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Identifying Barriers and Facilitators to
Breastfeeding Initiation in the African American Community

by
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DISSERTATION

Submitted in partial satisfaction of the requirements for the degree of

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Acknowledgements

I dedicate this dissertation to the past, present and future clients of the California Black Infant Health Program. Thank you for inspiring and motivating me to complete this program.

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Identifying Barriers and Facilitators to Breastfeeding Initiation in the African American Community

Ifeyinwa V. Asiodu

Abstract

While breast milk is considered the gold standard of infant feeding, a majority of African American mothers are choosing to not exclusively breastfeed their newborn infants. With the highest rates of infant mortality, premature birth, low birth weight and very low birth weight; African American infants can benefit greatly from an increase in breastfeeding initiation and continuation. The overall goal of this critical ethnographic research study was to describe infant feeding perceptions and experiences of African American mothers and their support persons. The specific aims were: 1) to describe and analyze the process African American women undergo when deciding on an infant feeding method; 2) to describe the barriers and facilitators encountered during this decision making process as it unfolds over time from antepartum through birth and the early postpartum period; 3) to understand the role social support persons, specifically grandmothers and parenting partners of the babies play in the decision making process. Participants were recruited from public health programs and community based organizations in the Bay Area. Twenty two participants were enrolled; 14 pregnant women and eight support persons. Data were collected through field observations and multiple in-person interviews. A total of 43 audio-recorded interviews were completed from March 2013 to June 2014. Participants were able to describe the benefits of breastfeeding. Most participants noted an intention to exclusively breastfeed during the antepartum period and expressed guilt for not being able to exclusively breastfeed during the postpartum period. Combination feeding (the use of both breast milk and formula feeding) was a common occurrence and the use of social media for social and educational support was frequently noted. Life experiences (e.g. challenging
family dynamics and difficulty with latch), public health programs (home visitors), and changes to the family dynamic (lack of support) played a significant role in the infant feeding decision making process. These data suggest that while exclusivity goals are not being met; African American women are breastfeeding. Future interventions geared towards this population should include social media, messaging around combination feeding and increased education for identified social support persons.
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Introduction

My interest in the infant feeding decision making processes of African American families developed out of my clinical, graduate, and personal experiences. During my time as a research assistant on a postpartum depression study, I noted that when compared to White, Asian and Latina participants, African American participants initiated breastfeeding at much lower rates. While the focus of the study was postpartum depression, I was struck by the infant feeding disparity observed in the study cohort. As a public health nurse with the Black Infant Health Program, I also witnessed the same disparity within our client population. At intake, majority of our clients would state an intention to exclusively breastfeed; however a number of clients were unable to successfully initiate and maintain breastfeeding for a significant amount of time. Subsequently, I often dealt with the emotional ramifications of unsuccessful breastfeeding as clients would begin to blame themselves and their bodies. Armed with this information, I turned to the literature and found that this issue was not new phenomenon. Researchers had been investigating this problem for many years; however no salient interventions had been developed or implemented. In addition, I also began the didactic and clinical preparation for the International Board Certified Lactation Consultant exam as I wanted to be part of the solution and not contribute to the barriers experienced by my clients.

It has been documented that African American women have high intentions of breastfeeding; however, those intentions are not being translated into practice (Corbett, 2000; Meyerink & Marquis, 2002; Persad & Mensinger, 2008). Much of the current literature in this area has primarily focused on the mother and her processes; however I believe the decision to breastfeed is one that is made by the mother and those most important in her life at that time (Corbett, 2000; Meyerink & Marquis, 2002; Persad, & Mensinger, 2008). While there appeared to be a great deal of literature in the field on infant feeding perceptions and experiences; the
research on African American families as it relates to factors influencing infant feeding decision making is limited. Qualitatively seeking the perceptions and experiences of African American mothers would be very beneficial in identifying pathways to increasing breastfeeding initiation rates in this population. Thus, in an effort to improve the infant feeding experiences and perceptions of African American families, I embarked on my dissertation work.

**Background & Significance**

In 2011, the Surgeon General of the United States (US) issued a Call to Action to Support Breastfeeding (United States Department of Health and Human Services, (HHS), 2011). This pivotal document outlined critical issues concerning infant feeding, specifically addressing breastfeeding initiation and continuation rates. Previously, breastfeeding trends in the US had reportedly been on the rise; however there had been no significant changes to the initiation and continuation rates of lower socioeconomic women of color and adolescent mothers (HHS, Healthy People 2020, 2011). While the literature in this area consistently illustrates the infant feeding disparity among African American women, sparse data exists about what is really at the crux of this infant feeding disparity.

Since families depended on breast milk as a source of nutrition for their infants, breastfeeding was considered the norm, regardless of socioeconomic status, location or education (Stevens, Patrick & Pickler, 2009). This dependence on breastfeeding changed in the early 1900s with medical and pharmaceutical advances. Sensing a shift in public perception, infant formula companies capitalized on these advances and began to market artificial infant formula as a superior method of feeding newborns. Consequently, infant formula was seen as a high commodity and a status symbol for wealthy families or those with discretionary incomes (Stevens, Patrick & Pickler, 2009). Families with moderate to low-incomes, notably African
American families, were left to purchase evaporated milk-based products or breastfeed, thereby perpetuating the negative stigma of breastfeeding developed during slavery (Barness, 1987; Dunaway, 2003).

**Theoretical Approach**

The approach of this study was informed by the Family Life Course Development Theory (Bengston & Allen, 1993) and Black Feminist Theory (Collins, 2008). Using both theories, a conceptual framework to address the infant feeding decision making process in African American families was created. The conceptual framework incorporated the familial, social, gender, historical and cultural contexts associated with the infant feeding decision making process across the perinatal time period. While the decision to breastfeed or use formula is ultimately the mother’s; she will make that decision based on information received from significant family members, partners, friends, health care providers and society throughout her life course.

**Operational Definitions of Breastfeeding**

**Breastfeeding** - By definition, breastfeeding is the practice of feeding a newborn, infant or young child with breast milk (Riordan & Wambach, 2010). Breastfeeding is usually initiated by a woman within the first several hours after giving birth.

**Infant feeding** – Infant feeding is a neutral term used to denote the practice of nourishing a newborn, infant or young child by using either breast milk, substitute formula or complimentary foods (depending on the age of the child in question) (WHO, 2009). Infant feeding has also been used to describe the feeding patterns and duration as it relates to infants and young children. The term infant feeding is more often used by researchers and those in academia.
**Exclusive breastfeeding** – Exclusive breastfeeding refers to the act of providing only breast milk to a newborn or infant over a specific period of time. In the US, exclusive breastfeeding is recommended for the first six months of life after birth (AAP, 2012).

**Duration of breastfeeding** – The duration of breastfeeding is used to define the time period a mother chooses to breastfeed her infant. The exclusivity of breastfeeding is not an important aspect as it relates to duration.

**Initiation of breastfeeding** – The initiation of breastfeeding typically commences during the early postpartum hours, barring any major complications involving the newborn or the mother (Riordan & Wambach, 2010).

**Continuation of breastfeeding** – The continuation of breastfeeding refers to the act of ongoing breastfeeding once breastfeeding has been initiated.

**Combination feeding** – Combination feeding is the act of using both breast milk and substitute formula as a method to nourish a newborn or infant.

**Low Income** – The guidelines used by the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Program will be used to determine low-income status. The current guidelines stipulate that any pregnant woman whose gross income falls at or below 185% of the US poverty income level is eligible for services (HHS, 2009).

**Family** – The definition of family was determined by the childbearing women, enrolled in the dissertation study. The term family can refer to both biological and non-biological members.

**Support Person(s)** – Is someone who provided assistance in the form of emotional, physical and/or psychosocial encouragement to an enrolled pregnant participant, specifically a friend, partner or family member.
**Purpose and Specific Aims**

The purpose of this dissertation was to understand and describe the infant feeding perceptions and experiences of African American mothers and their social support persons. The specific aims of this study were: 1) to describe and analyze the process African American mothers undergo when deciding on an infant feeding method; 2) to describe the barriers and facilitators encountered during this decision making process; and 3) to understand the role social support persons (grandmothers and partners of the babies) play in the decision making process.

**Overview of Chapters Two to Five**

In an effort to enhance the infant feeding experiences of African American women and their families, the following three chapters were created. Each chapter constitutes an individual manuscript. The second chapter, entitled “Individual and Family Contexts of Breastfeeding in the African American Community,” presents the conceptual framework describing the individual and family context of breastfeeding in the African American community encountered during the perinatal period using the Family Life Course Development Theory (Bengston & Allen, 1993) and Black Feminist Theory (Collins, 2008). Guided by the developed conceptual framework, the third chapter, entitled “What does Infant Feeding Mean to African American Women and Their Support Persons,” critically examines the infant feeding experiences and perceptions of the African American women and their support persons. Chapter Four, entitled “Social Media: A Missed Opportunity to Diffuse Breastfeeding Education to African American Mothers and Their Support Network?” explores and describes the consumption of social media during the antepartum and postpartum periods. Clinical implications, directions and suggestions for future research are presented in Chapter Five. Additionally, a synthesis of the previous chapters is also presented in Chapter 5. Hence, the purpose of the three presented manuscripts is to expand on
current knowledge and further explore the infant feeding barriers and facilitators experienced by
African American women and their families.
References


U.S. Department of Health and Human Services. *The Surgeon General’s Call to Action to*

Chapter 2:

Paper 1: Individual and Family Contexts of Breastfeeding in the African American Community

Ifeyinwa V. Asiodu
Abstract

Title: Individual and Family Contexts of Breastfeeding in the African American Community

Background: Currently, an infant feeding disparity among African American women and other populations exists. Several theoretical frameworks have been used to address this disparity; however, the selected theories do not examine the intersectionality between race, gender, class, family, history, and slavery experienced by African American women and their families.

Method: The Family Life Course Development and Black Feminist theories were explored and critiqued.

Results: A new conceptual model informed by the Family Life Course Development and Black Feminist theories was created. The investigator-developed Infant Feeding Decision Making Framework explored the decision-making process across the perinatal period. The tenets and assumptions of the model were assessed and presented.

Conclusion: Using the Infant Feeding Decision Making Framework will allow researchers and clinicians greater insight into the complex lives of African American women and their families.

Key words: African American mothers, black feminism, breastfeeding, family life course development, infant feeding,
Well Established

A number of theoretical frameworks have been used to address the infant feeding disparity in the African American community. However, a conceptual framework exploring the intersectionality of race, cultural, history, family and social contexts is needed.

Newly Expressed

Using the Family Life Course Development and Black Feminist theories, a new integrated conceptual model was created to address the infant feeding disparity in the African American community.
Individual and Family Contexts of Breastfeeding in the African American Community

Breastfeeding provides mothers and infants a multitude of physiological and psychological short- and long-term benefits. Breastfeeding supports the neurological and immunological health and wellbeing of infants by providing valuable nutrients and antibodies to their developing systems (American Academy of Pediatrics [AAP] Work Group on Breastfeeding et al., 1997, 2005, 2012). Infants who are breastfed are less likely to develop infections, obesity, diabetes or celiac disease (Kramer & Kakuma, 2012). Maternal-infant bonding is greatly influenced by the frequency and duration of breastfeeding early in the postpartum period (Bai, Middlestadt, Joanne Peng, & Fly; 2009; Guttman & Zimmerman, 2000; U.S. Department of Health and Human Services (US DHHS), 2011). Breastfeeding can provide mothers with contraceptive protection and weight loss if exclusive breastfeeding is practiced for the first 6 months after delivery (Hatcher et al., 2011). Risk reduction of postpartum hemorrhage, endometrial and ovarian cancers and osteoporosis has also been observed in breastfeeding mothers (AAP, 2012).

While there has been a recent call to action to increase breastfeeding initiation and continuation in the United States (US), a majority of African American mothers choose not to breastfeed their newborn infants (US DHHS, 2011). Though it has been well documented in the literature that African American women have high intentions of breastfeeding (Corbett, 2000; Meyerink & Marquis, 2002; Persad, & Mensinger, 2008); those intentions are not being converted into action. With the highest rates of infant mortality, premature birth, and low birth weight, African American infants would benefit greatly from an increase in breastfeeding initiation and continuation. The current rates of breastfeeding initiation and continuation in the African American community are below the goals set by the Healthy People 2020 initiative,
which are: 82% ever breastfeed and 61% breastfeed at 6 months (HHS, Healthy People 2020, 2013; MICH-21.1 and MICH-21.2). When compared to the national average of 75%, only 59% of African American women initiate breastfeeding (Centers for Disease Control and Prevention [CDC], 2013). At 6 months, the numbers of African American women still breastfeeding are even lower at 30% (CDC, 2013). There are few conceptual frameworks to help understand the presented infant feeding disparity. The purpose of this paper is to describe the Family Life Course Development and Black Feminist theories as underpinnings to provide individual and family contextualism for understanding breastfeeding in the African American community. From these two theories, a new conceptual framework will be discussed.

**Review of the Literature**

A number of theories have been used to underpin infant feeding research involving African American women (see Table 1). Bandura’s Social Learning, Social Cognitive and Self-Efficacy theories have been used to explain decision-making processes of mothers and their self-efficacy to initiate breastfeeding (Avery, Zimmerman, Underwood, & Magnus, 2009; Dennis, 1999; McCarter-Spaulding & Gore, 2009). The Cultural-Ecological Framework and Phenomenology have been used to address feeding styles and behaviors of women during the antepartum and postpartum periods (Corbett, 2000; Cricco-Lenza, 2004; McCarter-Spaulding, 2007). Table 1 provides a summary of theoretical approaches regularly used in infant feeding research in the African American community.

Much of the literature on infant feeding has been guided by various iterations of Bandura’s theories, the Health Promotion Model, or other theories listed in Table 1 (Avery et al., 2009, McCarter-Spaulding & Gore, 2009; Mickens, Modeste, Montgomery & Taylor, 2009;
Pugh et al., 2010; Sharps et al., 2003). While these theories provide the basis for information about perceptions, attitudes and factors influencing breastfeeding initiation and continuation, they are insufficient to fully understand the factors surrounding infant feeding issues in the African American population. As constructs such as race, ethnicity, cultural, and life experiences are not adequately addressed. Breastfeeding initiation and continuation is a complex decision for a woman and family to make; therefore, this phenomenon might be better understood through the lens of a multidimensional framework, such as Family Life Course Development and Black Feminist theories because these theories focus on individual, family, social and cultural perspectives over the lifespan (Bulcroft, Forste & White, 1993; Collins, 2008).

[Insert Table 1 here]

Chinn and Kramer’s (2010) and Meleis’s (2007) criteria for theory analysis and evaluation were used to comment on the Family Life Course Development Framework and Black Feminist theories and the proposed conceptual framework. The criteria include clarity, simplicity and generality. Clarity refers to the consistency and clearness of the theory and is addressed by the question “How clear is this theory?” (Chinn & Kramer, 2010, p. 237). Simplicity denotes how easy the theory is to use or incorporate into one’s clinical practice or program of research and is evaluated by the question “How simple is this theory?” (Chinn & Kramer, 2010, p. 237). Generality refers to how applicable the proposed theory is to the research problem or clinical problem and is addressed by the question “How applicable is this theory?” (Chinn & Kramer, 2010, p. 237).

**Family Life Course Development Theory**
The Family Life Course Development Theory, as described by Bengston and Allen (1993), Elder (1996) and White and Klein (2008), proposes analyzing families’ lives through structural, social and cultural lens as they move through different stages of their lives. This theory is rooted in the fields of psychology and sociology and was first described in the 1940s to early 1950s (Bengston & Allen, 1993). More specifically, it describes the link between one’s personal history and various life events on future life decisions, such as breastfeeding initiation and continuation. Breastfeeding is often depicted solely as an individual decision made by the mother, however, the decision to breastfeed is not only an individual decision; it is also an informed family life course decision (Lu & Halfon, 2003). Thus, understanding individual and family dynamics over the antepartum and postpartum periods could be enhanced with this theoretical approach.

The Family Life Course Development Theory is divided into three sections: Individual Life Span Theory, Family Development Theory and Life Course Theory (White & Klein, 2008). Four major assumptions are associated with this framework: (a) multilevel analysis is needed to analyze the family on individual, group and societal levels (process); (b) societal social norms are constantly influencing individuals within family dynamics (context); (c) the familial unit is semi-permeable and fluid (meaning); and (d), time is multidimensional (time) (Rodgers & White, 1993). When taking the familial context of a specific phenomenon into consideration one must go past the individual level; the histories of individuals within the family unit must be taken into consideration as how one interacts with their social and physical environments will play an important role in how one navigates the world around them and makes decisions (Chibucos, Leite & Weis, 2005).
The Family Life Course Development Theory offers a different perspective rarely seen in the field of infant feeding research. It focuses on explaining the dynamic nature of the familial unit as it changes over time or during a specific life stage (Bengston & Allen, 1993; Elder, 1996; White & Klein, 2008). It brings to light the unique history that each individual within a family unit brings to a particular situation; looks at families as a whole entity and does not dissect them into specific problem areas; focuses on the resiliency of a family and their ability to complete functions pertaining to themselves and the community around them; and, places great importance on how well the family deals with specific issues and difficult situations.

The Family Life Course Development Theory takes into consideration the importance of the inherent layers of complexity of a given situation over a given time period, such as the transition to parenthood (Bulcroft, Forste, & White, 1993). This transition to parenthood signifies new roles and expectations for the mother and everyone in the family unit (e.g. partner, family members, friends, community members, and healthcare providers). While many researchers have only focused on the infant feeding perceptions and experiences of mothers, few studies have taken into consideration the role of the other family members during the perinatal period. These perspectives are important to understand as family members may have unrealistic expectations or previous experiences that can lead to conflict within the family unit. Each individual in the familial structure will have his or her own expectation of his or her role during this transitional period.

The decision whether or not to initiate breastfeeding can have a significant positive or negative consequence on the dynamics of the mother-infant relationship, mother-partner relationship, mother-family relationship, partner-infant relationship, and mother-community relationship (Bulcroft, Forste & White, 1993). While it is important to understand the mother’s
perspective at an individual level, it is also important to understand and explore the impact of this decision as it relates to the significant relationships in a woman’s life.

Along with defining new roles, one must also take into consideration societal and normative influences being placed on mothers by those around her (Bulcroft, Forste & White, 1993). Recently, there has been a societal shift as it relates to infant feeding. Over the last two decades, there has been increased support and vocalization about the importance and naturalization of breastfeeding in the lives of mothers and infants (AAP, 1997, 2005, 2012; HHS, 2000, 2011). Several health professional organizations have written position papers in support of the practice (e.g. the Academy of Breastfeeding Medicine, American Academy of Family Physicians, American Academy of Pediatrics, American College of Nurse Midwives, American College of Obstetricians and Gynecologists, American Dietetic Association, Association of Women’s Health, Obstetrics and Neonatal Nursing, Lamaze International and the National Association of Pediatric Nurse Practitioners). The U.S. government issued its second Call to Action, and the Baby Friendly Hospital Initiative is becoming more popular than ever (HHS, 2000, 2011). To some, breastfeeding might appear to be an inherently natural phenomenon that should be practiced by all women (Evans & Danda, 2000). However, this might not always be acceptable for certain individuals. If the practice of breastfeeding has not been normalized within the context of a woman’s life by frequent observations of the practice or some type of personal experiences or discussions, breastfeeding may feel abnormal and uncomfortable (Bulcroft, Forste & White, 1993).

Another aspect of the Family Life Course Development Theory can be described in how a woman understands the benefits and harms of breastfeeding or not breastfeeding, not only for her newborn, but for herself as well (Rodgers & White, 1993). Researchers and educators excel
at highlighting the benefits of increased breastfeeding initiation on the health and well-being of
newborns, infants and young children; however, the benefits for the mother and family are
seldom attended to (Bulcroft et al., 1993). Therefore, defining the benefits for the mother and
family, preparing them for a challenge, yet rewarding experience, and recognizing that families
need to grow, learn and adapt to changes at their own pace may impact infant feeding practices.

**Application of the Family Life Course Development Theory**

The usefulness of the Family Life Course Development Theory to guide infant feeding
research in African American women is its emphasis on each individual within the context of the
family structure by not focusing just on one aspect of a particular problem, but also, by involving
all of the key players in the infant feeding decision-making process. The theory, however, does
not account for the intersection of gender, race, ethnicity, class, religion, etc., making it
challenging to use as a theoretical underpinning for understanding infant feeding initiation and
continuation in the African American community. Familial structures help to understand better
individuals and their dynamics with other family members. In the African American community,
however, the concept of family may be more flexible and less defined than in other racial or
ethnic communities (Barbarin & McCandies, 2002; Brown, 2008). While there are several
similarities among African American families and other populations, there are also a number of
distinctive characteristics and cultural differences noted in regards to gender roles, parenting
styles and stress and coping mechanisms (Barbarin & McCandies, 2002; Brown, 2008; Williams
et al., 2000). A number of these differences in familial conceptualization relate to the historical
injustice of slavery and the forced migration from Africa, and the social and economic inequities
experienced after the abolition of slavery (Barbarin & McCandies, 2002; Collins, 2008;
Dunaway, 2003). The structure of the African American family is influenced by (a) physical,
emotional and social adaptation into slavery; (b) perceived and experienced racism and discrimination; and (c), adaptation of cultural practices from key regional areas in Africa (Barbarin & McCandies, 2002; Williams et al., 2000).

According to Barbarin and McCandies (2002) and Dunaway (2003), during slavery, many familial units were often separated and prevented from communicating with one another; slaves were left to build a sense of community and family among individuals with whom they worked on an isolated landowner’s estate; and once freed, many African Americans sought to reconnect with their family members and even went as far as buying their loved ones from their current slave masters. The current structure of the African American family is based on familial structures observed in several regions of West Africa (Barbarin & McCandies, 2002). The majority of family units in West Africa are composed of immediate and extended family members and often times include neighboring families and highly respected community persons (Barbarin & McCandies, 2002).

Research indicates the infant feeding disparity noted in the African American community is related to historical, structural, social and cultural views of breastfeeding (Hurley et al., 2008; Lewallen & Street, 2010; McCann et al., 2007; Sharps et al., 2003; Spencer & Grassley, 2013; U.S. DHHS, 2011). In order for a practice to be deemed successful, acceptance from all parties must be achieved. Authors of this paper believe the practice of breastfeeding has not been fully accepted by many in the African American community, which may be attributed to the legacy of slavery and the introduction of substitute infant feeding methods. If an individual, family, and/or community have a negative perception or understanding of a recommended practice, the likelihood that the practice will be initiated is minimal (Bulcroft, Forste & White, 1993).

**Black Feminist Theory**
One cannot discuss African American mothers, infants, and infant feeding without discussing Black feminism as it relates to inherent gender roles and racial biases associated with the terms. The “maternal effect,” specifically, mothering, nurturing, providing for and tending to a newborn infant are all roles that have been relegated to women in our society (Creager, Lunbeck & Schiebinger, 2001, p. 107). For example, partners may be expected to assist in newborn and infant care, if an infant fails to thrive or gain weight, it is the skills of the mother that often come into question rather than the partner or family unit as a whole. Black Feminist Theory provides a framework that allows one to understand and describe not only the historical and sociocultural reasons, but also it takes into consideration the role of gender, sexual orientation, class and to a certain extent race and ethnicity (Collins, 2008). Traditional feminist theory includes a belief in equality for all human beings and acknowledgment of the unique differences each person brings with respect to experiences, perspectives, situations, morals, language and attitudes (Creager, Lunbeck & Schiebinger, 2001).

Black Feminist Theory is a critical theory that aims to reduce oppressive societal attitudes through understanding the use of power as it relates to gender, race, culture, class and sexual orientation (Collins, 2008; Davis, 1981; Haraway, 1988). Throughout the course of time, women have struggled for equal representation and opportunity within society (Godfrey-Smith, 2003). Black Feminist Theory offers an additional insight into the challenges experienced by women of color. Four major assumptions are associated with this theory: (a) acknowledgment of the plight and oppression experienced by African American women over a significant period of time; (b) understanding how the intersections of race, gender, and class affect the lives of African American women and their families; (c) challenging and eliminating negative depictions of African American women; while promoting positive representations of Black women; and (d),
the importance of integrating a critical perspective when conducting research focused on African Americans, specifically African American women (Collins, 2008; Few, 2007). Oppression as defined by feminist theory is an injustice perpetrated on a marginalized population by an entity with power (Women’s History, 2012). There are several types of oppression including social, institutionalized, systematic and internalized oppression (Collins, 2008).

Black feminists understand that many of the discourses around infant feeding for African American mothers and their infants are based on a predominantly White, Western, male and female middle-class perspectives (Collins, 2008; Haraway, 1988). Haraway (1998) explains that society will often ignore or discount knowledge from a non-male or marginalized perspective; however, the views of subjugated persons or the population are important and more reliable as they are not blinded by the current discourse of a given situation or place. This standpoint is extremely relevant to disparities in infant feeding practices as gender-based factors such as socialized gender roles, and power in relationships and society play an important role in how we better understand breastfeeding in the African American community.

Black Feminist Theory highlights the intersectionality of race, gender, class and ethnicity while examining the multiple oppressions experienced by African American women (Collins, 2008; Davis, 1981; Few, 2007). While this paper argues the decision to breastfeed is an informed family decision, the African American mother will be initiating the selected infant feeding method. Therefore, understanding the lived experiences of that woman is vital and Black Feminist Theory provides an additional perspective to guide the discussion around infant feeding decision making in the African American community. Furthermore, Black Feminist Theory presents an opportunity to explore the histories, culture and oppression experienced by African American women and their families as it calls on the researcher to examine internal and
institutional biases to ensure the accurate representation of the population being studied (Collins, 2008).

**Application of the Black Feminist Theory**

Black Feminist Theory is appropriate for addressing the needs of women within the context of the family structure, as breastfeeding is inherently a gendered activity. Black Feminist Theory posits that race/ethnicity, gender, class, etc. are bound inextricably in society (Collins, 2008). According to Collins (2008), Black women and other women of color experience a different and more intense kind of oppression, due to the historical, gender and racial milieu in the US. African American women not only have to deal with the stress of being female (and charged with the responsibility of rearing children), there is also the reminder of discrimination, and the stress of racial inequalities related to economics, education, health, birth outcomes, quality healthcare access, health insurance, housing and other types of resources. Black Feminist Theory calls for the exploration and explanation of such topics and is encompassing of all spectrums of life. Even if one is a poor, middle-class or wealthy Black woman, all Black women still share a commonality that cannot be dissolved away with money, education, improved access, increased power, etc. (Collins, 2008). By incorporating this perspective, one can truly begin to understand the multifaceted lives of African American mothers, their infants and families.

**Infant Feeding Decision-making Integrated Framework across the Perinatal Period**

Neither the Family Life Course Development Theory nor Black Feminist Theory alone is adequate as a theoretical underpinning to describe and explain breastfeeding in the African American community. An integrated conceptual framework of these theoretical perspectives is represented in Figure 1. The integrated framework shows the transition from preconception to a
decision about an infant feeding method. The infant feeding decision-making process is framed within the context of both the individual and family, which is framed within the context of the greater community and societal environment. While it is true that a new mother will ultimately make the final decision to initiate breastfeeding, during the antepartum and postpartum periods, it is also the case that she will consider advice and experiences of significant people around her (e.g. a partner, family members, friends and healthcare providers) thereby making it an informed individual and family decision.

In the proposed integrated framework, the major life stages are Preconception, Pregnancy, Postpartum and Breastfeeding or Formula Initiation. Preconception was selected as the first major life stage as a great deal of what women know about breastfeeding comes from what they were told or exposed to during their childhood, adolescence and young adulthood. The images in the media, discussions with family and friends and involvement with their surrounding communities all play a role in shaping a woman’s perceptions and experiences about infant feeding, specifically, breastfeeding. Pregnancy was selected as the second major life stage as it defines a role change in the life of the newly pregnant woman and her family members. At this moment in her life, she is not only responsible for herself, but also is now responsible for another person. This holds true for multiparas as well, since each pregnancy is unique and perceptions and experiences may change. Postpartum was selected as the third major life stage as it signifies a significant life-changing event as a pregnant woman transitions to a first-time or experienced mother. Breastfeeding or Formula Initiation was identified as the fourth major stage as this is where the new mother and family make their first significant postpartum decision. This decision making process is depicted as a linear process to represent the fact that once a woman decides
whether or not to maintain the pregnancy, the transitions can only really move forward, unless there is an unforeseen event.

The three areas of transition noted are: (a) Becoming Pregnant, (b) Giving Birth, and (c) Implementing the Infant Feeding Decision. Prior to becoming pregnant, the concept of infant feeding is not a major concern and/or priority. During the antepartum period, the woman’s body will begin to undergo physiological changes in breast tissue and give her clues about what to expect. The future mother, along with her partner and other support persons might embark on educational breastfeeding classes to assist with anticipatory guidance. Giving birth signifies the transition from womanhood to motherhood and infant feeding also denotes this transition as well. While this may hold true for primiparous women, multipara women may also experience significant reconfiguration of family relationships with the addition of each new child.

The forces acting and playing upon a mother and her family are the aforementioned social, cultural, gender and historical factors, which influence mother’s infant feeding decision during the antepartum and early postpartum periods. Along this timeframe, one would expect changes in the family dynamic and structure over time. The conceptual framework also allows for the possibility of increased life stressors across the perinatal period and it was created to be used in lower and higher socioeconomic African American populations as the infant feeding disparity is prevalent across socioeconomic status (Spencer & Grassley, 2013)

Assumptions of the Infant Feeding Decision-making Integrated Framework across the Perinatal Period

- Every pregnant woman has some type of “familial” system in place to provide support during the antepartum and postpartum periods.
- Types of support will vary from one familial system to another familial system.
• Familial support will vary in the types of information and experiences shared with the pregnant woman.

• The decision-making process is linear.

• The infant feeding decision-making process begins once the woman discovers she is pregnant. On occasion, this process might begin during the Preconception period and/or in Postpartum period.

• The infant feeding decision is implemented during the early postpartum period.

**Conclusion**

This paper presents an overview of the current commonly used theoretical frameworks to guide infant feeding research and proposes a new integrated framework to address the infant feeding disparity in the African American community. Breastfeeding initiation and continuation in the African American community is a complex yet interesting phenomenon. The Family Life Course Development Theory, first described by Bengston and Allen (1993), and later enhanced by Elder (1996) and White and Klein (2008), adequately frames the infant feeding disparity within the context of the individual and family structure. Nonetheless, it does not sufficiently address the concepts of gender, class and race. The addition of Black Feminist Theory (Collins, 2008) helps to bridge somewhat this gap; however, it alone does not adequately address the infant feeding disparity among African American families. The proposed integrated framework effectively and conceptually combines the most salient aspects of Black Feminist theory with the Family Life Course Development Theory. This critical lens and theoretical model will serve to guide research design and methods to better understand the infant feeding decision-making process of African American families.
Acknowledgments

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Conflict of Interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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Table 1

*Summary of Theories Frequently Used in Infant Feeding Literature*

<table>
<thead>
<tr>
<th>Theory</th>
<th>Description</th>
<th>Processes</th>
<th>Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Learning Theory (Bandura, 1977)</td>
<td>Individuals can learn from modeling and observing the desired behavior from other individuals (in a social context).</td>
<td>Decision Making Processes</td>
<td>Antepartum &amp; Postpartum</td>
</tr>
<tr>
<td>Social Cognitive Theory (Bandura, 1977)</td>
<td>Describes how individuals retain information through behaviors patterns, repetition and motivation.</td>
<td>Decision Making Processes</td>
<td>Postpartum</td>
</tr>
<tr>
<td>Theory of Planned Behavior (Ajzen, 1985)</td>
<td>Links one’s attitude and beliefs to their behavior</td>
<td>Attitudes, barriers and facilitators influencing breastfeeding initiation</td>
<td>Antepartum &amp; Postpartum</td>
</tr>
<tr>
<td>Self-Efficacy Theory (Bandura, 1977)</td>
<td>Describes one’s belief in their own abilities to master a specific task and/or function.</td>
<td>Self-Efficacy</td>
<td>Antepartum &amp; Postpartum</td>
</tr>
<tr>
<td>Cultural-Ecological Framework (Steward, 1955)</td>
<td>Discusses the role of one’s environment (social and physical) on cultural change and adaptation.</td>
<td>Feeding Styles and Behavior</td>
<td>Postpartum</td>
</tr>
<tr>
<td>Phenomenology (Based on Heidegger's philosophy) (Benner, 1994)</td>
<td>Focuses on individual experiences of a particular phenomenon</td>
<td>Breastfeeding personal experience</td>
<td>Postpartum</td>
</tr>
<tr>
<td>Theory of Culture Care Diversity and Universality (Leininger, 1991)</td>
<td>Culture and social environment can influence health behaviors and attitudes through a micro and macro lens.</td>
<td>Initiating and sustaining breastfeeding</td>
<td>Postpartum</td>
</tr>
<tr>
<td>Health Promotion Theory (Pender, 1982)</td>
<td>Focuses on individual experiences and behavior outcomes</td>
<td>Perceptions and experiences of additional breastfeeding support</td>
<td>Postpartum</td>
</tr>
<tr>
<td>Health Belief Model (Hochbaum, Leventhal, Kegeles &amp; Rosenstock, 1950s)</td>
<td>One’s behavior is guided by the belief of a particular health situation</td>
<td>Breastfeeding initiation and attitudes</td>
<td>Postpartum</td>
</tr>
</tbody>
</table>
Figure 1. Infant Feeding Decision Making Framework across the Perinatal Period

- Preconception
- Pregnancy
- Postpartum
- Breastfeeding Initiation or Formula

- Becoming Pregnant
- Giving Birth
- Implementing the Infant Feeding Decision

- African/African American Cultural Context
- Social Context
- Family Context

- Woman – Daughter – Partner – Friend
- African/African American Woman Context

Life Stressors Across the Perinatal Period

Δ in Family Dynamics

Mother
Chapter 3:

Paper 2: What Does Infant Feeding Mean to African American Women and Their Support Persons

Ifeinwa V. Asiodu
Abstract

Title: What Does Infant Feeding Mean to African American Women and Their Support Persons

Background: While overall breastfeeding initiation and continuation rates in the United States have increased, disparities in breastfeeding rates between African American women and White women remain. African American infants have the highest rates of infant mortality, premature birth, low birth weight and very low birth weight and can benefit greatly from an increase in breastfeeding. The purpose of this study was to understand and describe infant feeding practices of African American mothers as well as the infant feeding perceptions and experiences of their support persons.

Methods: Twenty-two participants (14 pregnant women and 8 support persons) were interviewed about and observed for infant feeding decisions during the antepartum and postpartum periods using a critical ethnographic approach. Through thematic analysis, key themes were identified.

Results: Most participants intended to breastfeed exclusively before birth, noting the importance of breastfeeding and its benefits for mothers and infants. Yet combination feeding (the use of both breast milk and formula feeding) was a common occurrence after birth, and participants felt guilty for not being able to breastfeed exclusively. Life experiences (e.g., lack of breastfeeding role models, education and/or employment aspirations) also played a role in intentions and perceptions about breastfeeding.

Conclusion: These data suggest African American women want to breastfeed and that future interventions geared towards this population should include messaging around combination feeding and increased support for all mothers regardless of their infant feeding method. Public health measures aimed at reducing the current infant feeding disparities would benefit by incorporating a more culturally inclusive message around breastfeeding.

Word Count: 248 words

Key words: African American mothers, breastfeeding, combination feeding, ethnography, infant feeding, messaging, qualitative research
Well Established

While breast milk is considered the optimal method of infant feeding, many African American mothers are choosing to not exclusively breastfeed. Research exploring the intersection of social, cultural, familial and historical contexts needs to be explored to address this disparity.

Newly Expressed

Using an integrated life course framework, this study sought to identify barriers and facilitators to breastfeeding initiation in the African American community. Understanding the barriers and facilitators to this decision making process, is imperative to developing effective breastfeeding interventions.
What Does Infant Feeding Mean to African American Women and Their Support Persons

**Background**

While breast milk is considered the gold standard of infant feeding in the United States (US), racial disparities in breastfeeding initiation and continuation are well known. In the most recent Breastfeeding Report Card, only 59% of African American women surveyed indicated they had ever breastfed (Centers for Disease Control and Prevention [CDC], 2013). At 6 months, the breastfeeding rate for African American women dropped to 30.1% while the national average remained at 44% (CDC, 2013). Unfortunately, health disparities in African American childbearing families are not only limited to breastfeeding. In fact, African American infants are approximately three times more likely to die than White, non-Hispanic infants and about twice as likely to have low birth weights (U.S. Department of Health and Human Services (US DHHS), 2011). Regrettably, being born too early and too small are the strongest indicators of infant mortality, child development and chronic disease and premature death in adulthood (Eichenwald & Stark, 2008). The disparity in breastfeeding rates is especially concerning because it is estimated that breastfeeding can reduce infant mortality by up to 21% (Chen & Rogan, 2004). Bartick and Reinhold (2010) estimated 900 infant lives might be saved each year in the US with increased breastfeeding initiation and continuation. Non-breastfed infants are 56% more at risk to succumb to sudden infant death syndrome (SIDS) than breastfed infants are and they have higher rates of asthma and eczema (US DHHS, 2011). Thus, increasing breastfeeding initiation and continuation rates can play a vital role in eliminating poor infant outcomes in the African American population.

Deciding on an infant feeding method is one of the first postpartum decisions a mother and family will make and the decision has profound health implications. However, there are
minimal data on how African American women are making feeding decisions in the antepartum
and postpartum period, or in the family context. Data on the relationship between personal
history (i.e. various life events, exposures and experiences) and breastfeeding initiation and
continuation are also very limited. Much of the literature focuses on the differences between
Caucasian and African American mothers, with an emphasis placed on socioeconomic status and
not the experiences related to breastfeeding or the infant feeding decision making process.
Increasing knowledge and understanding of the driving forces contributing to African American
women’s decisions about breastfeeding their infants, is a critical step toward designing effective
interventions to increase breastfeeding rates in this population.

**History of Breastfeeding and the African American Community**

The history of breastfeeding in the African American community is complicated as the
accessibility of infant feeding resources has changed immensely over time. Decades ago, women
had very few choices or limited resources for infant feeding methods; their options included
breastfeeding, evaporated milk products, or cow and goat milk (Stevens, Patrick & Pickler,
2009). Now there are several different brands and consistencies to choose from and if they
qualify, women have the option to receive free infant formula vouchers from the WIC program
(USDA, Food and Nutrition Service, 2009). With the increased accessibility to infant formula
and a negative perception of breastfeeding related to the legacy of slavery, an increased number
of African American mothers have forgone breastfeeding for formula.

Historically, the negative relationship between African American women and
breastfeeding dates back to the days of slavery. As wet nurses, African American women were
forced to nurse, nurture and care for the children of their slave owners, while their own children
were left alone or tended by another lactating woman (Dunaway, 2003). Such practices during
slavery disrupted the natural infant feeding bond that should have occurred between a mother and her infant. Subsequently, young African American girls were unable to observe their mothers breastfeed. The lack of autonomy, disruption of family units, and broken will endured as a result of slavery has placed African American women at a great disadvantage (Dunaway, 2003). Thus, African American women have been dealing with a lack of resources, inequality and poor health outcomes since the late 1600s when slavery was initiated (Dunaway, 2003). Although times have changed, the historical impact of slavery has left a permanent mark on African American women and their infants as women of color continue to experience oppression, due to the historical, gender and racial milieus in this country (Collins, 2000).

The objectives of this study were to describe and analyze the process African American mothers undergo when deciding on an infant feeding method; describe the barriers and facilitators encountered during this decision making process; and, understand the role social support persons (e.g., grandmothers, partners, and friends) play in the decision-making process. The research question was: What are the infant feeding perceptions and experiences of African American families who successfully or unsuccessfully initiate breastfeeding?

**Theoretical Framework**

The Infant Feeding Decision-Making Framework across the Perinatal Period incorporates essential elements of both Family Life Course Development Theory (Bengston & Allen, 1993) and Black Feminist Theory (Collins, 2000). This investigator-developed, integrated conceptualization of infant feeding decision-making was created to understand the intersection of social, gender, cultural, familial and historical contexts associated with the infant feeding decision-making process in African American families (Asiodu, 2014). The integrated model describes the infant feeding decision-making process across the perinatal period. Major life
stages, such as Preconception, Pregnancy, Postpartum and Breastfeeding or Formula Initiation, are used to illustrate important periods throughout one’s life course in which the infant feeding decision may be influenced.

**Methodology**

**Research Design**

A critical ethnographic approach was used to explore decision-making and infant feeding practices of African American mothers while also investigating infant feeding perceptions and experiences of their support persons. Critical ethnography focuses on uncovering the underlying themes with the purpose of identifying injustices and empowering the population being studied; it concentrates on detecting the rituals, gestures and language associated with a particular group and understanding how those factors affect the phenomenon of interest (Madison, 2005; Thomas, 1992).

**Sample**

A purposive sample of socioeconomically diverse African American women was recruited from public health programs, social media, breastfeeding support groups, hospital bulletin boards, sororities and professional organizations. Inclusion criteria were first pregnancy, self-identified as African American, 18 years of age or older, and able to read and write English. Pregnant women identified support persons for inclusion in the study. Inclusion criteria for support persons differed in that race/ethnicity and sex were not a condition of study eligibility.

The final sample consisted of 22 participants (14 pregnant women and 8 support persons) recruited from four Northern California Bay Area Counties. The final sample size was determined by data saturation consistent with ethnographic methodology (Hammersley & Atkinson, 2007; Holloway & Wheeler, 2009; Spradley, 1979; Thomas, 1992).
Setting

Participants were recruited from African American sororities, professional organizations, parenting and mothers groups and social networking sites such as Facebook, and Craigslist. Additionally, community based organizations; home visiting and public health programs were also used.

Data Collection

With approval by the University of California, San Francisco, Committee on Human Research, data were collected through in-person interviews, demographic sheets and field observations. Interviews were conducted in participants’ homes, a community based organization or coffee shop. Participants (pregnant women and their support persons) were asked to read and sign the consent form and complete the demographic questionnaire prior to the beginning of the interview. Participants were interviewed over 60 to 90 minutes multiple times during the antepartum and postpartum period. In an effort to enhance and protect the free sharing of information, pregnant participants and support persons were interviewed separately. Enrolled participants received a $20.00 gift card after the completion of each interview and community observation. In total, 43 in-person interviews were completed.

Open-ended questions, centered on perinatal and infant feeding experiences, were used to elicit a more holistic view of participants’ lives and perceptions. In order to obtain a deeper understanding around intention and selected infant feeding method, each participant was asked “What does infant feeding mean to you?” This question elicited a variety of responses and was very effective in setting the tone for the interviews. An investigator-developed semi-structured interview guide was used and data were collected over a 15-month period (March 2013 to June 2014). Representative questions from the interview guides are listed in Tables 1 and 2. Similar
questions were asked to the support person. The interview guide was modified to follow emergent themes as they arose. All interviews were audiotaped and transcribed verbatim by a professional service.

[Insert Table 1 and 2 about here]

Detailed field notes and pertinent observations made during participants’ baby showers, prenatal, postpartum, and breastfeeding groups were recorded throughout the data collection process. Verbal consent was obtained from the community-based organizations prior to observing the prenatal, postpartum and breastfeeding groups. During participant observations, the focus was on the physical, social and emotional environments surrounding African American women and their families; how African American mothers interacted with their infants and their social support persons; and, how African American mothers reacted and coped with different life stressors and important decisions during the antepartum and postpartum periods. In total, 25 hours of participant observations were conducted.

Data Analysis

Consistent with ethnographic methodology, data analysis occurred throughout the data collection process. A theoretical and latent thematic analytical approach as described first by Aronson (1994) and later expanded on by Braun & Clark (2006) was used to analyze the data and identify underlying emerging themes and patterns embedded in the data. Transcripts were first reviewed to confirm accuracy and then coded in their entirety. Initial codes were very specific; which lead to the formation of relevant themes that were often more broad and comprehensive. Transcripts were reviewed several times to obtain a deeper and richer understanding of the data. Once the initial coding process was completed, related codes were placed into specific categories. From there the specific categories were organized into even
broader themes (e.g., barriers, facilitators or potential facilitators to breastfeeding initiation and continuation). Throughout this process, the research question and study purposes were reviewed. As themes were identified member verification was used to validate the analysis, thus informing subsequent interviews and participant observations. Thematic maps, situational maps and memos were used to support the data analysis process (See Table 4). The included ordered situational map describes various elements of infant feeding as described by the study participants and participant observations.

Results

Sociodemographic Profile of Participants

Demographic characteristics of the 22 participants (14 pregnant women and 8 support persons) are shown in Table 3. Support persons included 3 partners, 3 friends, 1 mother and 1 grandmother. A majority of the support persons self-identified as African American and were women; their ages ranged from 24 to 77 years, with a median age of 35.5 years. Most of the support persons were high school graduates with some college education. Two of the support persons were college graduates and one person stated graduate school as their highest level of education. The majority of the support persons believed their pregnant partner, friend or family member intended to breastfeed during the postpartum period.

Pregnant women’s ages ranged from 21 to 36 years, with a median age of 23.5 years. At the time of the first interview, about half of the pregnant participants noted being married or having a partner. Most of the women had graduated from high school, while some had attended college, and two of the pregnant participants noted graduate school as their highest level of education. Half of the pregnant participants were employed. A majority of pregnant participants were Medi-Cal recipients or were on a health plan paid for by Medi-Cal. Income levels ranged
from $0-25,000 to $100,000 or more. All but one participant began receiving prenatal care in the
first trimester. Most of the participants noted an intention to breastfeed or combination feed their
infants. Only one participant noted an intention to formula feed.

[Insert Table 3 about here]

Themes

Themes are organized around the conceptual framework for the study. Participants’
meaning of breastfeeding is presented first, followed by a discussion of contextual factors
involved in infant feeding decision-making. Then, salient themes related to infant feeding
decision-making that emerged in each of the identified life stages and transitions are presented.

Meaning of Feeding

During the initial antepartum interviews, participants were asked to describe their infant
feeding decision-making processes. Participants first defined the meaning of infant feeding in the
context of their lives. For most participants, the answer to this question came rather quickly;
while others asked for further clarification or signs of approval when responding. The
explanations were thoughtful and varied in length as each participant had a different description
of what infant feeding meant to them. Representative quotes were extracted and are presented
below.

Hmm. Infant feeding means the best possible nutrient that you can give a growing
baby. It looks like giving your kid nothing but the best that you can. So whether
that's breastfeeding or whether that's in a bottle or whatever, you know it has to be
good for your child [Pregnant participant]

I guess the basic term of infant feeding is just in that – it’s just feeding and I think
that there’s two options, there’s breast-feeding and there’s formula. I think that
breast-feeding isn’t just infant feeding and I think that that’s where the difference
lies. Not to say that you don’t cuddle and kiss and bond with your children by
giving them formula but I will say that by breastfeeding, there is a step beyond
that cannot be duplicated through a bottle. So infant feeding is just that it’s
feeding an infant. [Support person]
For many of the study participants, infant feeding was tantamount to breastfeeding. This finding is significant as it contradicts the current depiction of African American women as non-breastfeeding mothers or having no interest in the practice of breastfeeding. Participants were very clear on the differences between breastfeeding and formula feeding. However, clarification was in regard to “bottle feeding” was asked as “bottle feeding” was used to describe both expressed breastfeeding being fed through a bottle or prepared formula being fed via a bottle.

**Contextual Factors Involved in Infant Feeding Decision-making**

**Family context.** Participants noted that the decision to breastfeed or formula feed was often influenced by input received from members within their social support networks (e.g., family members, friends, co-workers, and church members). During the antepartum period, many of the pregnant participants and their support persons reported numerous infant feeding conversations with other family members or friends. Conversations varied from very positive breastfeeding experiences to extremely negative breastfeeding experiences. Following these discussions, pregnant participants were often left with more questions, doubts or concerns over their desire and ability to breastfeed. However, many were able to rationalize the stories and place them in the proper context. The following exemplary quotes from pregnant participants and support persons illustrate understanding that similar to giving birth, everyone has a different infant feeding experience.

Some of my family members like my sister said her, - her milk was drying up. I think my grandmother told me one of my aunts didn’t make any milk at all and oh I have – I had a friend who was like, “Oh. I’m not making enough milk” and at the point in time when I was hearing that information, I didn’t know enough myself to be like, “Well, it might be something else. Maybe you need to talk to a lactation consultant” but most of those conversations just highlighted the lack of information and support for breastfeeding women. [Pregnant participant]

She wanted to yes, she definitely expressed interest in breastfeeding but she also had concerns. She said that she wasn’t worried about labor and she wasn’t
worried about birth but she was very worried about breastfeeding in that it was going to be her challenge and she said that she would have nightmares about it. [Support person]

During the initial and subsequent interviews, participants were asked to describe their previous infant feeding experiences involving family members or friends. Breastfeeding was not the norm as a majority of the participants (pregnant and support persons) interviewed grew up with a limited number of breastfeeding role models. If breastfeeding was practiced, it was portrayed as a private activity and an act that was not discussed in public. According to a number of study participants, formula feeding or bottle feeding was the preferred infant feeding method in their households. Most recalled observing few if any breastfeeding women in their surroundings. The discourse on infant feeding primarily focused on the type of formula being used or the difficulty of initiating breastfeeding.

Yeah. ‘Cause breastfeeding was really private in my family. So when we breastfed – fed a child, we weren’t in a room with everyone else. So it’s not like we saw breastfeeding. So it was like I didn’t know how to breastfeed. So I just saw bottles because they had milk bottles, they said, “Go ahead and feed the baby.” So that’s how that was. [Pregnant participant]

…I guess only recent experience, because I think almost everybody I’ve ever known has always done formula. Maybe like the last time I knew people with kids was when I was in high school…and so all those kids were formula kids. Um, yeah and then there was a few smattered in between but I’ve never known anyone that breastfed actually. [Pregnant participant]

…No. Uh, just bottle feeding…I would imagine if [breastfeeding] was happening, it was happening in private. So I haven’t been too privy to that. Other than walking down the street…But other than that, no. [Support person]

Though formula feeding appeared to be the prevailing feeding method, a handful of participants did witness successful breastfeeding or recalled hearing about such stories. Those participants believed their early breastfeeding experiences played a significant role in their current infant feeding beliefs and desires. Participants with positive visual experiences and
memories of breastfeeding were more likely to be supportive of breastfeeding for themselves or their partner, family member or friend.

I grew up in a household where my mother nursed me for 18 months and my grandmother breastfed my mother and my uncle. You know my great-grandmother breastfed just because formula wasn't really [available].... [Support person]

Well… My mom, my mom is one of those old school moms. She was a nurse and she was an advocate for breastfeeding. [Support person]

Understanding the influence of family on infant feeding decision making and practice, specifically breastfeeding, proved challenging at times as some participants described having very difficult relationships with family members during the antepartum and postpartum periods. Two pregnant participants reported feeling uncomfortable asking any family members or other support persons to participate in the study since previous requests for support had gone unanswered. During one participant observation of an antepartum group, another participant expressed not feeling supported by anyone in her family at the moment, and thus, wanted to continue in the study without a support person.

**Social context.** Significant changes to the social dynamic and structure of the participants’ lives was also noted over the prenatal and postpartum periods. During the antepartum period, participants described in detail what their support systems consisted of and expressed expectations of the type of support wanted from those individuals. Social support networks included family members (e.g., mothers, fathers, siblings, cousins, aunts, uncles, grandmothers, and great-grandmothers), partners (husbands, boyfriends, and father of the babies), friends, neighbors, church members, public health nurses and community workers. Expectations of support differed based on education level, breastfeeding experience, availability of time and current location. While each participant expressed the kind of support needed or
anticipated differently, common elements were the importance of identified support persons and the lack of consistent support (see representative quotes below).

Yeah well luckily I have a pretty good husband that knows when I’m creating enough [stress] to just calm me down so he’s good. Otherwise…here I don’t have a super huge amount of like support and I’ve always kind of been a kid that other people’s moms pick up and you know. [Pregnant participant]

I’ve always grew up by myself. Even with my family. So me trying to be close to family was kinda hard to do. I like, realize it now that I'm getting older that it’s a good thing to have… I feel like I’d rather call up someone in [Public Health Program]. And actually ask them for help or whatever. More than my own family…. [Pregnant participant]

Unfortunately, participants experienced a great deal of transition within their family and social dynamics during the postpartum period. Often expectations of support expressed during the antepartum period (e.g., childcare, financial and housing support, emotional encouragement and social interaction) were not met. Relationships with partners or family members became strained and living arrangements were affected. Participants were left feeling somewhat alone and isolated at times, which lead to feelings of resentment or resiliency.

I mean, [my boyfriend] is supportive but I'm getting more support from my mom and dad, because my mom’s been taking the baby, because [my boyfriend] had to go back to work after three weeks. I've been by myself with the baby... My mom is helping me emotionally because I had the baby blues for like the first two weeks when I came home. I was crying and stuff because [my boyfriend] was acting different… [Postpartum participant]

Yeah. But he’s making me a lot stronger being a mom. Because me and my mom are very close but we got in an argument like a little bit before [holiday]...Uh and she didn’t call me for Christmas, New Year or Thanksgiving. And it’s hard because I'm an only child and we’re very close. But there were days like, “You know what? I'm not even worried about it anymore. It’s like I'm focusing on my son. And focusing on being a better parent, going to school, getting a job.” You know – so, maybe she’s doing it to teach me a lesson. Even though I think it’s kinda harsh because he’s like my first child. You don’t know what I’m going through. Or but that’s life, you know. [Postpartum participant]
When family members or friends did display some type of interest, participants often felt as if the interactions were not genuine. A number of participants expressed feeling ignored or questioned whether they were being punished for their decision to become a mother. As first time mothers, study participants described the need to defend their parenting skills and styles. Participants were often made to feel as if they were not as important as the baby or if their presence was no longer needed. This lead to feelings of emotional conflict as all of the family attention was often thrust upon the newborn.

Be exactly that, be supportive. Be there. Don’t always be asking about the baby. It isn’t just about the baby. Just like I understand it’s a new baby coming and they’re excited and you don’t know anything about it and its new and everything but at the same time, it has been the whole nine months everybody have been asking baby, baby, baby….Now, the baby’s here, it’s still baby, baby, baby, but you want to still feel important. You want to still feel like people care about what’s going on with you as well... [Postpartum participant]

In an effort to create a supportive environment, some participants sought out assistance through other venues in the community (e.g., postpartum, parenting or breastfeeding support groups). All of the study participants reported attending some type of antepartum and/or postpartum class or group (e.g., prenatal, childbirth, postpartum or breastfeeding). Within the group sessions, participants were able to find encouragement from other women in similar situations and received comfort knowing their experiences were not unique. During one postpartum group observation, study participants were noted asking and giving each other advice about various infant topics (e.g., infant feeding and sleeping schedules, clothing, bottles and skincare maintenance). Participants spoke very highly about the social interaction and fellowship obtained while attending these groups.

[Public Health Program]? It’s cool. It’s a lot of black girls, actually that had babies, really. I first started when I was pregnant...I’m lucky because all the girls, are cool...They all got babies, they’re all young like me and everything... [Postpartum participant]
I go to [Community Based Organization] and now there’s a class called Knowing Your Baby and there’s like…about five other women in the class and we all breastfeed and it’s like really empowering to be in a room full of women that are breastfeeding, it makes me feel really good. [Postpartum participant]

The support received from members and leaders of the different support groups was critical, especially if the participant was trying to breastfeed exclusively or had a strained relationship with family members or friends.

**Infant Feeding Decision-making through the Life Stages and Transitions**

**Antepartum Intention.** Most of the pregnant participants and support persons indicated an intention to breastfeed exclusively. Half (7) of the pregnant participants noted an intention to breastfeed exclusively; whereas 6 of the 8 of support persons noted a desire for their partner, family member or friend to breastfeed exclusively. Six of the 14 pregnant participants intended to practice combination feeding (e.g., using both breast milk and formula). In all, 13 of the 14 pregnant participants intended to breastfeed in some capacity. Pregnant participants revealed their infant feeding decisions were mainly based on the benefits of breastfeeding for mother and infant (e.g., bonding, immunity protection, weight-loss, child development, and/or healthier option). The quotes below are representative of participants’ perceptions of the benefits of breastfeeding.

Just because it's healthier for the baby. I would want to have a healthy child as I don’t want anything to go wrong or when he's inside me or when he is outside…I guess I'm going to be overprotective. So, just because it's healthier for him… [Pregnant participant]

Breastfeeding. It’s definitely healthier. I know that, with breastfeeding, from what I’ve heard from other parents - most of my co-workers are parents, there’s a lot of value to a mother being able to breastfeed at least for the first couple of months because nutrients, in addition to the immune system, is strengthened by that process. Uhm, I’ve heard [that kids] who were breastfed, got sick a lot less frequently. So in that, there are a lot of benefits to it, again… [Support person]
As first time mothers and/or parents, study participants appeared to be very engaged with the infant feeding decision-making process during the antepartum period. Information to influence this decision was often collected via anecdotal stories or through the attendance of prenatal groups and breastfeeding classes. Participants received infant feeding information, specifically on breastfeeding, in the form of pamphlets, booklets, information sheets. In their classes or groups sessions, breastfeeding instructional videos were often viewed and discussed. Some participants sought pertinent information via various social media platforms (e.g., BabyCenter website and Facebook pages).

**Postpartum actual feeding practices.** While breastfeeding was portrayed as the best option and method of infant feeding, the concept combination feeding also emerged as an important theme during the postpartum period. Many participants attempted to breastfeed exclusively, however, combination feeding was the most common method used during the postpartum period. Only 5 of the 14 pregnant participants were exclusively breastfeeding at 3 months postpartum. For those mothers who were practicing combination feeding, breastfeeding was typically a night activity or a practice done only at home; formula was primarily used while participants were out in public or when the baby was left in the care of someone else.

When I come home from work, I pump him one bottle but I’m not getting that much anymore now because during the day he drinks formula. [Postpartum participant]

I do breastfeed him when I’m at home but if I leave him with somebody else then they bottle [formula] feed him but I always have to bottle [formula] feed after I breastfeed him anyway. [Postpartum participant]

Combination feeding was also noted in families where the participants were pursuing educational or employment goals. Defensiveness around the term combination feeding was noted as participants believed they were breastfeeding mothers, even if they were supplementing with
formula, regardless of the amount of formula being provided. The definition of exclusive breastfeeding was also called into question.

So when you say exclusive, I mean giving him one formula bottle like every couple of nights is that still exclusively breastfeeding?...And sometimes he doesn’t take it, the formula...I don’t like that because it makes me feel like, oh it’s not enough. But I know it’s enough because 99.99.99% of his meals are from my boob. And I just don’t want him to not get all the vitamins and nutrition that he needs and so it makes me nervous to think oh I’m not exclusively breastfeeding you know. [Postpartum participant]

Although substitute formula was viewed as more convenient, study participants still recognized the importance of breastfeeding. Thus, significance was placed on the importance of providing both breast milk and formula. Regardless of the amount of breast milk provided, participants were committed to the process prior to cessation of breastfeeding.

Participants’ life experience and stress related to their current situation (e.g., lack of housing, strained and changing family dynamics, employment and education) played a major role in the continuation or early cessation of breastfeeding. Each participant reported feelings of stress associated with motherhood, relationship issues with a significant other (and family members), and limited to no social support persons. The life stressors mentioned compiled with the intention to breastfeed often left participants feeling guilty about their decision to cease breastfeeding.

I feel guilty about giving him formula because the bond that we have and sometimes I know when he’s sleepy or when he’s restless, he wants to breastfeed and I’m not there....So I use [formula] but I feel really guilty because I know that breast milk is better for him....I feel guilty because I only have one breast that works but when I get home, I try to make it up to him by feeding him.....[Postpartum participant]

I’m going back to work [at the beginning of the year]. So, I was gonna like, stop breastfeeding her ‘coz my stepmom was like, “You have to stop breastfeeding her. You have to wean her over to the bottle you know. And I was sad because she really likes breastfeeding. But my dad always goes, “You like it more than the baby.” Because I always feed her. [Postpartum participant]
A majority of participants expressed increased guilt associated with unsuccessful or early cessation of breastfeeding. Tearing of eyes, softening of the voice, increased fidgeting and avoidance of eye contact were observed when participants were discussing barriers to successful breastfeeding. Feelings of guilt appeared to be influenced by early breastfeeding cessation or lack of milk production. Participants had high expectations and felt inadequate if they were unable to meet infant feeding goals set during the antepartum period.

I had a total like…I broke down. It’s like oh I can’t make enough to feed my baby like that’s what I’m supposed to do and like I said nobody – nobody even mentioned that, that might happen so yeah it was just like, you know, shocking and upsetting and it was like a relief, okay I can feed him out of a bottle because I’m like cracked and sore but then also there’s like disappointment and feeling like inadequate. [Postpartum participant]

Discussion

African American women in this sample were breastfeeding and wanted to breastfeed exclusively. Unfortunately, there were a number of barriers preventing the women in this study from being successful in meeting their breastfeeding goals and feeling successful about their infant feeding practices. However, participants were able to discuss the benefits and importance of breastfeeding as it related to the wellbeing and development of infants. Yet, few participants were able to recall observing breastfeeding women during their childhood or discussing breastfeeding with other family members or friends prior to the antepartum period. In fact, most participants were able to provide vivid descriptions about their experiences preparing and using formula bottles. This finding was expected as generations of African American children were raised without seeing their mothers or grandmothers breastfeed (US DHHS), 2011).

While study participants expressed limited first-hand knowledge around breastfeeding, a most of those interviewed expressed a desire to initiate breastfeeding. All but one participant
initiated breastfeeding during the postpartum period, although a majority felt they were not able to breastfeed exclusively their infants. This led to an increase of combination feeding and substitute formula use. Mothers who supplemented with formula or ceased from breastfeeding prior to 6 months were often left with feelings of guilt or inadequacy. Participants had specific expectations of themselves and their mothering abilities and felt embarrassed when they were unable to meet those goals. This is significant as higher rates of perinatal mood and anxiety disorders have been linked to unsuccessful breastfeeding initiation (Dennis & McQueen, 2009). There also appeared to be a failure of the healthcare system to support these women who intend to breastfeed exclusively (Cricco-Lizza, 2006; Lewallen & Street, 2010). The lack of support intersected with the cultural narratives around how, when and why women are supposed to breastfeed has created a divisive climate for breastfeeding women, specifically African American women (Cricco-Lizza, 2006; Lewallen & Street, 2010).

Much of the education and messaging around breastfeeding promotes exclusive breastfeeding. Minimal time is spent discussing the effects of combination feeding or preparing mothers for the possibility of supplementation with infant formula. Providing increased lactation support as well as inclusive messaging around combination feeding may be needed to help women overcome barriers and decrease feelings of guilt. Changing cultural norms and discourses around what it means to be a breastfeeding mother is significant; as current breastfeeding definitions and culture were created by a predominantly White, male centered perspective that does not take into consideration the struggles of low-income, women of color, dealing with the history of slavery, forced wet nursing, high levels of stress, racism, lack of resources and limited support (Collins, 2008; Spencer & Grassley, 2013).
Breastfeeding is not a commodity; as a basic human need, rather than privilege, this need should be used as a factor to determine the allocation of infant feeding resources for African American women and all breastfeeding women. Adequate access to breastfeeding resources and support is a human right and it is our obligation to remove barriers or obstacles to achieve exclusive breastfeeding. Furthermore, in order to address properly the infant feeding disparity, there needs to be an increased focus on social determinants of health (e.g., social, economic, and physical conditions effecting health and quality of life outcomes) (US DHHS, 2011). If these social determinants of health are not addressed, is it fair to expect African American women or any woman dealing with such conditions, to breastfeed exclusively for six months?

The importance of social support systems was another common thread found among all of the interviews. This was a central finding as it reaffirmed the importance of interactions throughout one’s life course as it pertains to health behaviors and beliefs. Social support networks can play an integral role in the way one experiences and sees the world, especially in the African American community (Wills, Eder, Lindsay, Chavez, & Shelton, 2004). In order to prepare properly these women for successful breastfeeding, infant feeding support systems and procedures need to be discussed and put into place during the antepartum and preconception periods. In this study of first time mothers, the antepartum periods appeared to be an opportune time to engage and interact with women and their social support systems. Developing interventions that connect the importance of social support systems with infant feeding is important as African American women and their infants would benefit greatly from an infant feeding support team.

Study Limitations
The perspectives presented in this paper were from a purposive sample of first-time African American mothers and their support persons. These results are not intended to be generalizable to all first-time African American mothers and their support persons as the study participants were of similar socioeconomic backgrounds and lived in similar geographic locations. Every effort to enroll the social support persons of each participant into the study. However, that was not possible as some participants were without a partner or social support system.

**Conclusion**

The positive benefits of breastfeeding for mothers and infants have been well established. It is important to understand the barriers associated with low breastfeeding initiation rates in the African American community. With that information, policies can be influenced and new methods of education can be developed, tested and implemented. For researchers and clinicians, the understanding of this infant feeding disparity will only be enhanced through additional qualitative research focused on the perceptions, behaviors and experiences of breastfeeding in the African American community. Continued research in the area of perceptions of multiparous African American women is warranted, as first-time mothers’ account for a smaller percentage of births. Support persons, specifically partners and grandmothers played a crucial role in the infant feeding decision-making process in this sample, and more research examining their unique role is needed. Developing and testing support person interventions focused on increased lactation education and understanding the importance of support is vital based on findings of this study. In addition to further qualitative inquiry, a mixed methods approach is also needed to obtain a deeper understanding of the life stressors and psychosocial factors affecting low breastfeeding initiation and continuation rates in the African American community. Clinically,
the presence and role of support persons needs to be assessed and efforts made to include the identified support persons in early infant feeding planning.

**Acknowledgments**

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**Conflict of Interest**

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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postpartum depression: A qualitative systematic review. *Pediatrics, 123*, 736-751


U.S. Department of Health and Human Services. *The Surgeon General’s Call to Action to*


Table 1

*Antepartum In-Person Interview Guide*

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tell me about your prenatal care experiences.</td>
</tr>
<tr>
<td>What does infant feeding mean to you?</td>
</tr>
<tr>
<td>How did you come to the decision to <em>(breastfeed or formula feed)</em> your new baby?</td>
</tr>
<tr>
<td>What experiences have you had with infant feeding in the past?</td>
</tr>
</tbody>
</table>

Table 2

*Postpartum In-Person Interview Guide*

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tell me about your experience having your baby.</td>
</tr>
<tr>
<td>Tell me about your infant feeding experiences so far, <em>the good, bad and the ugly.</em></td>
</tr>
<tr>
<td>How did your <em>social support person(s)</em> view the decision you had made regarding infant feeding?</td>
</tr>
<tr>
<td>What, if anything, would you change about your experiences if you could?</td>
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<td>-------------------------------</td>
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<tr>
<td></td>
</tr>
</tbody>
</table>
| **Age**                       | 23.5 years of age (median)  
                                 | 20 to 36 years (range)   |
|                               | 35.5 years of age (median)  
<pre><code>                             | 20 to 77 years (range)   |
</code></pre>
<p>| <strong>Gestation Age</strong>             | 32.5 weeks (median)     |                        |
|                               | 10 to 40 weeks (range)   |                        |
| <strong>Race/Ethnicity</strong>            |                       |                        |
| African American              | 14                    | 7                      |
| White                         | 0                     | 1                      |
| <strong>Highest Education</strong>         |                       |                        |
| Some High School              | 2                     | 1                      |
| High school Graduate          | 6                     | 2                      |
| Some College                  | 4                     | 2                      |
| College Graduate              | 0                     | 2                      |
| Graduate School               | 2                     | 1                      |
| <strong>Employment</strong>                |                       |                        |
| Employed                      | 7                     | 2                      |
| Retired                       | 0                     | 1                      |
| Self-Employed                 | 0                     | 1                      |
| Stay at Home Mother           | 0                     | 1                      |
| Student                       | 1                     | 2                      |
| Unable to Work                | 5                     | 1                      |
| Unemployed/looking for work   | 2                     | 0                      |
| <strong>Insurance</strong>                 |                       |                        |
| Healthy San Francisco         | 1                     | 0                      |
| Medi-Cal                      | 11                    | 2                      |
| Medicare                      | 0                     | 1                      |
| Parent’s Insurance            | 0                     | 1                      |
| Private Insurance             | 2                     | 4                      |
| <strong>Yearly Income</strong>             |                       |                        |
| $0.00 - $25,000             | 12                    | 5                      |
| $25,000 - $50,000           | 0                     | 1                      |
| $50.00 - $75,000            | 0                     | 1                      |
| $75,000 - $100,00           | 0                     | 0                      |
| $100,000 or more             | 2                     | 0                      |
| Unknown                       | 0                     | 1                      |
| <strong>Housing</strong>                   |                       |                        |
| Apartment                     | 3                     | 1                      |
| Apartment w/Family             | 1                     | 2                      |</p>
<table>
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<tr>
<th></th>
<th>Pregnant Participants</th>
<th>Social Support Persons</th>
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<tbody>
<tr>
<td></td>
<td>((n = 14))</td>
<td>((n = 8))</td>
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<tr>
<td>Homeless</td>
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<td>0</td>
</tr>
<tr>
<td>House</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>House w/Family</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>With Family</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>With Friends</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>With Partner</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td><strong>Chronic Diseases</strong></td>
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<td></td>
</tr>
<tr>
<td>Asthma</td>
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<td>3</td>
</tr>
<tr>
<td>Depression</td>
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<td>0</td>
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<tr>
<td>Diabetes</td>
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<td>1</td>
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<tr>
<td>Glaucoma</td>
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<td>1</td>
</tr>
<tr>
<td>Hypertension</td>
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<td>2</td>
</tr>
<tr>
<td>Obesity</td>
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<td>0</td>
</tr>
<tr>
<td><strong>Prenatal Care Accessed</strong></td>
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<td>_____</td>
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<tr>
<td>1st Trimester</td>
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<tr>
<td>2nd Trimester</td>
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<td></td>
</tr>
<tr>
<td>3rd Trimester</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Preferred Infant Feeding</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Method</td>
<td></td>
<td></td>
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<tr>
<td>Breastfeeding</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Combination Feeding</td>
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<td>0</td>
</tr>
<tr>
<td>Formula</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Table 4

Ordered Situational Map

INDIVIDUAL HUMAN ELEMENTS/ACTORS
Mother & baby dyad
Support persons – grandmother, friends, and father of the baby
Healthcare providers (prenatal, postpartum & pediatric)
Lactation Consultants
Nurses – Postpartum, Labor & Delivery
Perinatal, Childbirth and Breastfeeding Educators
Public Health Nurses
Women, Infants and Children (WIC) staff

COLLECTIVE HUMAN ELEMENTS/ACTORS
WIC program
Black Infant Health Program
Homeless Prenatal Program
Nurse-Family Partnership
Community Based Organizations
Baby friendly hospitals
Hospitals
Healthcare organizations (WHO, AAP, AWHONN etc.)
Formula manufactures

DISCURSIVE CONSTRUCTIONS OF INDIVIDUAL AND/OR COLLECTIVE HUMAN ACTORS
Healthcare providers and educators as knowing or possessing knowledge about the importance of breastfeeding and techniques
Difficulties (mother & baby) with latching on or milk production
Lack of knowledge around milk production
Some mothers unreceptive to teaching
Some providers are too “pushy” or aggressive in advocating of breastfeeding
Limited amount of time or resources geared towards breastfeeding during inpatient (postpartum stay)

POLITICAL/ECONOMIC ELEMENTS
Formula production is “big business,” with many lobbyists at the local, state and national level
Surgeon General’s Call to Action to support breastfeeding
In CA – SB-402 Breastfeeding legislature – all hospitals have to be Baby-Friendly Hospital by 2025

TEMPORAL ELEMENTS
Breastfeeding is now considered the gold standard in terms of infant feeding methods

MAJOR ISSUES/DEBATES (USUALLY CONTESTED)
Is there an actually difference between breastfeeding and formulas (that are fortified with DHA, iron, lipil etc.)?
Time associated with breastfeeding sometimes seen as too much or limiting to other aspects of life
Sometimes breastfeeding can contribute to relationship strife (especially is there is increased pressure to cease breastfeeding earlier than expected
Location – is it appropriate to breastfeed in public places?

NONHUMAN ELEMENTS/ACTANTS
Knowledge & Skill
Formula vouchers (provided by WIC)
Pumps & pumping supplies
Benefits (maternal and pediatric) of breastfeeding
Social Media – perinatal mobile applications and internet webpages

IMPLICATED/SILENT ACTORS/ACTANTS
Mother & baby dyad
Support persons – grandmother, friends, and father of the baby
Healthcare providers (prenatal, postpartum & pediatric)
Social Media companies

**DISCURSIVE CONSTRUCTIONS OF NONHUMAN ACTANTS**
Healthcare system appears to be anti-breastfeeding (in some hospitals formula is given at discharge)
Movement towards more Baby-Friendly Hospitals
Formula vouchers (provided by WIC)
Limited time with a lactation consultant during postpartum period
Demands of work or school environment
Limited infant feeding information offered via social media

**SOCIAL/CULTURAL/SYMBOLIC ELEMENTS**
African American culture
Social/cultural history of breastfeeding leading back to slavery (forced wet nurses)
Culture of disapproval in regards to breastfeeding in the United States and negative stigma attached
Influence of social media – breastfeeding support groups

**SPATIAL ELEMENTS**
Lack of privacy or designated areas when lactating mothers are in public
Unsafe neighborhoods and environments

**RELATED DISCOURSES (HISTORICAL, NARRATIVE AND/OR VISUAL)**
Breastfeeding can be lifesaving to all infants, specifically African American infants (↓ infant mortality rates and beneficial for preterm and very low and low birth weight infants)

**OTHER KINDS OF ELEMENTS**

Postpartum depression
Increased Stress
Coping mechanisms
Lack of social support system
First-time mothers
Unsafe environments
Resource limited environments
Limited infant feeding resources (e.g. lactation consultants of color or local resources)
Limited public transportation options
Other responsibilities (e.g. employment, education)
Chapter 4:

Paper 3: Social Media: A Missed Opportunity to Diffuse Breastfeeding Education to African American Mothers and Their Social Support Network?

Ifeyinwa V. Asiodu
Abstract

Title: Social Media: A Missed Opportunity to Diffuse Breastfeeding Education to African American Mothers and Their Social Support Network?

Objective: To describe the utilization of social media during the antepartum and postpartum periods among first time African American mothers and their support persons.

Design: A qualitative critical ethnographic research design.

Setting: Participants were recruited from community-based, public health and home visiting programs.

Participants: A purposive sample of 14 pregnant African American women and eight support persons were recruited.

Methods: Twenty-two participants were interviewed individually and observed multiple times during the antepartum and postpartum periods. Data were analyzed thematically.

Results: Participants frequently used social media for educational and social support, and searched the internet for perinatal and parenting information. Most participants reported using at least one or two mobile applications during their pregnancy and after giving birth. Social media was typically accessed through the use of smartphones and/or computers using a variety of different websites and applications. While participants gleaned considerable information about infant development from these applications, they had difficulty finding and recalling information about infant feeding.

Conclusion: Social media is an important vehicle to disseminate infant feeding information; however it is not currently being used to its full potential. These findings would suggest that future interventions geared towards African American mothers and their support persons should include a variety of social media approaches. The way individuals gather, receive and interpret information has changed. With the increasing popularity and use of social media platforms, now is the time to create more innovative interventions for infant feeding and breastfeeding promotion.

Key words: African American mothers, breastfeeding, infant feeding, social media, messaging, ethnography, qualitative research
Social Media: A Missed Opportunity to Diffuse Breastfeeding Education to African American Mothers and Their Social Support Network?

Introduction

Breastfeeding is the optimal source of nutrition for newborns and infants under 6 months (American Academy of Pediatrics, [AAP] 2012). The benefits of breastfeeding on the neonatal, infant and early childhood periods are supported and well-documented with scientific evidence. Infants who are breastfed are less likely to experience ear infections, asthma, respiratory infections, diabetes and obesity (AAP, 2012). A large infant feeding disparity exists in the African American community. The current rates of breastfeeding initiation and continuation in the African American community are below the goals set by the Healthy People 2020 Initiative, 82% ever breastfed and 61% breastfeeding at 6 months (United States Department of Health & Human Services [HHS], Healthy People 2020, 2011). With the recent Surgeon General’s Call to Action to Support Breastfeeding, this infant feeding method has once again been thrust into the spotlight (HHS, 2011). While the current 59% initiation rate and 30% continuation rate at 6 months postpartum in African American women can be somewhat discouraging, it is important to note that this is an improvement from previous years (Centers for Disease Control and Prevention, [CDC], 2013). Although the increase in breastfeeding initiation rates demonstrates that great efforts are being made in the African American community around breastfeeding, we should not let this progress overshadow the work that remains.

Research has shown that breastfeeding practices are directed by ethnotheories that are specific to each culture (Hurley, Black, Papas, & Quigg, 2008). Ethnotheories can be described as cultural ideas or beliefs about a specific topic shared by a socio-cultural community or group such as parents, mothers, grandmothers, African Americans etc., (Harkness & Super, 1996).
African Americans have a rich and lustrous history built on the importance of family, religion and community. Grandmothers, fathers of the baby, aunts, sisters, cousins and other friends influence infant feeding decisions among African American women, including whether they will initiate and continue breastfeeding their infants (Avery, Zimmerman, Underwood, & Magnus, 2009; Bentley et al., 1999; Jimenez, 2002; McCarter-Spaulding, 2007; McCarter-Spaulding & Gore, 2009; Racine et al., 2009; Rose, Warrington, Linder, & Williams, 2004).

While the decision to breastfeed or use formula is ultimately the mother’s, she will make that decision based on information received from significant family members, partners, friends, health care providers and society. However, there are minimal data on how African American women are making feeding decisions across the perinatal period, what information they use to make these decisions, and how decisions are made in the context of family or support persons’ views. Furthermore, the way in which individuals obtain health information is rapidly changing. PricewaterhouseCooper (PwC) reported approximately 33% of consumers in the United States are using social media sites to obtain pertinent health information (PwC, 2012). The purpose of this article is to describe how African American women and their support persons use social media as a means of obtaining breastfeeding and perinatal information and support. These findings are from a larger study of infant feeding perceptions and experiences of African American women (Asiodu, 2014).

Methodology

Research Design

The study was approved by the University of California, San Francisco, Committee on Human Research. Critical ethnography guided this research (Thomas, 1992). Critical ethnography expands on ethnography, which deals with the study of culture or a particular group,
by focusing on linking social phenomena with underlying themes with the purpose of empowering the population being studied (Hammersley & Atkinson, 2007; Madison, 2005). The approach of this study was further informed by the Family Life Course Development Theory (Bengston & Allen, 1993) and Black Feminist Theory (Collins, 2008). Using both theories, a conceptual framework to address the infant feeding decision making process in African American families was created. The conceptual framework incorporates the familial, social, gender, historical and cultural contexts associated with the infant feeding decision making process across the perinatal time period (Asiodu, 2014).

**Data Collection**

Consistent with ethnographic methodology, data were collected using semi-structured interviews, community participant observations and field notes (Hammersley & Atkinson, 2007; Spradley, 1979). Eligible participants were interviewed and observed multiple times throughout antepartum and postpartum periods, either in participants’ homes, coffee shops, or community-based organizations. Pregnant participants and support persons were interviewed separately. The investigator-developed interview guide was modified to follow emergent themes as they arose. Interviews lasting 60-90 minutes were audio-recorded and professionally transcribed verbatim. To obtain a deeper understanding of infant feeding content received by participants via mobile applications and internet pages, one of the more popular mobile applications most frequently mentioned by study participants was downloaded and observed.

Community participant observations were also conducted. Participants were observed in the while attending prenatal and postpartum groups and breastfeeding classes and support groups. Observations and associated field notes focused on: 1) the physical, social and emotional environments surrounding the African American women and their families; 2)
interactions between the African American mothers and their infants and their social support persons; and 3) reactions and responses of the African American mothers to different life stressors and important decisions during the antepartum and postpartum periods. Rigor was maintained through prolonged community engagement and peer debriefing (Tobin & Begley, 2004). Data were collected from March 2013 to June 2014. In total, 43 in-person interviews were completed and 25 hours of participant observations were conducted. Consent was obtained from all study participants prior to initiation of the first in-person interview and each participant received a $20.00 gift card for each interview and observation.

Setting

In an effort to obtain a socioeconomically diverse study population, participants were recruited from community based, public health and home visiting programs, African American sororities, professional organizations and social networking sites such as Facebook, and Craigslist.

Participants

English speaking, self-identified African American first time mothers, 18 years and older were recruited from four Northern California Bay Area Counties. Support persons identified by the mothers were also recruited. In total, 22 research subjects (14 pregnant women and 8 support persons) participated in this study. Pregnant women ranged in age from 21 to 36 years with a median age of 23.5 years. At the time of the first interview, about half of pregnant participants were married or had a partner and about half were employed. A majority of the pregnant study participants had graduated from high school, earned an annual income of $25,000 or less, and were Medi-Cal recipients. Most of the participants noted an intention to breastfeed or combination feed their infants. Only one participant noted an intention to formula feed.
Support persons included 3 partners, 3 friends, 1 mother and 1 grandmother who primarily self-identified as African American. One support person identified as White, non-Hispanic. The median age was 35.5 years and ranged from 24 to 77 years. Most of the support persons were high school graduates and believed their pregnant partner, friend or family member intended to breastfeed during the postpartum period.

**Data Analysis**

Data analysis was iterative and occurred throughout the data collection process. Relevant themes were examined for significance and importance using thematic analysis (Aronson, 1994; Spradley, 1979). Thematic analysis focuses on identifying emerging themes and patterns embedded in the data. To ensure accuracy and familiarity with the data, transcripts were reviewed multiple times. Initially, transcripts were coded systematically as concepts related to barriers, facilitators and potential facilitators to breastfeeding initiation were identified. Following the initial data analysis session, transcripts were re-examined and individual codes were placed into thematic categories related to participants’ use of social media technology. Thematic maps were generated to assist with the analysis. The study purpose and research question were revisited as needed to maintain objectivity. Themes developed from the data analysis were used to inform subsequent interviews and participant observations. Criticality and integrity of the data analysis process were maintained by the completion of reflective memos and member validation of emerging themes (Whittemore, Chase, & Mandle, 2011).

**Results**

The concept of technology, specifically the use of social media via smartphones, was a consistent and important theme throughout both the antepartum and postpartum interviews with pregnant women and their support persons. The significance of social media technology was
noted as a theme early in the simultaneous data collection and analysis processes. Social media was defined for the purpose of this study as “any form of electronic communications (e.g., websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (e.g. videos)” (Merriam-Webster, 2014, online). In addition to this definition, we considered social media as the use of internet webpages and mobile applications. Both pregnant participants and support persons were often observed using social media before, during, or after their interactions with the first author.

While participant lived experiences and environments varied, one common thread observed throughout the in-person interviews and participant observations was the use of technology, specifically, smartphones. Regardless of educational background, income, or living situation, each participant had a smartphone or access to one. Given that a majority of participants in this study were low-income and living in resource limited environments (e.g., no supermarkets, limited public transportation options, banks, healthcare centers or breastfeeding support services), understanding possible links between technology and breastfeeding initiation and continuation is essential.

**Type of Information Obtained**

Social media was often used to communicate information and share life-changing events with family members and friends, that is, as a means of social connection, as well as a way to gather pertinent perinatal information. Participants used a variety of social media platforms such as mobile applications, Facebook, and websites to obtain pertinent perinatal information. For instance, much of the knowledge obtained via mobile applications was centered on the growth and development of the fetus. Each week participants received notifications from their mobile
applications indicating the weight and length of the fetus, in addition to updates on organ
development and body characteristics. Anticipatory guidance around childbirth, body changes,
parenting and nutrition were also provided. Participants appeared enthusiastic about receiving
and sharing the growth and development information with the first author and their support
persons. During one postpartum group observation, participants were observed referring back to
previous messages received on their phones to assist with answering pregnancy trimester
development questions. Facebook and Google were also frequently mentioned as instruments to
gather information, education and support.

…well, I won’t say [app] is the most important, but I would say it’s the most
interesting, what I look forward to when at the beginning of the week, it tells you,
“Oh your baby now weighs this much and is this many inches”…Yes. So I guess
that’s the part I look forward to. [Pregnant participant]

I mean you even have like a weekly checklist. “Watch for signs of labor, Eat a
pregnancy super food. Go to bed early. Check with a friend.” You know. “Do
some Kegel exercise. Try to relax.” You know, the [app] gives you certain stuff to
do weekly. [Pregnant participant]

Excited with a message received for the day, one participant read an entire excerpt from
her mobile application during her one to one interview. While the perinatal information received
by participants appeared to be useful, the excerpt shared (and other messages reviewed by the
first author) were generic and lacked culturally specific information or recommendations.
Participants rarely questioned the veracity or authenticity of what they were reading and found
the information quite credible.

Participants had difficulty recalling if any infant feeding messages had been reviewed or
received. When asked specifically about infant feeding messages provided through the mobile
applications, participants often spent several minutes scrolling through their devices to find such
information. In instances where the participant was unable to locate the specific information, they often attempted to describe the received messages.

About lactating or something? I believe so...I don’t know…Let me see. I have the [app] right here and I’m pretty sure it says something…See it says things like this: like start lining up helpers, exercise. I don’t know where it says the breastfeeding thing, but I know it mentioned something about it not too long ago…. [Pregnant participant]

Oh, I’ve used this [app] and it tracked my whole pregnancy, however many weeks I was, how the baby was developing, what stages we were at, what to expect, how to feel, how much weight I should be gaining, how much weight they predict the baby is in your stomach. And then now, that he’s born, they send me updates every month saying what your baby should be doing at this month, the progress so I love that app. Then it links itself to Facebook. Then another app [name]. It would just tell you like what to expect each month. It had a timer on it for if you had contractions, you could keep time. Time it. It had the calendar for all your appointments. Just different little things I like to – so I was on two different apps and then – but as far as like breastfeeding goes, I don’t remember if it said anything about that. [Postpartum participant]

Participants were able to recite with ease, growth and development messages received during the week and prior weeks; however, they were not able to recall much pertinent infant feeding information. These interactions were informative as the infant feeding information provided by most of the mobile applications was not memorable.

Social Media Platforms and Access

Most participants reported using at least one or two mobile applications during their pregnancy and after giving birth. The most frequently noted applications were BabyCenter’s My Pregnancy and My Baby, BabyGaga, and I’m Expecting. The social media platforms were initially accessed during the antepartum period and continued to be used after the arrival of the baby. Several participants acknowledged receiving various infant feeding and perinatal pamphlets; however, they appeared to be most engaged with their social media platforms.
Participants seemed very eager and excited to discuss the different applications and websites currently being used.

During many of the in-person interviews, participants regularly pulled out their mobile devices to display the perinatal applications or websites. All of the applications or websites were viewed using a smartphone. The applications were free of charge and downloaded via the “App Store” or “Play Store” on their mobile devices. Study participants had either an iPhone or an Android phone and frequently downloaded multiple applications, although they typically settled on using just one or two applications during the antepartum and postpartum periods.

I have the app on my phone that has been following me throughout my pregnancy. So you know they have little tips and little information toggle that you can go and see, and they explain a lot to you and even show you videos and everything. So I use that a lot, and if I have a question, I’ll Google it. I’ll just look at it right quickly and see what I can find in. Ooh. [app]. Do you want to see it? [Pregnant participant]

At times when participants questioned information received from the mobile applications, they often referred to other websites or social media sites for fact checking.

Just because a couple of my other friends had it and they would post stuff on Facebook. That’s how I saw it and I was like, “Oh, well, let me check it out.” It was pretty accurate information because I would go back and read the [prenatal book] or go on – was it [website] – or no. I think it was the – one of those websites…and it was also giving similar information to that so I trusted it. [Postpartum participant]

In addition to mobile applications, participants appeared connected to a number of specific websites. Repeated mention of Facebook, Google, YouTube, Mom365 and WebMD were noted throughout antepartum and postpartum periods. Again, participants seemed content and comfortable sharing the contents of the websites they enjoyed most.

Yeah. It’s a website because…they send you like a lot of promotions like good deals and stuff like that and every week they send you information like, “What’s going on with your baby this week?” Like it tells you like what’s happening with them…if I have a question really I just Google. [Postpartum participant]
And this one is called [app]. Let me see if I can find that app, I mean that page in Facebook. Yeah this page, they’re awesome…like there are lots of women all over the country. This is another page I just added [Facebook page]. But I want to find the one that I like. I can’t find it. They’re always posting stuff. Uh-huh, a plethora. Yeah, like this for example this [Facebook page], I just added this today. “This is a page dedicated to providing information and showing support to fellow mothers. You can ask questions and share your nursing pictures without fear of getting bashed for it. I will not tolerate anything but support on this page. It’s time we take a stand and fight for what we believe in…to normalize breastfeeding. Please help me support each other by asking questions….I know we can make a difference, just have to do it one person at a time.” [Postpartum participant]

In addition to personal media searches, recommendations from family members, friends and healthcare providers were highly valued. Pregnant participants and their support persons were typically introduced or directed to a particular mobile application or website early on in the antepartum period. Support persons were particularly vocal about how they accessed perinatal information and shared information with their family member, significant other or friend.

Somebody told me get like [app] or something like that or I think there was something like that but I just uh, I went on to [app store] and just typed in ‘pregnancy apps’ and I’m quite sure, they have a list of [them] [Support person]

Yeah. I definitely pointed her to the [app] ‘cause like I said that was like the number one app she had got – she hardly knew about babies and, there was tons of apps…yeah so pretty much all the sites that I mentioned before, I mentioned to her. [Support person]

Social media platforms appeared to be the preferred mechanism to obtain important information during the antepartum and postpartum periods. Participants and social support persons were frequently offered unsolicited advice about useful mobile applications and websites. When a personal search was completed, applications and websites were often selected based on their popularity.

**Frequency of Use**
Most of participants noted reviewing the mobile applications or websites on a daily or weekly basis. Participants were notified when new information was available and were able to set parameters around how the notifications were received. However, the communication was not unidirectional as participants were able to navigate the applications to view upcoming topics or review information possibly missed during the previous week(s).

No, I just opened the app and I just look at it every day and I scroll down. [Pregnant Participant]

Weekly with me. And, you know, it asks me certain questions, and how I feel about certain stuff and give me video update on, you know, how big the baby is, how it’s growing. And anything like that. And, you know, it’s just – anything. Like do you wear heels when you’re pregnant? Like it just give you a whole bunch of tips and it’s from day to day so…I get a notification every week. [Pregnant participant]

However, participants interacted with the websites and Facebook pages quite differently, especially during the postpartum period. Pregnancy related applications were deleted and newborn or parenting specific applications were downloaded. Decreased usage was noted during the postpartum period as participants were spending more time interacting with their babies and attending postpartum groups. Participants were more likely to use the internet or view a mother’s support group page on Facebook, if they had a question or were looking for some type of clarification.

Only when I have a question. Probably twice – two to three times a week. [Postpartum participant]

I look on every now and then but not really. I really don’t have time. Now, it’s like sleep or making sure my house stays pretty decent. It’s hard to do that but it’s okay. [Postpartum participant]

**Potential for Increased Support**

During the antepartum and postpartum periods, pregnant participants frequently discussed the limited or minimal support received from family members and friends. Pregnant
participants expressed feeling alone, isolated and saddened by the lack of visitors or interest shown in them after giving birth. Social media was often used as a means to obtain support, especially for the breastfeeding mothers. Most of the participants practiced combination feeding, using both breast milk and formula. However, 4 of 14 participants were exclusively breastfeeding after 3 months. For those breastfeeding mothers, the support provided through participation on Facebook pages was invaluable.

…sometimes a lot of different women comment on it so like you get to see all the different types of questions and stuff like that and responses. There’s not just one response. It’s like more to it – every woman has like a different, experience so you get to see like all the different responses like they have and stuff. And then you’re bound to find someone who is the same as you, you know. [Postpartum participant]

I really refer to that app a lot because there was the August group there. So all mothers who have babies born in August 2013, they would post their questions, they would post pictures, they would just post tons of information…and then they had a breastfeeding group. So like you know any questions that people have and that you may have, I just go on and look…so social media has definitely been like that’s kinda vital pretty much ‘cause it’s like you know, you’re not able to be around that many people who are, breastfeeding so it’s like when you can bring all people from around the world who do and then just get different views, it really helped out. [Support person]

Additionally, pregnant participants with partners seemed to embark on a different relationship with their mobile applications. In situations where the partner was present and enrolled in the study, the use of mobile applications was discussed quite openly as messages from mobile applications were often used to engage family members, partners and friends.

One participant shared:

And then my phone is not as smart, that’s my husband’s phone because my husband has um, like two apps. That’s how he probably knew it was my week and he reads them to me and tells me what the baby looks like, the size of the baby. “I think my baby looks like a papaya right now,” he said and yeah, that has been helpful for us ‘cause we know – we’re tracking the baby every week to know what – what is happening with it. I mean - I heard, like his ear, he can hear sounds
but his brain is not well developed to know what it’s hearing and stuff. [Pregnant participant]

While her partner stated:

Yeah, it’s really interesting and actually on my phone, um, I have like a couple different pregnancy apps and stuff like that… but I always do a lot of research like I’m always on the Internet just like looking up stuff about the baby. Like what are they doing … how’s the brain developing? Like, you know what organs are developing this week. [Support Person]

Another participant and her partner stated:

Oh, the [app]. Yes, I like [app] but that was – like monitor my progress with my pregnancy but other than that, I really didn’t – oh, and like look up different little stuff, symptoms and different stuff like that so it was good for that. [Pregnant participant]

No. She does that. She goes on [site] and be on Facebook, putting up pictures. I don’t have a Facebook. I don’t really do too much social media. I’m more like listening to YouTube type guy… I’m more like listen. She always be doing that type of stuff, sitting there. “Babe, look. They say when he gets three months, he’ll be – and show me a picture. I’m like, “Okay, we’ll wait till he gets three months and see. [Support person]

The interactions depicted in this series of quotes suggest pregnant participants were able to share their experiences with their support partners in a unique way. While the participant in the first set of quotes did not have any mobile applications on her personal phone, she had access to social media via the use of her husband’s phone. As first-time parents, they were eager to learn as much about the growth and development of their child as they could. By discussing and reading the daily messages provided through the applications together, the pregnant participants and their partners seemed to be developing a stronger bond with their baby and each other.

While support was received through a variety of social media platforms, African American specific support was absent from these forums used by participants. When asked about resources, specifically about African American infant feeding most participants stated they were not aware that such websites or resources existed. A number of participants stated they would
have benefited from seeing more women like them on the different breastfeeding and parenting Facebook pages and websites.

No. I haven’t seen any out there….And actually you know what, I do take that back because on the [app site] there was an African American group on there…There weren’t [that] many questions about breastfeeding and things like that….I want to say the topics were geared more [around] life experiences….So that helped in a sense too but as far as like centered around like having the baby or breastfeeding and things like that, it wasn’t focused on that. [Support Person]

I haven’t seen them…Because I would probably could relate even more so, you know, being a woman of color, having a child and breastfeeding...Because you said that like a lot of Black, African-American people have the lowest rates of breastfeeding like, that sticks on my mind now and it makes me think like if there was more support between us as Black women then, you know, it would empower us to do it. On the page it’s all white people basically because they’re like from, like all over the United States but it’s mostly white people. So like when I see a black girl comment I instantly want to read it or, you know, click on her page. You know it makes me – it give me curiosity you know. [Postpartum participant]

These quotes highlight the need and desire of breastfeeding African American women to find supportive women and community. The first quote discusses the complexity of finding the right type of support. Even when web groups or web pages are identified as for African American women or mothers, the purpose and content of the group might not meet the needs of the intended users. Through the interactions on Facebook, participants recognized that they were not alone in their breastfeeding struggles. However, the absence of Black women or women of color participating in the different breastfeeding web pages was obvious and difficult to explain. Participants were left wondering if there were other breastfeeding African American breastfeeding mothers online.

Discussion

Participants in this study viewed social media as a practical, convenient and valuable vehicle to obtain perinatal information and support. The information provided through the mobile applications appeared to be appropriate and educational. Social media is different than
traditional media and/or communication as it involves the use of mobile technology and other web platforms (Boyd & Ellison, 2007). The frequency and quality of information disseminated on this platform is also non-traditional as information is shared at a fast pace (Hether, Murphy & Valente, 2014). By using the social media platforms, participants were hoping to accomplish a number of things: (a) obtain relevant information about the perinatal period; (b) educate themselves about various health related topics (e.g., diet, exercise, and FAQs around pregnancy and parenting); and (c) receive social support and advice from other mothers and women in similar situations.

Being that 90% of Americans have cell phones and 18% of households in the United States are mobile-only, this emerging theme was quite relevant and timely (Duggan & Smith, 2014). Mobile phone use is of particular importance for the target population of this study. Pew Research Center (2014) reports that young, lower-income women of color use social media at much higher rates than any other populations. Moreover, the use of smartphones is also on the rise. Approximately 40% of cell phone users access social media platforms on their phones and 28% access social media platforms daily. According to Duggan & Smith (2014), young people, African Americans and Latinos are more likely to use their phones to access social media platforms than any other ethnic or age group.

Social media platforms are more popular than ever as they are easy to access and usually free to download. A recent study conducted by the Pew Research Center (2014) found that approximately 72% of adults online use a social networking site. Young adults, women and those living in urban areas are more likely to use and share information on these platforms. Also, African American women are the highest users of Twitter, Instagram and Pinterest. Since the target population of this study appears to be well-engaged with social media technology, one can
argue the importance of exploring African American women’s experiences accessing and using health communication services, specifically around infant feeding.

While the statistics for young urban women’s use of information technology are promising, they also demonstrate the need to improve and enhance current health communication services (e.g., health related social media platforms). Although the current messages disseminated through the perinatal mobile applications noted in this study may be suitable for most women, in circumstances where there is a large health disparity or knowledge gap, different messaging may be needed. Being that African American women and their infants have higher rates of poor perinatal outcomes (e.g., premature birth, low-birth weight, infant mortality and maternal morbidity and mortality), the one message fits all model needs to be reexamined. More time and resources should be invested in developing culturally appropriate messaging and information for women of color, and specifically for African American women. Additionally, it is difficult to determine who or what entities are responsible for the infant feeding messaging provided by the social media platforms. This leads one to question the depth, cultural relevance and frequency of infant feeding information being disseminated throughout the antepartum and postpartum periods. Being that a majority of the participants in this study used some type of social media during the perinatal period, identifying and acknowledging the sources of information behind the infant feeding messages is important, as is validating the accuracy and appropriateness of the information provided by these platforms.

As previously stated, African American women initiate and continue breastfeeding at much lower rates than any other US population (CDC, 2013). Increased social support is an essential aspect of successful breastfeeding initiation and continuation. While the importance of social support persons is widely noted throughout the infant feeding literature, the type of
support observed between study participants and partners is significant to highlight as partners and fathers of the babies are known to have great influence over the infant feeding decision-making process (Avery et al., 2009; Bentley et al., 1999; McCarter-Spaulding, 2007; McCarter-Spaulding & Gore, 2009; Racine et al., 2009; Rose et al., 2004). Understanding how social support persons’ (e.g., partners, family members and friends) use social media to influence pregnant or parenting African American women and their decision making or health behaviors is also noteworthy for future research endeavors.

Likewise, the support received or sought through social media webpages, specifically around breastfeeding needs to be emphasized as well. A great deal of what African American women know about breastfeeding comes from what they have been told during their childhood, adolescence and young adulthood. The images in the media, discussions with support persons and involvement with their surrounding communities all play an important role in shaping one’s perceptions and experiences around infant feeding, specifically, breastfeeding. Furthermore, social media presents a new pathway for reaching these women. However, findings from this study would suggest that the opportunity to provide breastfeeding support, both in general and to the African American community, is not being realized.

**Limitations**

The perspectives presented in this paper were from a purposive sample of first-time African American mothers and their support persons from similar socioeconomic backgrounds and geographic locations and may not be generalizable to other contexts. However, the purpose of this study was to obtain a deeper understanding of infant feeding decision making processes and identify barriers and facilitators to breastfeeding initiation in the African American community. Being that the use of social media was an emergent theme from this study, further
research specifically focused on the use of social media and infant feeding information is recommended.

**Conclusion**

Understanding the factors associated with low breastfeeding initiation rates and possible facilitators that can be used to overcome these barriers is very important. Increased knowledge of how African American women use the information provided via social media platforms may assist healthcare providers and educators in developing tools that will facilitate an increase in breastfeeding initiation rates in this population. Awareness and understanding of this phenomenon will be enhanced by developing and testing social media interventions.

While there are a number of institutional, personally-mediated and internalized barriers contributing to the infant feeding disparity, social media platforms can be used to help overcome these hurdles (Jones, 2000). Individuals are obtaining medical information in a variety of different ways. With the advent of social media and increased internet use and access, creating more innovative interventions to engage African American women and their social support persons is imperative. While the lactation community has attempted to take advantage of this movement via social media campaigns initiated by the CDC and U.S. Department of Health and Human Services’ Office of Women’s Health, a significant opportunity remains for increased development of pertinent resources and interventions (Wolynn, 2012). In fact, the amount of infant feeding information provided through the perinatal mobile health applications was limited and often not as timely as it could have been. Social media is an important vehicle to disseminate significant infant feeding education and information. However, it is not currently being utilized to its full potential. The antepartum period appears to be an ideal time to engage future parents with specific health messages. Much of the information disseminated via the mobile applications
is focused on the growth and development of the fetus. Understanding the growth and development of the fetus is important; however, with limited messages around infant feeding, we are missing a vital education opportunity.

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Conflict of Interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.
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Chapter 5

Dissertation Summary

Ifeyinwa V. Asiodu
Summary of Research

As previously stated, the objectives of this critical ethnographic research study were to describe infant feeding perceptions and experiences of African American mothers and their support persons. The specific aims of the dissertation study were: 1) to describe and analyze the process African American mothers undergo when deciding on an infant feeding method; 2) to describe the barriers and facilitators encountered during this decision making process; and 3) to understand the role social support persons, such as grandmothers and fathers of the babies, play in the decision making process. The overall goal of this dissertation was to identify and improve health disparities, specifically, infant feeding disparities in the African American community; and identify facilitators and barriers associated with infant feeding decision making that will promote health and prevent disease.

Review of Chapter 2

The first manuscript presented the newly developed conceptual framework, entitled, Infant Feeding Decision Making Framework across the Perinatal Period. One of the theoretical approaches used to describe the phenomenon of infant feeding was the Family Life Course Development Theory. The Family Life Course Development Theory recognizes the importance of exploring both the individual and familial perspectives across a given time period. By examining events and experiences from one’s past, insight can be gained as to how current decision-making processes may unfold (Bengston & Allen, 1999; Elder, 1996). Being that barriers contributing to the infant feeding disparity are deeply rooted in historical, social and structural contexts, this theory presented a unique way to engage and assess families during the antepartum and postpartum periods.

While the infant feeding decision is often depicted as a unilateral decision made by the mother, it is actually an informed family decision, initiated and implemented by the mother. As
was noted during the course of this research study, many of the pregnant participants based their infant feeding decisions on information received or gathered from family members, friends, healthcare providers and public health agencies. Regardless of the veracity of the information provided, study participants valued feedback received from trusted support persons. Although, the advice given was not always positive or supportive, as first-time mothers or parents, study participants appeared eager to obtain as much perinatal information as possible. Thus an understanding of the family dynamics over the antepartum and postpartum periods; was enhanced through the use of this theoretical approach.

Additionally, Black Feminist Theory was used to further understand the complexity of African American women and their families (Collins, 2008). As African American women and their support persons were the subjects of this study, selecting a theoretical framework that spoke to the uniqueness of the African American community and their lived experience was vital. African American women and their families experience a multitude of structural and societal oppressions, such as racism, impoverished neighborhoods, and limited access to health care, education and employment (Collins, 2008; Davis, 1981; Few, 2007). Black women and their families lead very complex lives as they are constantly shifting between societal and cultural norms and expectations. Black Feminist Theory reminds us that the intersectionality between race, class, culture, gender and sexual orientation needs to be taken into consideration at all times when conducting research involving African American women and their families (Collins, 2008).

The analysis of the two theoretical frameworks presented in the second chapter identified and highlighted similarities and differences between the Family Life Course Development Theory and Black Feminist Theory. However, navigating between the two models became
cumbersome; hence it was more efficient to develop a conceptual framework that embodied the best elements of both theories. The developed model depicts the transition from preconception to breastfeeding or formula initiation, with the infant feeding decision process beginning during pregnancy. The infant feeding decision making process was initially framed within the context of the individual and family. Being mindful that most individuals and families do not exist in isolation, the contexts of African American history, culture, gender and society were also taken into consideration.

Over the course of this dissertation study, the self-efficacy and agency of the pregnant participants, their identified social support persons and the use of social media platforms were noted as significant mediators to the infant feeding decision making process and implementation. Many participants expressed self-doubt and concern in their abilities to successfully breastfeed during the antepartum and postpartum periods. This lack of self-efficacy contributed to the early cessation and decreased exclusivity noted in this study population as formula feeding was depicted as a more convenient infant feeding option. The role of the support persons and utilization of social media is discussed in subsequent sections of this chapter. The updated integrated conceptual framework is represented in Figure 1.

The investigator developed framework provides researchers with the tools to highlight experiences that are not often heard, from the perspective of the individuals and families being observed. This theoretical framework presents an excellent approach for understanding breastfeeding perceptions and behaviors, through the lived experiences of African American families. It is important to understand the factors associated with low breastfeeding initiation rates due to its effect on the overall health and wellbeing of the African American community.
As researchers, our awareness and understanding of this phenomenon will only be enhanced through the use of the Infant Feeding Decision Making Framework.

**Review of Chapter 3**

The second manuscript presented the main findings from the dissertation study. In total, 22 participants (14 pregnant women and 8 support persons) were enrolled in the study and 43 in-person interviews completed. Identifying facilitators to breastfeeding initiation and continuation was an important goal of this study. During the antepartum and postpartum periods a number of breastfeeding facilitators were noted. The most significant facilitators to breastfeeding initiation included; a strong intention to breastfeed during the antepartum period; positive social support systems; knowledge of the benefits of breastfeeding for the mother-infant dyad; normalization of breastfeeding and participation in a community health organization or home visiting program. Results from this study were consistent with previous infant feeding studies conducted with African American women as 13 of the 14 pregnant participants intended to initiate breastfeeding. Additionally, the amount of support perceived and actually received made a considerable difference in the initiation and continuation of breastfeeding in the study population. Pregnant participants with breastfeeding friendly partners, family members and friends were observed to have initiated and maintained breastfeeding for a longer period than women without such support. In cases where limited support was provided by family members or friends, participants sought support via other mechanisms, such as prenatal and postpartum groups, parenting classes, breastfeeding support groups and home visiting programs. Majority of the study participants acknowledged and cited many of the benefits to breastfeeding for the mother-infant dyad. The most frequently noted benefit of breastfeeding was the development of a strong mother-infant bond. Many of the study participants were concerned about connecting with their babies. The
importance of health and providing the best nutrients possible was also frequently mentioned by study participants. Partners of the pregnant participants appeared to be very interested in the immunity protection and cost savings provided by breastfeeding. Additionally, participants with breastfeeding role models or positive past experiences with breastfeeding were observed to be more comfortable with the practice of breastfeeding.

With that said, there were a number of barriers to breastfeeding initiation and continuation noted during the antepartum and postpartum periods. The most significant barriers included: lack of consistent social support; life stressors; employment and education obligations; pain and discomfort; being unprepared and the fear of public breastfeeding. Participants with limited support or support systems that were not supportive of breastfeeding were not successful with initiating and maintaining breastfeeding. Often, these participants began using formula early in the postpartum period (e.g. on the postpartum unit and immediately upon discharge from the hospital). Life stressors, such as lack of money, employment, housing, transportation, and strained social relationships played a role in the decrease of breastfeeding initiation and continuation in this study population. The prospect of going back to work or school often prompted study participants to begin combination feeding. Additionally, the fear of public breastfeeding also lead to the use of formula feeding as breastfeeding was activity practiced at home and during the night. Pain and discomfort and being unprepared for the physiological changes experienced also contributed to the lack of breastfeeding initiation and continuation. Study Participants (pregnant participants and their support persons) appeared unaware of the milk production process, the importance of breast stimulation and the proper amount of breast milk needed during the early newborn periods. These knowledge deficits and lack of lactation resources often lead to increased combination feeding. Thus, the presented barriers coupled with
the intention to breastfeed exclusively, often lead to feelings of guilt and inadequacy. Emotional reactions were observed as mothers described their early breastfeeding challenges and struggles. When asked if there was anything about their infant feeding experiences they would change, majority of the combination feeding mothers stated they would have breastfeed for a longer period of time.

**Review of Chapter 4**

While identifying barriers and facilitators to breastfeeding initiation was the main purpose of this study; one emerging potential facilitator to breastfeeding initiation and continuation was noted. Pregnant participants and support persons appeared to be very engaged with several different perinatal related social media platforms during the antepartum and postpartum periods. Every pregnant participant had at least one mobile application downloaded to their personal phone or the phone of a significant other. The mobile applications provided easily accessible perinatal health education and information. However, study participants were not able to describe any of the infant feeding messages or information received through the mobile applications. Participants received mobile application recommendations from family members, friends, partners and community members. The mobile applications were accessed through smartphones and laptop computers. In addition to mobile applications, study participants were also interacting and connecting with other mothers and support persons through social media websites and group pages. Participants found comfort in knowing that there were other women experiencing the same challenges as they were. The social media websites were also used to obtain answers to parenting and breastfeeding related questions. Being that the study population, African American women and their families are frequent users of social media.
platforms, developing and testing infant feeding interventions incorporating this technology is an important next step in decreasing the infant feeding disparity.

**Implications**

The findings of this study indicate that a majority of the African American women in this study wanted to exclusively breastfeed. However, due to the identified barriers, many were unable to access or obtain the necessary resources or support to be successful. In regards to clinical practice, it is important to identify the meaning of infant feeding to the mother and family. Knowing this information will prove vital in initiating a plan of action. Educating the mother and family on the importance of breastfeeding for the mother-infant dyad and family is important as support is needed from everyone involved in the decision making process. However, it is important to use the language of the individual or family when discussing infant feeding methods. If the preferred infant feeding method is described as breastfeeding, then using the term breastfeeding is appropriated; whereas if infant feeding is presented as bottle feeding, further exploration would be required to uncover whether they are describing expressed breast milk or formula. Understanding and assessing the breastfeeding self-efficacy of the individual during the antepartum period is imperative especially for first-time mothers, as self-doubt, lack of education and resources may impact one’s overall breastfeeding initiation and continuation experience. Having a baseline breastfeeding self-efficacy score may assist in identifying relevant breastfeeding education tools and resources. Additionally, assessing previous infant feeding experiences of the mother and identified support persons is essential to understanding current beliefs and perceptions about infant feeding.

Many, if not all hospitals, public health departments, and universities have implemented different types of lactation services and support; however educating healthcare professionals
before they are exposed to clients in an inpatient or outpatient setting is significant, especially for practitioners working with African American families. In order for a family, especially a breastfeeding woman to be successful, she is going to need a tremendous amount of resources and support during the antepartum and early postpartum periods. Referring a woman and her family to adequate resources, such as lactation counseling, support groups, and social services will play a key role in successful breastfeeding initiation and continuation.

In regards to culturally appropriate care, as previously mentioned, African American women initiate and continue breastfeeding at much lower rates than other populations, so culturally aware clinicians are important in improving this infant feeding disparity. Culturally sensitive healthcare providers can make a significant difference in the lives of their clients, whether it is through culturally appropriate handouts, having a diverse staff, or being aware of one’s own biases. All of these factors can play a positive role in the healthcare provider-client relationship. Being culturally competent pertains to more than just learning, knowing and understanding different cultures; it involves acknowledging one’s own biases, understanding and being sensitive to the behaviors, languages and attitudes of clients from different backgrounds and ethnicities and using all that information to develop appropriate goals and care plans (Giger et al., 2007). Culturally competent clinicians catering to breastfeeding African American women are very limited; hence additional resources may be needed to adequately address the needs of this population.

**Future Research**

While there appears to be a great deal of literature in the field on infant feeding perceptions and experiences as they relate to African American women and their infants; there are still a number of gaps in the literature that need to be addressed. The first has to do with the
sample populations. Much of the current literature has studied low income, African American women or African American receiving services from The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) or other social service agencies. It is widely noted that, the health disparities are common among all African American women, regardless of socioeconomic status (Wills, Eder, Lindsay, Chavez, & Shelton, 2004). All African American women and infants are at risk for many of the complications described in earlier chapters such as infant mortality, maternal death, low birth weight and very low birth weight (Wills, Eder, Lindsay, Chavez, & Shelton, 2004). However, the voices of middle and upper classes of African American women are absent in the literature. It is important for us to understand and describe their perceptions as well; as this population is sure to have different experiences, exposures, barriers, and facilitators to infant feeding, specifically, breastfeeding.

Another gap noted is the lack of research and intervention studies involving support persons. Research has shown the importance of social support persons, specifically partners, grandmothers and friends on the infant feeding decision making process. In order to improve this infant feeding disparity family members, partners and friends, must be part of the education and planning process; however more insight is needed into their own infant feeding perceptions and experiences. Uncovering the specific barriers and facilitators to breastfeeding initiation and continuation as identified by support persons will play an important role on improving the infant feeding experiences of African American families.

While many studies have attempted to quantify breastfeeding initiation and continuation rates by examining race/ethnicity and socio-economic status, few have looked qualitatively at this population through the context of the family during the antepartum and postpartum periods. Additional qualitative research will help to elicit a richer, in-depth understanding of the barriers
and facilitators encountered during the infant feeding decision making process; thus this was a good starting point for family-centered research on infant feeding practices. Increasing knowledge and understanding of the driving forces contributing to African American women’s decisions about breastfeeding their infants, is a critical step toward designing effective interventions to increase breastfeeding rates in this population.
References


Appendix
CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Study Title: African American Families Infant Feeding Study

This is a research study about understanding African American families’ experiences with infant feeding. The study researchers, Audrey Lyndon, PhD, RN (Principal Investigator) from the UCSF Department of Family Health Care Nursing or Ifeyinwa Asiodu, RN, PHN (Co-Principal Investigator) doctoral candidate from the UCSF Department of Family Health Care Nursing, will explain this study to you.

Research studies include only people who choose to take part. Please take your time to make your decision about participating, and discuss your decision with your family or friends if you wish. If you have any questions, you may ask the researchers.

You are being asked to take part in this study because you are African American, pregnant, over the age of 18 and English speaking.

Why is this study being done?

The purpose of this study is to understand and describe the infant feeding perceptions and experiences of African American families.

- This study is currently being funded by the National Institutes of Health, National Institute of Nursing Research.

How many people will take part in this study?

About 60 people will take part in this study. This number includes about 30 pregnant women and their self-identified social support persons, partners and/or family members.

What will happen if I take part in this research study?

If you agree, the following procedures will occur:

First, you will need to answer some “screening” questions to find out if you can participate in the main part of the study. These are more detailed questions about your prenatal (during pregnancy) and early postpartum (after you have given birth) activities. If the answers to these questions show that you can be in the main part of the study and you choose to continue, this is what will happen next:

- First, you will be asked to complete a questionnaire that asks for information about your age, ethnicity, employment, and perinatal period, and education.
- Then you will be asked a series of questions centered on your method of infant feeding and experiences.
  - This portion will be tape-recorded, with your permission.
• You may be asked to participate in site or community observations.
  o During a site observation day, you will be observed in your social service agency or home (WIC office or BIH location) as you interact with staff, family and other program participants, with your permission.
• Participation in the study is expected to take approximately six hours. This timeframe will be spread across your prenatal (during pregnancy) and early postpartum (after you have given birth) periods.
• Multiple interviews will be requested during the prenatal and early postpartum periods.
• You will also be asked to self-identify one to two social support persons. These persons may include your partner, family members, such as your mother, grandmother or sibling, and/or a friend.
• An opt-in letter for participation in this study will be sent to the identified social support persons.
• The support persons, if they agree to be part of the study, will go through the same procedures as previously stated.
• At the completion of the study, all of the audiotape(s) will be destroyed.

How long will I be in the study?

• You will be asked to participate in interviews and community observations during your pregnancy and through the 1st three months after you have given birth. During this time, the research team will ask to meet with you to ask you questions about your infant feeding experiences. Each interview is estimated to take approximately 60-90 minutes, with a participant observation period lasting anywhere from two to four hours depending on the event(s) or activities being observed. In total, the interviews and participant observation may take six hours of your time to complete.

Can I stop being in the study?

Yes. You can decide to stop at any time. Just tell the research team member right away if you wish to stop being in the study.

Also, the study researcher may stop you from taking part in this study at any time if he or she believes it is in your best interest, if you do not follow the study rules, or if the study is stopped.

What side effects or risks can I expect from being in the study?

• The questionnaires are time consuming and may be boring, but you can stop at any time.
• Some of the questions are personal and may remind of you of upsetting experiences.
• However, you don’t have to answer any question that you don’t want to and you are free to stop your participation in the study at any time.
• As a Mandated Reporter; the Co-PI is required to report any situations in which financial, physical, sexual or other types of abuse has been observed or is suspected, or when there is evidence of neglect, knowledge of an incident, or an imminent risk of serious harm.
Are there benefits to taking part in the study?

There will be no direct benefit to you from participating in this study. However, this study will help nurses, physicians, and others develop recommendations that will improve education received by African American women and their infants, in regards to infant feeding methods.

What other choices do I have if I do not take part in this study?

You are free to choose not to participate in the study. If you decide not to take part in this study, there will be no penalty to you. You will not lose any of your regular benefits, and you can still get your care from our institution the way you usually do.

Will information about me be kept private?

We will do our best to make sure that the personal information gathered for this study is kept private. However, we cannot guarantee total privacy. Your personal information may be given out if required by law. If information from this study is published or presented at scientific meetings, your name and other personal information will not be used.

Organizations that may look at and/or copy your research records for research, quality assurance, and data analysis include:

- National Institutes of Health, National Institute of Nursing Research, the study funder and other government agencies involved in keeping research safe for people.
- University of California offices that oversee research

What are the costs of taking part in this study?

You will not be charged for any of the study treatments or procedures.

Will I be paid for taking part in this study?

In return for your time, effort and travel expenses, you will be paid $20.00 per interview and participant observation for taking part in this study. You will receive a gift card immediately after you complete your interview and/or participant observation. If multiple interviews are needed, you will also be compensated with the same amount as listed above after each interview. An infant growth and development toy will be given to you in addition the to $20.00 gift card during the postpartum (after you have given birth) interview.

What are my rights if I take part in this study?

Taking part in this study is your choice. You may choose either to take part or not to take part in the study. If you decide to take part in this study, you may leave the study at any time. No matter what decision you make, there will be no penalty to you in any way. You will not lose any of your regular benefits, and you can still get your care from our institution the way you usually do.
Who can answer my questions about the study?

You can talk to Dr. Lyndon or Ifeyinwa Asiodu about any questions or concerns you have about this study. You can also contact Dr. Lyndon directly at (415) 476-4620 and Ifeyinwa Asiodu at (213) 400-0082.

If you wish to ask questions about the study or your rights as a research participant to someone other than the researchers or if you wish to voice any problems or concerns you may have about the study, please call the Office of the Committee on Human Research at 415-476-1814.

CONSENT

You have been given a copy of this consent form to keep.

PARTICIPATION IN RESEARCH IS VOLUNTARY. You have the right to decline to be in this study, or to withdraw from it at any point without penalty or loss of benefits to which you are otherwise entitled.

If you wish to participate in this study, you should sign below.

__________________________
Date                     Participant's Signature for Consent

__________________________
Date                     Person Obtaining Consent
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Study Title: African American Families Infant Feeding Study

This is a research study about understanding African American families’ experiences with infant feeding. The study researchers, Audrey Lyndon, PhD, RN (Principal Investigator) from the UCSF Department of Family Health Care Nursing or Ifeyinwa Asiodu, RN, PHN (Co-Principal Investigator) doctoral candidate from the UCSF Department of Family Health Care Nursing, will explain this study to you.

Research studies include only people who choose to take part. Please take your time to make your decision about participating, and discuss your decision with your family or friends if you wish. If you have any questions, you may ask the researchers.

You are being asked to take part in this study because you have been identified as a support person by an enrolled pregnant woman.

Why is this study being done?

The purpose of this study is to understand and describe the infant feeding perceptions and experiences of African American families.

- This study is currently being funded by the National Institutes of Health, National Institute of Nursing Research.

How many people will take part in this study?

About 60 people will take part in this study. This number includes about 30 pregnant women and their self-identified social support persons, partners and/or family members.

What will happen if I take part in this research study?

If you agree, the following procedures will occur:

First, you will need to answer some “screening” questions to find out if you can participate in the main part of the study. These are more detailed questions about your partner and/or daughter (granddaughter)’s prenatal (during pregnancy) and early postpartum (after you have given birth) activities. If the answers to these questions show that you can be in the main part of the study and you choose to continue, this is what will happen next:

- First, you will be asked to complete a questionnaire that asks for information about your age, ethnicity, employment, and perinatal period, and education.
- Then you will be asked a series of questions centered on your method of infant feeding and experiences.
  - This portion will be tape-recorded, with your permission.
• You may be asked to participate in site or community observations.
  o During a site observation day, you will be observed in your social service agency or home (WIC office or BIH location) as you interact with staff, family and other program participants, with your permission.
• Participation in the study is expected to take approximately six hours. This timeframe will be spread across the prenatal (during pregnancy) and early postpartum (after birth) periods.
• Multiple interviews will be requested during the prenatal and early postpartum periods.
• At the completion of the study, all of the audiotape(s) will be destroyed.

How long will I be in the study?

• You will be asked to participate in interviews and community observations during the pregnancy and through the 1st three months after birth. During this time, the research team will ask to meet with you to ask you questions about your infant feeding experiences. Each interview is estimated to take approximately 60-90 minutes, with a participant observation period lasting anywhere from two to four hours depending on the event(s) or activities being observed. In total, the interviews and participant observation may take six hours of your time to complete.

Can I stop being in the study?

Yes. You can decide to stop at any time. Just tell the research team member right away if you wish to stop being in the study.

Also, the study researcher may stop you from taking part in this study at any time if he or she believes it is in your best interest, if you do not follow the study rules, or if the study is stopped.

What side effects or risks can I expect from being in the study?

• The questionnaires are time consuming and may be boring, but you can stop at any time.
• Some of the questions are personal and may remind you of upsetting experiences.
• However, you don’t have to answer any question that you don’t want to and you are free to stop your participation in the study at any time.
• As a Mandated Reporter; the Co-PI is required to report any situations in which financial, physical, sexual or other types of abuse has been observed or is suspected, or when there is evidence of neglect, knowledge of an incident, or an imminent risk of serious harm.

Are there benefits to taking part in the study?

There will be no direct benefit to you from participating in this study. However, this study will help nurses, physicians, and others develop of recommendations that will improve education received by African American women and their infants, in regards to infant feeding methods.

What other choices do I have if I do not take part in this study?
You are free to choose not to participate in the study. If you decide not to take part in this study, there will be no penalty to you. You will not lose any of your regular benefits, and you can still get your care from our institution the way you usually do.

**Will information about me be kept private?**

We will do our best to make sure that the personal information gathered for this study is kept private. However, we cannot guarantee total privacy. Your personal information may be given out if required by law. If information from this study is published or presented at scientific meetings, your name and other personal information will not be used.

Organizations that may look at and/or copy your research records for research, quality assurance, and data analysis include:

- National Institutes of Health, National Institute of Nursing Research, the study funder and other government agencies involved in keeping research safe for people.
- University of California offices that oversee research

**What are the costs of taking part in this study?**

You will not be charged for any of the study treatments or procedures.

**Will I be paid for taking part in this study?**

In return for your time, effort and travel expenses, you will be paid $20.00 per interview and participant observation for taking part in this study. You will receive a gift card immediately after you complete your interview and/or participant observation. If multiple interviews are needed, you will also be compensated with the same amount as listed above after each interview. An infant growth and development toy will be given to you in addition the to $20.00 gift card during the postpartum (after you have given birth) interview.

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If you wish to ask questions about the study or your rights as a research participant to someone other than the researchers or if you wish to voice any problems or concerns you may have about the study, please call the Office of the Committee on Human Research at 415-476-1814.

CONSENT

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PARTICIPATION IN RESEARCH IS VOLUNTARY. You have the right to decline to be in this study, or to withdraw from it at any point without penalty or loss of benefits to which you are otherwise entitled.

If you wish to participate in this study, you should sign below.

__________________________________________
Date Participant's Signature for Consent

__________________________________________
Date Person Obtaining Consent
Social Media - Request for Volunteers (Craigslist, Facebook, MySpace, Berkeley Parents Network)

Posting Title: Research Study Seeks Pregnant African American Women

The Department of Family Health Care Nursing at UCSF is looking to better understand the attitudes and perceptions of African American families and infant feeding methods.

We hope to learn more about how pregnant African American mothers decide on what infant feeding method(s) to use with their newborn infants; and what factors help with the decision making process.

Volunteers for this study must be:

- African American
- Pregnant
- At least 18 years old
- English Speaking

Volunteers will be asked to meet in a location that is mutually agreed upon to talk about their infant feeding attitudes and perceptions. Interviews will last no longer than 90 minutes and volunteers will meet with the research team during your pregnancy and after giving birth. Volunteers will receive $20 in payment per interview, for involvement in the study.

The study is completely voluntary and you have the right to not take part and can also leave the study at any time.

If you are interested in participating or have any questions about the study, you may contact the research team directly by phone at (213) 400-0082 or by email at breastfeedingstudy1@gmail.com.
African American Families Infant Feeding Study
“Dear Patient” Letter

Date

Participant Name
Address 1
Address 2

Re: A Research Study You May Be Interested In

Dear Mr./s. Name:

Two researchers at UCSF, Dr. Audrey Lyndon and Ifeyinwa Asiodu, are studying Infant feeding experiences in the African American community.

A review of your chart suggests you might be eligible to participate in this study. The study is about your infant feeding perceptions and experiences. If you decide to participate in the study, Dr. Lyndon or Ifeyinwa Asiodu will interview you and ask you to tell your stories about infant feeding experiences and participate in site/community observations.

If you participate, your interview(s) will be audio taped and someone will transcribe the interview word-for-word, but your name and any other names mentioned in the interview(s) will be removed from the transcript. The tape of your interview will be destroyed when the study is finished. The interview(s) will take 60-90 minutes. Dr. Lyndon or Ifeyinwa Asiodu might ask to talk with you more than once during the prenatal and postpartum periods (up to three months after birth), but that is up to you.

If you would like to participate in this study, please contact Ifeyinwa Asiodu by phone (213-400-0082) or email (breastfeedingstudy1@gmail.com), or fill out the bottom of this sheet and return it. Once Ifeyinwa Asiodu hears from you, she will call you to go over the study details and answer any questions you may have. If you agree to participate in the study at that time, they will schedule an interview with you.

Participating in research is voluntary. It won’t affect your participation at __[Referring Agency]__ if you decide not to call about the study or decide not to participate.

Sincerely,

[Referring Agency]
In Person Screening Questions –  
*(Completed via interview by telephone or in person, by the research team)*

1. African American female?  
   YES____ NO_____  

2. Over the age of 18?  
   YES____ NO_____  

3. Able to read and write English?  
   YES____ NO_____  

4. Are you currently pregnant?  
   YES____ NO_____  

To be eligible: All responses must be answered with a YES

- **If ineligible**, offer her thanks.
  
  - “I’m sorry but you’re not eligible to be in the main part of the study.
  - “Thank you so much for your interest in this study. Goodbye.”

- **If eligible**, go over pertinent information about the study and schedule an appointment and decide on meeting place and time.
In Person Screening Questions – Support Persons
(Completed via interview by telephone or in person, by the research team)

1. Over the age of 18? YES_____ NO_____
2. Able to read and write English? YES_____ NO_____ 
3. Have a family member, partner or friend who is currently pregnant? YES_____ NO_____ 

To be eligible: All responses must be answered with a YES

❖ If ineligible, offer her/him thanks.

❖ “I’m sorry but you’re not eligible to be in the main part of the study.
❖ “Thank you so much for your interest in this study. Goodbye.”

❖ If eligible, go over pertinent information about the study and schedule an appointment and decide on meeting place and time.
INFANT FEEDING STUDY

- Pregnant?
- First Time Mom?
- African American?
- 18 years or older?
- English Speaking?

During your pregnancy, join a study about infant feeding (breastfeeding and formula feeding) attitudes and perceptions.

Get PAID $$$ for your time.

The purpose of this study is to better understand African American families’ attitudes about infant feeding. The study will use one (or more) interviews, each roughly 1-1 1/2 hours long.

Participation is strictly voluntary

Call: 213-400-0082 for more info
Email: breastfeedingstudy1@gmail.com
Target Gift Card

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University of California, San Francisco
African American Families Infant Feeding Study

Participants being sought for a paid study on infant feeding methods

Dr. Audrey Lyndon, an Assistant Professor in the Family Health Care Nursing Department and Ifeyinwa Asiodu, a doctoral candidate from the UCSF School of Nursing, are studying the experiences of infant feeding from a family perspective.

The purpose of this study is to better understand and describe African American families’ experiences with infant feeding and you have been nominated you for this study. Please consider volunteering for this study: your experiences.

We are asking for about six hours of your time for interviews and observations about your experiences over the prenatal and postpartum periods. The interviews will be kept strictly confidential. The information from the interviews will be used for research purposes only. You may be asked to participate in more than one interviews, or to allow Ms. Asiodu to observe you at home or in the community, but that is completely up to you. Participation is voluntary, and you have the right not to participate in the study.

If you’d like to participate, you may contact Ms. Asiodu directly by phone (213-400-0082) or email (breastfeedingstudy1@gmail.com), or by returning this form in the stamped self-addressed envelope.

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Please return this form in the self addressed envelope to:
Ifeyinwa Asiodu, PhD(c), RN, 2 Koret Way, #N-319X, San Francisco, CA 94143-0602

Thank you so much for your valuable time!

**The envelope does not need postage**

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African American Families Infant Feeding Study

Antepartum Period Interview Guide

Pre-Interview Stage:

Tell me about yourself, where you grew up, your friends and family or those that are most important to you– anything about you that you would like to share, etc.

Stage One:

1. How did you find out you were pregnant?

2. Tell me about your prenatal care experiences.
   Follow-up: If there is one appointment or perinatal class that stands out more in your mind, tell me about that one.

3. What does infant feeding mean to you?

4. Have you decided on an infant feeding method?

5. How did you come to the decision to (breastfeed or formula feed) your new baby?
   Follow-up: Was there anyone in your life that helped you come to that decision: such as a family member, friend, spouse, health care provider or community agency?

Stage Two:

6. What experiences have you had with infant feeding in the past?

7. Do any of your friends or family members have children?

8. Do you remember how they fed their babies? How did you feel about their infant feeding choice(s)?

Stage Three:

9. Are you happy with your infant feeding information you have received so far in your pregnancy?
   Follow-up: More specifically, what information has been the most helpful and what information has not been very helpful?

10. What does infant feeding mean to you now?

Stage Four:
11. Is there anything else you would like to share with me today? OR Is there anything you may not have thought about before that occurred during the interview?

13. If you could give advice to other women about infant feeding based on your own experiences, what would it be?

Thank you for your time and thoughtful responses.
African American Families Infant Feeding Study

Postpartum Period Interview Guide

Pre-Interview Stage:

Tell me about yourself, where you grew up, your friends and family or those that are most important to you– anything about you that you would like to share, etc.

Stage One:

1. Tell me about your experience having your baby.

2. Tell me about your postpartum care experiences.
   Follow-up: If there is one appointment or postpartum class that stands out more in your mind, tell me about that one.

3. What does infant feeding mean to you?

4. When did you decide on an infant feeding method?

5. How did you come to the decision to (breastfeed or formula feed) your new baby?
   Follow-up: Was there anyone in your life that helped you come to that decision: such as a family member, friend, spouse, health care provider or community agency?

Stage Two:

6. How did your social support person(s) view the decision you had made regarding infant feeding?
   Follow-up: Were they supportive or non-supportive of your decision? Did you feel comfortable bringing up the topic with them?

7. How did your prenatal care provider view the decision you had made regarding infant feeding?
   Follow-up: Were they supportive or non-supportive of your decision? Did you feel comfortable bringing up the topic with them? Or did they approach you with the topic?

8. Tell me about your infant feeding experiences so far, the good, bad and the ugly.
   Follow-up: If there is one particular moment or experience that stands out more in your mind, tell me about that one.

Stage Three:

9. Are you happy with your infant feeding experiences?
   Follow-up: More specifically, what part of your experiences brought you the most joy/excitement or pain/difficulty?
10. What, if anything, would you change about your experiences if you could?

**Stage Four:**

11. Is there anything else you would like to share with me today? OR Is there anything you may not have thought about before that occurred during the interview?

12. If you could give advice to other women about infant feeding based on your own experiences, what would it be?

**Thank you for your time and thoughtful responses.**
African American Families Infant Feeding Study

Partner/Grandmother/Friend Antepartum Period Interview Guide

Pre-Interview Stage:

Tell me about yourself, where you grew up, your friends and family or those that are most important to you– anything about you that you would like to share, etc.

Stage One:

1. How are you doing today?

2. Tell me about your partner’s (or granddaughter’s) prenatal care experiences so far.  
   Follow-up: If there is one appointment or perinatal class that stands out more in your mind, tell me about that one.

3. What does infant feeding mean to you?

4. Has your partner (or granddaughter) decided on an infant feeding method?

5. How did she come to the decision to (breastfeed or formula feed) the new baby? 
   Follow-up: Was there anyone in her life that helped her come to that decision: such as a family member, friend, spouse, health care provider or community agency?

Stage Two:

6. What experiences have you had with infant feeding in the past?

7. Do any of your friends or family members have children?

8. Do you remember how they fed their babies? How did you feel about their infant feeding choice(s)?

Stage Three:

9. Are you happy with your infant feeding information your partner (or granddaughter) has received so far in her pregnancy? 
   Follow-up: More specifically, what information has been the most helpful and what information has not been very helpful?

10. What does infant feeding mean to you now?

Stage Four:
11. Is there anything else you would like to share with me today? OR Is there anything you may not have thought about before that occurred during the interview?

13. If you could give advice to other partners or grandmothers about infant feeding based on your own experiences, what would it be?

Thank you for your time and thoughtful responses.
African American Families Infant Feeding Study

Partner/Grandmother/Friend Postpartum Period Interview Guide

Pre-Interview Stage:

How are you doing today?

Stage One:

1. Tell me about your experience having your baby or grandchild.

2. Tell me about your partner or grandmother’s postpartum care experiences.
   Follow-up: If there is one appointment or postpartum class that stands out more in your mind, tell me about that one.

3. What does infant feeding mean to you?

4. How is your partner or grandchild feeding the baby?

5. How did she come to the decision to (breastfeed or formula feed) the new baby?
   Follow-up: Was there anyone in your life that helped you come to that decision: such as a family member, friend, spouse, health care provider or community agency?

Stage Two:

6. How did you feel about the decision she made regarding infant feeding?
   Follow-up: Were you supportive or non-supportive of her decision? Did you feel comfortable bringing up the topic with them?

7. How did her prenatal care provider view the decision that was made regarding infant feeding?
   Follow-up: Were they supportive or non-supportive of your decision? Did you feel comfortable bringing up the topic with them? Or did they approach you with the topic?

8. Tell me about your infant feeding experiences so far, the good, bad and the ugly.
   Follow-up: If there is one particular moment or experience that stands out more in your mind, tell me about that one.

Stage Three:

9. Are you happy with your infant feeding experiences?
   Follow-up: More specifically, what part of your experiences brought you the most joy/excitement or pain/difficulty?

10. What, if anything, would you change about your experiences if you could?
Stage Four:

11. Is there anything else you would like to share with me today? OR Is there anything you may not have thought about before that occurred during the interview?

12. If you could give advice to other support person about infant feeding based on your own experiences, what would it be?

Thank you for your time and thoughtful responses.
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