced their signs and symptoms are consistent with those previously identified.

Nipple trauma was also identified as a common concern. Feenstra et al. (2018) found in a mixed method study that sore, wounded and/or cracked nipples were prominent in the early postpartum period. Part of this finding was confirmed by Gianni et al. (2019) in which a prospective observational study of 552 mothers found one of the most frequently reported difficulties included cracked nipples. Pain was intertwined in the narratives of the mothers' of this study when discussing engorgement and nipple trauma. In this study, the pain of nipple trauma seemed to be more intense than that of

engorgement, so it is included here. Berens (2015) found a pain rating of five or higher (based on a one to ten scale with ten being the highest) was noted by 58.8% of the mothers during the first week and that percent decreased to 33.9% during the second week, although 85.9% still noted pain at this time. A decrease in nipple pain was previously confirmed in a review that found no matter which treatment method mothers used for nipple pain their pain level decreased to mild by seven to 10 days postpartum (Dennis et al., 2014). Walker (2008) stated in a review that "mothers described numerous aspects of nipple pain that ranges from mild to excruciating, occurring as transient latch-on pain, pain throughout a feeding, pain between feedings, and burning pain" (p. 267). The mothers in this study did not provide a pain rating when discussing the pain they experienced, but their narratives point to the fact that pain was most intense early on and subsided prior to the time they were interviewed at four to six weeks postpartum.

The mothers in this study identified several remedies they used for the relief of engorgement and nipple trauma. Most of the methods identified by the mothers have been identified in the literature, although the effectiveness might not be statistically significant. Gresh et al. (2019) conducted a review of literature on case reports focused on treatment for primary engorgement. Their review identified five treatment categories used for engorgement: 1) medication; 2) hot and cold treatments; 3) cabbage leaf application; 4) nontraditional therapies; and 5) breast massage and milk expression. Most of the interventions in each treatment category resulted in an improvement of the engorgement pain or the engorgement itself and in many cases the results were statistically significant. The mothers in this study used remedies in the categories of hot and cold treatments and breast massage and milk expression. A commonly used remedy for breast engorgement

that was not used by any of the mothers in this study is cabbage leaves. A literature review conducted by Makwana and Tiwari (2018) found an association between the use of cabbage leaves and engorgement relief. For this reason and because of cost effectiveness and ease of use they concluded cabbage leaves should be considered for the treatment of breast engorgement.

The literature for treatment of nipple trauma is more extensive than that for breast engorgement. In like fashion the mothers of this study talked more extensively about the remedies they used for nipple trauma. A Cochrane Review conducted by Dennis et al. (2014) reviewed interventions for treating painful nipples among breastfeeding mothers. This review included four trials of good methodological quality involving a total of 656 women. Overall, the review found there was insufficient evidence to recommend any of the interventions studied (glycerin pads, lanolin with breast shells, lanolin alone, expressed breast milk, and an all-purpose nipple ointment) for the treatment of nipple pain. Despite insufficient evidence they did conclude that "applying nothing or just expressed breast milk may be equally or more beneficial in the short-term experience of nipple pain than the application of an ointment such as lanolin" (p. 2).

Even though Dennis et al. (2014) could not make treatment recommendations based on their review, the mothers of this study found lanolin, other skin salves and balms, and breast milk to be helpful remedies for their nipple trauma and pain. An effective remedy used by one of the mothers in this study that was not used in the same way as identified in the literature was vinegar and water. This mother used vinegar and water on her nipples to help with pain and discomfort. The literature states vinegar and water can be used to treat candidiasis or yeast infections (Hafner-Eaton, 1997; Smith,

2016b). A solution of grapefruit seed extract, vinegar, and water can also be used to treat persistent milk blisters (Bonyata, 2016). The most common use for vinegar was for treatment of candidiasis and not at all for nipple pain and discomfort not related to yeast. Another remedy mothers in this study discussed and found beneficial was the use of nipple shields. This finding was confirmed by Hanna et al. (2013) who conducted an exploratory, longitudinal study to describe the experience of mothers who experienced difficulty in breastfeeding and were given nipple shields to aid initiation. Seven reasons were identified why mothers were using a nipple shield, two of which were painful nipples and cracked nipples. Eighty percent of the mothers in that study rated the 'helpfulness of the nipple shield' as a four or five with five being extremely helpful. Although mothers perceived nipple shields as being helpful their use for prevention and treatment of sore or cracked nipples, flat nipples, oversupply, and to facilitate the infant's attachment to the breast is non-evidence based (Flacking & Dykes, 2017).

The physical experiences of breastfeeding for the mothers of this study are no different than those that have already been documented in the literature. The breast changes of engorgement and nipple trauma are the same ones other mothers have experienced. All of the remedies except one, vinegar and water for non-candidiasis nipple trauma, have been identified in the literature as possible interventions for engorgement or nipple trauma. Although not all of the interventions were found to be statistically significant the mothers in the studies did perceive the remedies to be helpful.

As with physical experiences the mothers' emotional experiences were consistent with those found in the literature, except for those in the theme *Hiding the Truth*. Mothers in this study spoke of the sense of accomplishment of breastfeeding related to the overall

experience, the maternal and infant benefits, and used numerous positive words, such as happiness, joy, and satisfaction. Mothers not only in this study but also a study by Pados and Hill (2019) described the experience of their infant feeding well. In their study "some parents described feelings of pride and contentment that their infant was feeding well", they also described this as a time of bonding when they felt "fulfilled, calm, connected, happy, relaxed, and 'in love'" (p. 410). A pertinent example provided for this finding was the quote "Everything is going well!" (Demirci et al., 2018, p. 169). Wojnar (2004) reported most mothers had positive breastfeeding experiences which included enjoyment, pride, and personal fulfillment.

In most cases the breastfeeding experience cannot go without some challenges. Mothers in this study spoke of frustration, tiredness and that they could not do it because of pain, doubt, frustration, anxiety, and worry related to their infants' behavior. At least one of the sources for frustration identified in this study was consistent with the literature. Pados and Hill (2019) identified frustration as a feeling experienced by mothers, especially when their infant fights being fed at the breast. Mothers can come into breastfeeding with a variety of expectations with one being that it will be easy or natural (Mozingo et al., 2000; Prendergast & James, 2016). When this expectation is not met, as in the case of an infant fighting being fed at the breast, frustration can develop. As discussed in chapter four, one mother in this study described frustration related to her infant's strong suck and latching difficulties as her cross to bear. Demirci et al. (2018) identified frustration as a result of tiredness, especially when the infant was up for a significant amount of time at night. Tiredness was discussed by mothers in this study but not within the context of frustration. Being tired is something to be expected when

breastfeeding a newborn. Tiredness in and of itself might not seem like a challenges but it can contribute negatively to the experience. Demirci et al. (2018) identified how adequate sleep was a factor in "escalation and de-escalation of problems" and provided an excerpt about an experience of cluster feeding one night that caused a woman and her husband to start blaming her milk or that she was doing something wrong (p. 166). The feeling of not being able to breastfeed (cannot do it) is common and can develop for a variety of reasons. Anxiety and worry are two of the emotions that can encompass the feeling of not being able to breastfeed. Anxiety can be caused by questioning if their infant is getting enough milk (Demirci et al., 2018; Pados & Hill, 2019) or if their infant's behavior is normal (Eronen et al., 2007). Worry can occur from the breastfeeding process in general (Eronen et al., 2007) or from questioning if their infant is getting enough breast milk (Pados & Hill, 2019). Pain also contributes to the overall feeling of not being able to breastfeed and the individual feeling of anxiety (Demirci et al., 2018).

In addition to a sense of accomplishment and challenges, the theme of *Hiding the Truth* emerged. The emotional experiences that encompass this theme were only discussed by one mother, but it brings up the question of how many mothers do not express the extent of their pain and minimize it? In this context, hiding the truth was what one mother did to disguise that breastfeeding was not going well for her, although it was going well for her newborn. She used a play on words that most people might not catch when she stated breastfeeding was going well for her newborn and did not elaborate how the experience was going for her. She had described excruciating pain during the interview yet stated when asked by someone how breastfeeding was going, she stated she was a little bit sore. The occurrence of nipple pain in the early postpartum period can

range from 34% to 96% (Dennis et al., 2014), whereas the intensity can range from no pain to severe pain, with the average being moderate to severe (Coca et al., 2019). What is lacking in the literature is information on the phenomenon of minimization of pain by breastfeeding mothers. This brings to mind at least two questions: 1) How often do mothers minimize the pain they are experiencing while breastfeeding in the early postpartum period? and 2) Why do mothers minimize the extent of the pain they are experiencing? The second question could be better understood by using Communication Privacy Management (CPM) Theory. With this theory private information belongs to the person and it is their right to disclose it or not (Petronio & Durham, 2008). Privacy rules are the ways a person makes choices about how private information is provided to others and is based off of at least five criteria: cultural, gendered, motivational, contextual, and risk-benefit ratio (Petronio, 2002, as cited in Petronio & Durham, 2008). American culture tends to view breastfeeding as a private intimate experience that is portrayed as natural and easy. If a mother bases her breastfeeding experience off of this expectation and it is not met, her privacy rules might dictate keeping the information private.

A discussion about breastfeeding cannot occur without including the infant. Breastfeeding is a dyad experience with both mother and infant being involved. In this study the concern for their infants' health centered on reassurances for the mothers to know their infant was breastfeeding effectively enough to be healthy. These reassurances came in the form of weight gain and health care provider reassurance. In addition to their infants' health, the mothers discussed unfavorable and favorable breastfeeding behavior their infant demonstrated that made them feel as if the experience was not going well or that it was. This was consistent with findings by Burns et al. (2016) who stated that

infants were "positioned as a separate individual whose physical attributes, personality and decisions impacted significantly on whether breastfeeding progressed uneventfully or not" (p. 115).

Weight gain is one way mothers in this study identified as knowing their breastfeeding infants were healthy. This is consistent with the literature and breastfeeding websites. Bearzatto (2020) identified weight gain as one of eight signs of milk transfer and adequacy of breastmilk transfer. Similarly, Pados and Hill (2019) identified weight gain as "the most tangible measure of whether the infant is consuming enough to grow, especially within the limited time frame of a primary care visit" (p. 410). In addition to the literature two reputable organizations, La Leche League International (2020) and Office on Women's Health (2018) have identified weight gain as a way for mothers to know their infant is well fed and getting plenty of milk. Mothers in this study knew their infants had gained weight through weight checks at moms' group meetings or during visits with the infants' health care providers. One mother in this study also indicated that at her moms' group they could weigh their infant before and after feeds in order to know how much milk they got during that feed. Powers (2016) identifies this as test weighing and "weight gain in grams is approximately equal to the intake of the infant in milliliters" (p. 395).

In addition to weight gain the reassurance of a health care provider gave mothers piece of mind that their infants were healthy. Health care providers in this study provided general reassurance to mothers that their breastfeeding infant was healthy with one provider using weight gain as an objective measure. Health care provider reassurance provided mothers with comfort in knowing their infant was doing fine and what they

were experiencing was ordinary when establishing breastfeeding. Reassurance in the literature came in the form of the experiences of breastfeeding itself and not to the extent that the infant was healthy. Schmied et al. (2011) conducted a metasynthesis which found that providing reassurance was valued by mothers in the early postpartum period when there was uncertainty and they lacked confidence in their breastfeeding skills. Graffy and Taylor (2005) summed up the value of reassurance when they stated:

> Women sometimes felt unprepared for the realities of breastfeeding. Perhaps because of this, they found it helpful when they were reassured that what they were going through was not unusual and that they were not failing by finding it difficult. (p. 183)

Beyond their infants' health mothers in this study spoke of infant behavior and how it provided them with a perception that the breastfeeding experience was not going well or that it was. Mothers associated their infants' screaming, crying, pulling away from the breast, frequent waking, and being awake for long periods as unfavorable behaviors and that infants did not like breastfeeding or that it was not going well. This is what Douglas and Hill (2013) identified as cry-fuss behaviors "which in this age group frequently correlate with excessive feeding, feeding refusal, and excessive waking, [which for mothers] signal poor infant satiety" (p. 817). Pados and Hill (2019) described how one mother in their study felt frustration because her infant fought being fed. Although they did not give details on what 'fought being fed' meant it can be assumed her infant displayed some or all of the unfavorable behaviors identified above. Douglas and Hill (2011) stated "it is difficult to distinguish between cues or cries that indicate tiredness, boredom, and hunger in young infants" (p. 1267). Six of the eight mothers interviewed in this study were first time mothers. They might not be able to distinguish unfavorable behaviors from normal behaviors because they were not familiar with how

young infants behave. Sleep issues, such as frequent waking or being awake for long periods of time, were also unfavorable behaviors identified by the mothers in this study. Infant sleep varies widely from nine to 19 hours a day at birth to 12 to 21 total hours at two months of age (Douglas & Hill, 2011). For this reason, their infants' behavior might not necessarily be unfavorable but is normal for their developmental stage. Nonetheless fragmented sleep or lack of sleep can be an added stressor for mothers who are trying to establish breastfeeding and recover from childbirth.

In addition to unfavorable behaviors, mothers in this study identified favorable behaviors or characteristics their infants displayed that made them feel as if breastfeeding was going well. Favorable breastfeeding behaviors or characteristics included not crying, sleeping well, gaining weight, making eye contact, smiling, latching well, and being excited to eat. Some of these attributes are consistent with Eronen et al. (2007) who identified meeting developmental milestones, weight gain, and contentment as indicators of infant health and wellbeing.

Breastfeeding and support go hand in hand due to the nature of the experience. Support comes from a variety of entities such as family and friends, health care providers, and online resources. Family members identified were consistent with the literature and included husbands (Alves et al., 2020; Ngoenthong et al., 2020; Nickerson et al., 2012; Pados & Hill, 2019; Prendergast & James, 2016; Tohotoa et al., 2009) mothers (Alves et al., 2020; Prendergast & James, 2016), and mothers-in-law (Alves et al., 2020). Ngoenthong et al. (2020) in their integrative review discussed the critical activities fathers' performed that supported breastfeeding, which included "supporting the mother's decision to continue breastfeeding, providing physical and emotional support

for breastfeeding, and being an active member of the team to facilitate breastfeeding, such as setting aside time to support the partner in what she is doing" (p. 23). Seven of eight mothers in this study discussed the various ways in which their husbands provided breastfeeding support. The support provided aligns with the critical activities identified by Ngoenthong et al. (2020) and included helping with feedings, listening when she needed to talk, providing encouraging words, and taking time off of work. Mothers and mothers-in-law were identified as other family members in this study who provided advice and/or support. Mothers and mothers-in-law were uplifting and/or supportive, provided a listening ear, and came to stay for a few days. Literature on the support provided by mothers and mothers-in-law was not as readily available as it was for husbands. A pilot study conducted by Prendergast and James (2016) identified making meals, animal care, and being supportive and encouraging as support provided by mothers and family members, whereas Alves et al. (2020) included only non-specific support by mothers and mothers-in-law. Beyond family, friends were identified by mothers in this study as individuals who provided help and support but also provided information on specific issues such as engorgement and other difficulties. Cox, Giglia, and Binns (2017) found the mothers' friends to be one of the main sources of advice and support in the first month following hospital discharge. Emmott et al. (2020) analyzed data from a retrospective online survey and found a high probability that friends provided breastfeeding and caregiving information, as well as emotional support.

Health care providers, which included nurses and physicians, were another group identified who provided mothers in this study with support. Consistent with the findings of this study Sutter et al. (2018) identified professional support as most commonly used

for breastfeeding information and support. All eight mothers identified a nurse and/or physician as a health care provider who helped them, with seven identifying a nurse specifically. Health care providers answered breastfeeding questions and provided tips on technique in a variety of settings. Support was provided in person during individual office visits and breastfeeding/moms' groups or remotely through phone calls. As to be expected the health care providers identified by the mothers were consistent with the literature. Pados and Hill (2019) found lactation consultants provided support, offered suggestions on ways to overcome difficulties, and instilled confidence. One key component that was not identified in the literature was the magnitude a health care provider's words can have when a mother is struggling with breastfeeding. This was demonstrated on both ends of the spectrum in this study with some being beneficial and some detrimental. Sometimes mothers just need to hear that no matter how their infant is fed they are being fed and that is what is important. This reassures the mother that everything will be fine and that a fed infant is a healthy infant. On the other end of the spectrum what is said by a health care provider can be detrimental. By virtue of their training lactation consultants will instruct a mother not to supplement with formula and to continue breastfeeding when the process is being established. This might not always be what a mother needs or wants to hear. If a mother has attempted to breastfeed previously and her current experience is going the same as before with regard to breast milk supply, she knows how to address the situation. If she seeks assistance for breastfeeding but is also supplementing, she wants and needs to be supported in her endeavors, otherwise it could result in her giving up on providing any breast milk and never seeking assistance again.

The last source of support was from online resources. Online resources consisted of Facebook and Google. The reason why mothers in this study used Facebook was threefold: 1) the information was available 24/7; 2) feedback was immediate in most cases; and 3) due to the longevity of some of the groups they could just read posts and did not even need to ask questions. Google was used to look up answers to questions. Consistent with 24/7 availability and immediate feedback Regan and Brown (2019) found that online support was first sought during the night or on weekends when health care providers were unavailable. In addition, they found that when mothers needed help, they wanted it sooner rather than later, which aligns well with online support. Additional positive aspects of websites are that they could provide both written and audiovisual information (Pålsson et al., 2018). On the other hand the previous researchers found social media was used as a way to create support networks and to hold discussions with other mothers. An online ethnography study of a closed Facebook breastfeeding group conducted by Bridges et al. (2018) found that a majority of the mothers' questions were related to breastfeeding management. One particular area of breastfeeding management found in this study was about physical management, which included timing and frequency of feedings, positioning, latching, nipple damage, and other concerns. These findings are consistent with the mothers' descriptions of their use of Facebook in this study. Another finding of particular interest is that mothers in the Pålsson et al. (2018) study "expressed a desire for professionals in maternity health care to provide them with recommendations for reliable websites and apps" (p. 168). This was not identified by the mothers in this study but is a valuable piece of information for health care providers who provide breastfeeding mothers support. Since it is known that mothers seek online

support when health care providers are not available, and they want reliable sources of information it is imperative to provide this to them. In conclusion when discussing support in the electronic age Thorley (2017) best explained the benefits:

> When the mother has doubts about her ability to breastfeed, or a minor challenge that can develop into a major barrier, having the right support and advice from the right person at the right time can enable her and her baby to continue breastfeeding. (p. 10)

The overall constitutive pattern of **Getting the Hang of It** was selected and consisted of four themes and nine subthemes. The four themes (subthemes) included: *Physical Experiences* (*Breast Changes and Remedies*), *Emotional Complexities* (*Kaleidoscope of Feelings and Hiding the Truth*), *Infant Involvement in Breastfeeding Process* (*Health and Behavior*), and *Support* (*Family and Friends, Health Care Providers, and Online Resources*). These themes and their subsequent subthemes provided insight into the complexities experienced by mothers in order to acquire the skills they needed to breastfeed their infants. Each mother's breastfeeding experience was unique to her but also similar to other mothers both in this study and in the literature. Despite various aspects of breastfeeding being widely known and documented in the literature some variances were noted within the *Hiding the Truth* and *Health Care Providers* subthemes. *Hiding the Truth* was a subtheme within the *Emotional Complexities* theme and described how one mother minimized and hid the pain she was experiencing by focusing the attention on her infant who was doing well. While many aspects of breastfeeding have been extensively studied this one has not and warrants a more in-depth investigation. Another area that could benefit from further investigation is how health care providers can provide better support to mothers who are breast and formula feeding their infants. While research on how health care providers provide

support to breastfeeding mothers is not in short supply, it is for how effective support can be provided to mothers who want or need to supplement with formula. Effective support that is empathetic to mothers who want to breast and formula feed can make the difference between a mother reaching her breastfeeding goals or not.

Limitations

Several limitations should be noted with this study and are discussed as follows. It should be noted that although the study purpose was met this study included only one mother who had stopped breastfeeding during the first four weeks postpartum. The narrative of mothers who weaned in the early postpartum period has not been explored as extensively in the qualitative literature and for this reason their voices and experiences are lost to those that stayed the course and continued past the early postpartum period. One possible reason for this comes from a Grounded Theory study conducted by Hunt and Thomson (2017). Their study about infant feeding choices found:

> Pressure and judgement operated as the social, personal and cultural backdrop to many women's infant feeding decisions and experiences. Women sensed pressure (from professionals, media and social networks) to breastfeed and moral judgement around their feeding decisions. It was felt that women were made to feel 'guilty and bad' if they chose not to breastfeed and felt like a 'failure' if breastfeeding difficulties arose. (Findings section, para. 1)

With these results it can be inferred that mothers might not want to participate in a study about breastfeeding experiences because they might be made to feel guilty or like a failure for their decision to stop.

The sample size for this study was small, 100% non-Hispanic White mothers, 75% delivered their first child, and examined only a cross-sectional view of breastfeeding in the first four weeks postpartum and for these reasons cannot be generalized to the

population at large. Purposive and snowball sampling was used and mothers self-selected to participate in the study, so their experiences may not be representative of all breastfeeding mothers. The use of these types of sampling strategies can also result in participants who were biased toward continued breastfeeding, thus the perspective of those mothers who start breastfeeding and weaned was lost. In addition, seven of the eight interviews were conducted via the telephone, so body language and facial expressions were not observed for these mothers. Body language and facial expressions can convey additional meaning to a mother's narrative that is lost during the use of a phone.

Certain aspects of Heideggerian hermeneutic phenomenological methodology were not implemented as well as it could have been. This is especially accurate for rigor and trustworthiness, specifically the credibility and confirmability aspects. Analysis was not performed using a full team approach. The principal investigator, SR, performed the analysis and would consult with her committee chair, DS, to verify interpretations and when questions arose. Upon approval the analysis was sent to the three remaining members of the committee for review. For this reason, one aspect of credibility (frequent team meetings) was weak but the two other methods (reflective journal and direct quotes) remained intact. In order to increase validity and confirmability a second interview could have been performed. A second interview would have allowed verification of information and interpretations. However, the second interview was not necessary because the comments between mothers were so similar they worked as a form of verification. Confirmability remained partially intact through the use of an audit trail.

Implications for Education and Practice

The results add to the body of knowledge on mothers' early breastfeeding experiences and are important for education and practice in various ways. Education and practice go hand in hand as education can be used to inform practice. The mothers provided valuable insight into the experience of establishing breastfeeding in the first four weeks postpartum that can be used by health care providers to better support breastfeeding mothers.

Health care providers should be educated that breastfeeding mothers may minimize the amount of pain they are experiencing. Making sure to assess pain in a variety of ways at different times is important. In addition, health care providers should listen carefully to the words a mother is using to describe her pain and clarify what she means. Both quantifying and qualifying pain will provide a health care provider with a better picture of what the mother is experiencing.

Another important aspect of health care provider education is support. Depending on a health care provider's approach to emotional support they could make mothers feel alienated if they choose to use formula in addition to breastfeeding. Mothers who have attempted to breastfeed a previous child should be knowledgeable about the process and what is required to be successful. At this point they would not need informational support but instead need emotional support. Mothers need emotional support for whatever feeding method they decide to use. Breastfeeding is a polarized experience where a mother can feel like she must provide all breast milk or all formula and there is no middle ground. This raises the question if breastfeeding is really an all or nothing experience? The next question would then be how can practitioners support mothers who are

breastfeeding and using formula so that they can provide breast milk for as long as they want?

Health care providers also need to be aware that sometimes mothers need emotional support in the form of reassurance from them that what they are doing is ok. This can mean pumping and giving breast milk in a bottle, supplementing with formula, or weaning and providing their infant formula only. Pediatric health care providers are in a position to provide emotional support during early well child visits because mothers might share they are ready to give up breastfeeding. Emotional support in the form of reassurance that however they feed their infant it is ok and all that matters is their infant is being fed. The postpartum period is a vulnerable time for mothers since they are recovering physically and emotionally from childbirth and caring for a newborn, which can include learning to breastfeed. Sometimes all a mother needs is reassurance from a health care provider that what she is doing is ok or it could be permission to do something different like give formula.

Recommendations for Further Research

Recommendations for future research can include conducting a study that specifically aims to interview mothers who stopped breastfeeding in the first four to six weeks postpartum as their voice is widely missing from the qualitative breastfeeding literature. In order to understand the complexities and rationale for weaning prior to establishing successful breastfeeding we need to hear specifically from mothers who have weaned. The problems breastfeeding mothers experience are the same, so why do some persevere and others wean? A collaboration between nurse and psychology researchers

could utilize the expertise of both disciplines to provide some insight into ways health care providers can better support breastfeeding mothers.

Another area of research is breast pain assessment. Consistent with the recommendations of Berens et al. and the Academy of Breastfeeding Medicine (2016) a standardized assessment of breast pain is lacking even though there are instruments to assess other aspects of breastfeeding. Breastfeeding pain is multifaceted since it can be from mechanical, physiological, or pathological origins. In addition, a mother is recovering and healing from childbirth and experiencing hormonal fluctuations. Developing a standardized way to assess breast pain will provide consistent data across health care providers and health care settings. A review conducted by Pados et al. (2016) identified seven breastfeeding assessment tools that included scoring systems so psychometric testing could be conducted. One of the oldest breastfeeding assessment tools is LATCH. The LATCH breastfeeding assessment tool assesses five criteria: 1) latch; 2) audible swallowing; 3) type of nipple; 4) comfort of mother; and 5) help required (Jensen et al., 1994). The assessment of comfort includes breast tissue, nipples, and mother's verbalization of comfort level. A mother's comfort is assessed using the terms: tender, mild/moderate discomfort, or severe discomfort. The newest tool is the Bristol Breastfeeding Assessment Tool (BBAT) and it assesses four criteria: 1) positioning; 2) attachment; 3) sucking; and 4) swallowing (Pados et al., 2016). During testing of the tool one criterion related to comfort was removed. Pados et al. (2016) "found that sometimes the mother's [comfort] report seemed to be at odds with the midwife scored items in measurements of reliability and consistency" (p. 135). After checking the internal consistency using Cronbach's alpha the researchers decided to

remove it and link it to a pain assessment. One of the oldest breastfeeding assessment tools and the newest fail to standardize and adequately assess breastfeeding associated pain. For this reason further research is needed.

Conclusions

Breastfeeding is a complex and challenging experience with favorable and unfavorable aspects. Each mother's breastfeeding experience is unique to her but also similar to someone else's. The voices of mothers who have weaned in the early postpartum period are largely missing in the literature and they can provide health care providers with valuable information on ways they can be better supported. Even though their voices are missing a wealth of information is willing to be shared by breastfeeding mothers who have had favorable and unfavorable experiences. The key is to let them talk about their experiences and listen to what they are saying. The power health care providers hold was also observed in this study. Health care providers have the power to build a breastfeeding mother up or tear her down. In order to keep mothers breastfeeding for the recommended six months we need to build them up even if that means they are going to also supplement with formula. One mother provided a powerful reminder for health care providers, sometimes mothers just need to hear that no matter how they are feeding their infant, be it directly from the breast, pumped breast milk, or even formula, their infant is being fed.

Appendix A

Recruitment Flyer

Your Experiences Are Important to Us!!

The Mother's Experience of Breastfeeding in the First 4 Weeks Postpartum

Are you a mother who delivered in the past 6 weeks and left the hospital breastfeeding or were breastfeeding 2 days after home birth and <u>may or may not be currently breastfeeding</u>?

Research Purpose: To understand what it is like to breastfeed in the first 4 weeks after delivery.

You are eligible to participate if you: 1) delivered a full term single infant at 37 weeks or later with no complications; 2) delivered within the past 6 weeks; 3) reported you were breastfeeding at the time of hospital discharge or 2 days after home delivery and may or may not be currently breastfeeding; 4) are over the ager of 18 years; and 5) speak and understand English.

As a token of appreciation for taking part in the study you will receive up to $30 Walmart gift cards.

I'm interested in learning more or seeing if I'm eligible to participate in the study! What do I need to do?

- Contact Stacy Rosales, Doctoral Student in Nursing
  - **Call:** 765-455-9334 (leave message)
  - **Text:** 765-437-6971
  - **Email:** srosales@iuk.edu

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Appendix B

Interview Guide

The focus of this interview is breastfeeding and what that experience is/was like for you. I would like to know as much as I can about your experience so that I can think of ways to help breastfeeding mothers. The interview will be audio recorded, so I will tell you when I start recording.

Prior to starting the interview I would like you to fill out a demographic data sheet so I can learn a little more about you and your infant. If there are any questions you are not comfortable answering check prefer not to answer or just skip the question.

As the interview begins, I will ask an opening question and then you and I will talk about your experiences as you share them. Feel free to take a few moments to think about what you would like to say and then we will start. When you have said everything you would like to say the interview will then be done. The interview will be typed word for word and any identifying information will be removed (names, locations, or anything unique that might identify you). Your name is one piece of information that will be removed from the transcript and in its place a pseudonym or fake name will be used. What pseudonym would you like to use or I can pick one for you?

If it is ok I may contact you again during data analysis to clarify any information and confirm if you agree or disagree with my interpretation. The second interview will be in-person, via Skype, or via telephone and should last no longer than 30 minutes.

Prior to starting the interview I would like to remind you that you may choose not to answer questions that you are uncomfortable with. If you are uncomfortable answering questions, tell me that you do not care to answer it.

1. **Tell me about your breastfeeding experience from the time you left the hospital (or 2 days since delivery in the case of home births) until now.**
    a. Probes:
        - ☐ Tell me more about that…
        - ☐ Tell me about a breastfeeding experience that sticks out to you.
        - ☐ Others have told me about… Was that like what you experienced?
        - ☐ Additional probes will be based on information the participant shares
2. **I want to thank you for your time. For participating in the study would you like a $20 Walmart gift card?**
    - ☐ Yes: Can I have your address (if Skype or telephone interview, otherwise will just give to participant)? _____
    - ☐ No: No further information is needed.
3. **May I contact you again, if necessary, during data analysis to clarify any information and confirm if you agree or disagree with my interpretation?**
        - ☐ Yes
        - ☐ No

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Curriculum Vitae

Stacy Ann Rosales

Education

PhD in Nursing Science: 2021
Indiana University degree earned at Indiana University-Purdue University Indianapolis: Indianapolis, IN
Dissertation: The Mother's Lived Experience of Breastfeeding in the First 4 Weeks Postpartum: A Heideggerian Hermeneutic Phenomenological Analysis
Minor: Individualized (Relational Health)

Master of Science in Nursing: 2009
Indiana University degree earned at Indiana University-Purdue University Indianapolis: Indianapolis, IN
Major: Community Health Nursing
Academic Achievement Award
Master's Scholarly Paper: Health Education for Parents of Preschool Age Children: Viewpoints of Parents and Health Care Providers.

Bachelor of Science in Nursing: 1996
University of Michigan: Ann Arbor, MI
James B. Angell Scholar
Class Honors

Professional Licenses and Certification

American Heart Association Basic Life Support Instructor: 2011

Registered Nurse: 2005 (IN), 1997 (MI)

Inpatient Obstetrical Nursing (RNC-OB), National Certification Corporation: 2000

Appointments

Academic:

Indiana University Kokomo

Senior Lecturer in Nursing
July 2016-present

Lecturer in Nursing
August 2010-June 2016

Visiting Lecturer in Nursing
January 2009-August 2010 (Prior: Adjunct Clinical Instructor August 2005 – December 2006)

Teaching:

Undergraduate Courses

Course Title	Credits	Taught/Developed	Year	Semester	Enrollment
B334 Transitional Care of Families and Populations (Didactic)	3.0	Developed/Taught (Lead Instructor)	2018-present	Fall & Spring	34-53
B334 Transitional Care of Families and Populations (Practicum)		Developed/Taught (Community School Experience)	2018-present	Fall & Spring	1-9
B444 Managing Health & Illness Across Care Environments (Practicum)	2.0	Taught	2020-present	Fall & Spring	9
H355 Data Analysis and Research	3.0	Taught (Lead Instructor) RN to BSN Hybrid Track	2019-2020	Fall, Spring, & Summer	9-26
B223 Promoting Healthy Populations (Practicum)	1.0	Taught	2018-2019	Fall & Spring	13-19
S475 A Multisystem Approach to the Health of the Community	3.0	Taught RN to BSN Hybrid Track	2018-2019	Summer	16-29

Course Title	Credits	Taught/Developed	Year	Semester	Enrollment
H363 Developing Family and Child	4.0	Taught	2010-2017	Fall & Spring	22-53
H364 Developing Family and Child (Practicum)	2.0	Taught	2010-2017	Fall & Spring	5-12
B260 Foundations of Nursing Practice Practicum		Taught	2017	Spring	9
S471 Restorative Health Practicum	2.0	Taught	2012, 2013	Spring	5
H362 Restorative Health Practicum	2.0	Taught	2011, 2012, 2016 (DEU)	Fall & Spring	1-8
K415 Special Needs Children in the Community	4.0	Co-taught	2011	Summer	19
H354 Alterations in Health I Practicum	2.0	Taught	2009 Visiting Lecturer, 2011, 2012, 2016 (DEU)	Fall & Spring	1-10
J360 Operating Room Nursing	2.0	Developed/Taught	2009, 2010 Visiting Lecturer	Summer	7
K490 Perioperative Nursing	2.0	Developed/Taught	2009, 2010 Visiting Lecturer	Summer	6

Course Title	Credits	Taught/Developed	Year	Semester	Enrollment
S484 Research Utilization Seminar	1.0	Taught	2010 Visiting Lecturer	Spring	53
A190 Nursing Freshman Seminar	3.0	Developed/Taught	2009 Visiting Lecturer, 2010	Fall & Spring	19-55
B249 Science and Technology of Nursing	2.0	Taught	2009 Visiting Lecturer	Spring	11
B233 Health and Wellness	4.0	Developed/Co-taught	2009 Visiting Lecturer	Spring	47

Graduate Courses

Course Title	Credits	Taught/Developed	Year	Semester	Enrollment
T617 Evaluation in Nursing	3.0	Taught	2018	Spring	8
T679 Nursing Education Practicum	3.0	Taught	2017	Fall	9

Clinical Practice

St. Joseph Hospital: Kokomo, IN
Staff Nurse: Outpatient Surgery
September 2006-January 2010

Riverview Hospital: Noblesville, IN
Childbirth Educator
April 2006-November 2006

Marian Medical Center: Santa Maria, CA
Staff Nurse: Mother/Baby Unit
January 2004-April 2005

United States Air Force
Nurse Corps.
October 1998-January 2004

Vandenberg Air Force Base (AFB): CA
Pediatric Clinic Nurse: Captain
December 2001- January 2004

Achievements:

- 30th Medical Group Quarterly Award Winner (Company Grade Officer of the Quarter): Jul-Sep 2003
- 30th Medical Operations Squadron Company Grade Officer of the Quarter: Jul-Sep 2003
- 30th Medical Operations Squadron Company Grade Officer of the Quarter: Jul-Sep 2002

Travis AFB: CA
Obstetrical Staff Nurse (L&D and Mother/Baby): 1st Lieutenant
November 1998-December 2001

Marian Medical Center: Santa Maria, CA
Staff Nurse: Mother/Baby Unit
February 1998-November 1998

Cottage Hospital: Santa Barbara, CA
Staff Nurse: Pediatric Unit
October 1997-February 1998

Valley Community Hospital: Santa Maria, CA
Staff Nurse: Obstetric Unit
April 1997-October 1997

Professional Presentations

Poster Presentation (Refereed): Indiana University Purdue University Research Day 2015

- The First 4 Weeks Postpartum: The Mother's Breastfeeding Concerns and Support

Panel Discussion: Indiana University Kokomo Faculty Conference 2010

- Early Experiences with Clickers at IU Kokomo

Professional Memberships/Committees

Association of Women's Health, Obstetrical and Neonatal Nurses: 2009-present

Sigma Theta Tau, International (Alpha Chapter): 2009-present

University Service

Indiana University Kokomo

- Indiana University Kokomo Campus COVID Testing
  - 2020 (Fall)
- Indiana University Kokomo Campus Flu Vaccine Clinic
  - 2020 (Fall)
- Indiana University Kokomo Emergency Preparedness Committee
  - 2019-present
- Indiana University Kokomo Walk into Your Future (fall semester)
  - 2015-present (no event 2020 due to pandemic)
- Indiana University Kokomo Faculty Athletic Committee
  - 2011-present
- Simulation Center Tours and Other Activities for Local Schools
  - 2016-2019
- Indiana University Kokomo Institutional Review Board
  - 2010-2015
- IUK Academic Interests and Majors (AIM) Day
  - 2011-2013
- IUK VIP Day
  - 2011-2013
- Indiana University Kokomo IU-SEEK: Nursing Faculty Mentor
  - 2009-2011
- Indiana University Kokomo Foundations of Excellence
  - 2009-2010: Learning Dimension Committee

School of Nursing Service

- Indiana University Kokomo Council of Nursing Faculty
  - 2009-present
- Indiana University Kokomo School of Nursing Evaluation Committee
  - 2009-present
- Promotion and Tenure
  - 2019-present; 2016 & 2013
    - 2019: Non-voting member dossier review
    - 2016: Dossier review
    - 2013: Dossier review
- DAISY Award Committee
  - 2020-present
    - Spring 2020: Reviewed 7 faculty and 9 student nominations.
    - Fall 2020: Reviewed 4 faculty nominations.
- Indiana University Kokomo Student Affairs Committee
  - 2016-2020
- Peer Evaluations Conducted

    - 2018: 1 nursing faculty
    - 2017: 1 nursing faculty
    - 2014: 3 nursing faculty
- South Korean Student Exchange
    - 2009-2016
        - Host dinner: 2011, 2012, & 2016.
        - Participate in various activities with students as schedule allows.
- Basic Life Support Instructor: Sophomore fundamental students
    - 2011-2020
        - Spring & Fall semester
- Student Nurse Leader (SNL) Faculty Advisor
    - 2014-2017, 2020
        - Provided faculty oversight for the sophomore 2 SNLs planning the induction ceremony for the incoming sophomore nursing students.
    - 2011-2012
        - Provided faculty oversight for the senior 2 SNLs planning the recognition ceremony for the graduating class of December 2012.
- Indiana University Kokomo School of Nursing Faculty Affairs Committee
    - 2009-2016
        - Chair: 2011-2016

Community Service

- Kokomo Urban Outreach Baby University
    - This program was discontinued at Kokomo Urban Outreach, but the individual who organized the program continued to offer it as a parenting class through a non-profit she created to support it. Although the program is no longer called Baby University, the information I presented has remained the same.
    - 2017-2019
        - Baby University is a program offered through Kokomo Urban Outreach. Baby University is offered twice a year for women who are pregnant or mothers who have children up to the age of 5 (fathers can attend too). The program is a series of weekly classes that present various topics related to Kindergarten Readiness.
            - Presented a class titled Healthy and Happy, which is ways moms and dads can take care of themselves so they can take care of their children. This presentation focused mainly on the immediate postpartum period with mom and infant care.
- Howard County Health and Resource Fair
    - 2017-2018
- Partners for a Healthier Community
    - 2016-2018

        - In addition to meeting monthly to discuss health care opportunities for the community, this group organizes the Health and Resource Fair (formerly the Howard County Health Fair).
            - Coordinate the IUK SON sophomore student participation in BP and BMI screening.
- Immunization administration at Northwestern High School
    - 2015 (spring semester)
        - Coordinated with Howard County Health Department and provided faculty oversight for students administering meningococcal vaccine.
- Health education for Taylor High School
    - 2014-2019 (spring & fall semester)
        - Provide coordination and guidance for students conducting the education.
- Let's Pretend Hospital sponsored by St. Joseph Hospital St. Vincent Health
    - 2013-2019 (fall semester)
- Health education for Western High School
    - 2013-2019 (spring and fall semester)
        - Provide coordination and guidance for students conducting the education.
- Howard County Health Fair
    - 2011, 2012, & 2016
- North Central Indiana Breastfeeding Coalition
    - 2013-2014
    - Co-chair
        - April 2014-October 2014
- Howard County Health Department: Community H1N1 Clinic
    - 2009 & 2010
        - Administered vaccines for 3 clinics.
- Kokomo Urban Outreach
    - 2011-2012
- Howard Regional Health System & IUK School of Nursing Research Collaborative
    - 2010