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A Grant Proposal for Improving Breastfeeding Initiation, Duration, and Exclusivity Among African American Women Residing in Jefferson County, Mississippi through Continuity of Care

By

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Degree to be awarded: Master of Public Health

Prevention Science

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An abstract of A Thesis submitted to the Faculty of the Rollins School of Public Health of Emory University in partial fulfillment of the requirements of the degree of Master of Public Health in the Executive MPH program 2020

Abstract

A Grant Proposal for Improving Breastfeeding Initiation, Duration, and Exclusivity Among African American Women Residing in Jefferson County, Mississippi through Continuity of Care

By

Regina Mosley

Breastfeeding is acknowledged as the best form of nutrition for babies. It is highly recommended for infants to be fed breast milk exclusively for the first six months of life. In addition, mothers are recommended to continue breastfeeding while slowly introducing solid foods until the child reaches one year of age. While breastfeeding is widely considered to be the best form of nutrition for infants and guidelines recommend one full year, the percentage of breastfeed infants decreases as the length of life increases. Furthermore, the CDC identifies racial and geographic gaps in breastfeeding. African Americans are considerably less likely to breastfeed than any other racial or ethnic group. Additionally, geographic gaps are observed in the southern regions of the US. Mississippi is ranked last for state breastfeeding rates.

The proposed baby café program will combat breastfeeding disparities by providing free resources to mothers and families in Jefferson County, Mississippi and surrounding communities. The café will use evidence-based strategies to tackle disparities by providing a private environment, continuity of care, health literacy, encouragement, and a safe environment for peer and professional support.

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TABLE OF CONTENTS

| CHAPTER I - INTRODUCTION Introduction and Rationale | |
|---|-----|
| Problem Statement | .10 |
| Theoretical Framework | .10 |
| Purpose Statement | .13 |
| Objectives to be Addressed by the Grant Proposal | .14 |
| Statement Significance | .15 |
| Definition of Terms | .18 |
| CHAPTER II – LITERATURE REVIEW | .19 |
| Introduction | .20 |
| Literature Review Strategy | .20 |
| Current Breastfeeding Initiation and Duration Recommendations | .22 |
| Benefits of Breastfeeding | .23 |
| Breastfeeding as a Public Health Priority | .24 |
| Looking Back Review of Healthy People, Healthy People 1990 and Healthy People 2010 | .27 |
| Expansion of Breastfeeding Objectives Under Healthy People 2020 | .28 |
| Looking Forward: Healthy People 2030 | .29 |
| Current National Breastfeeding Initiation and Duration Trends | |
| Barriers to Breastfeeding | .32 |
| Exploring Racial Disparities in Healthcare and Breastfeeding | .34 |
| Mississippi: Demographics, Current Breastfeeding Initiation and Duration Trends | .41 |
| Current National Approaches Aimed at Increasing Breastfeeding Initiation and Duration | .45 |
| Health Literacy | |
| Peer Support Intervention | |
| Baby Friendly Designation | |
| Baby Cafés | |
| Summary | |
| CHAPTER III – METHODOLOGY | .58 |

| Introduction | |
|--|-----|
| Funding Agency | |
| Request for Proposal | |
| The Grant Review Process | 61 |
| Funding Application Scoring Rubric | |
| Funding Application Scoring Criteria | |
| Reviewer Open Ended Questions | |
| Grant Proposal Reviewers | 66 |
| CHAPTER IV – INCORPORATION OF GRANT PROPOSAL REVII COMMENTS | |
| Reviewer 1 Comments: Johanna M. Hinman, MPH, MCHS | |
| Reviewer 2 Comments: Natalie A. Fields, MPH | |
| | |
| Reviewer 3 Comments: Renata Dennis, MPH, BSN, RN | |
| Reviewer 4 Comments: Sharon Ingram-Cute, BSN, RN, CCRP | |
| Reviewer 5 Comments: Kenisha Barron, MBA, CCRC | 85 |
| CHAPTER V – BABY CAFÉ PROGRAM PROPOSAL | |
| Overview | |
| Problem Statement | |
| Proposal Overview | |
| Organizational Capacity & Experience | 96 |
| Project Deliverables and Timeline | |
| Budget Proposal | |
| APPENDIX A: Request for Proposal | 110 |
| APPENDIX B: Email to Reviewers | 119 |
| REFERENCES | |

CHAPTER I – INTRODUCTION

INTRODUCTION AND RATIONALE

The Centers for Disease Control and Prevention's (CDC) Division of Nutrition, Physical Activity, and Obesity (DNPAO) is dedicated to increasing national breastfeeding rates. Encouraging and supporting breastfeeding best practices furthers DNPAO's primary goal of improving the overall health of the public (CDC, 2020a).

Breastfeeding is deemed vital to improving overall public health by the CDC given the many identified health advantages breastfeeding offers mothers, infants, and children. It is highly recommended for infants to be fed breast milk exclusively for the first six months of life. In addition, mothers are recommended to continue breastfeeding while slowly introducing solid foods until the child reaches one year of age. While breastfeeding is widely considered to be the best form of nutrition for infants, and guidelines recommend one full year, the percentage of breastfeed infants decreases as the length of life increases (CDC, 2016).

In an effort to increase the rate of breastfeeding initiation and duration, the Department of Health and Human Services (HHS) has established national objectives as outlined in Healthy People 2020 (HP2020) (US Department of Health and Human Services [HHS], 2010). In HP2020, there are four main objectives surrounding national breastfeeding initiatives under the Maternal Infant and Child Health (MICH) section. MICH-21 is aimed at increasing the percentage of infants who were ever breastfed to 81.9%, increasing those being breastfed at 6 months to 60.6%, and those being breastfed at one year to 34.1%. In addition, MICH-21 aims to increase infants who were exclusively breastfed through three months to 46.2%, and to increase the number of infants who were exclusively breast feed through six months to 25.5%. MICH-22 is aimed at increasing the percentage of employers who provide lactation support programs on site to 38%. The goal of MICH-23 is to lower the number of breastfed infants who receive formula within the first 48 hours to 14.2%. The last objective, MICH-24, is geared towards increasing the number of live births at facilities who adhere to recommendations outlined for breastfeeding mothers and their newborns (Office of the Surgeon General [OSG], Centers for Disease, Prevention[CDC], & Office on Women's Health [OWH], 2011).

In the United States the rate of mothers who initiated breastfeeding has increased significantly, and an estimated 81.1% of all new mothers initiate breastfeeding. Trends in breastfeeding initiation (figure 1) have shown a mostly upward trend since 1990 (OSG, 2011).

Figure 1. National Breastfeeding Rates - United States, 1970-2010



Note: Graph contains data from two sources as indicated by break in line

Reprinted from the United States Office of Surgeon General 2011. Retrieved from https://www.surgeongeneral.gov/library/calls/breastfeeding/calltoactiontosupportbreastfe

eding.pdf

Over half the country (figure 2) has met the HP2020 MICH-21 objective of 81.9% for breastfeeding initiation. While this is encouraging, and breastfeeding duration is on the rise, far more states fail to meet the HP2020 objective for breastfeeding duration and exclusivity. Of the live births in 2013, only 12 states met this objective - accounting for approximately 60.6% (figure 3) (CDC, 2016). Within six months, only 51.8% newborns were breastfed and this further declines to 30.7% at 12 months. Only 44.4% of all newborns were breastfed exclusively at three months and 22.3% were breastfed exclusively at six months (CDC, 2016). According to the national breastfeeding report card by the CDC, Mississippi and Alabama have some of the lowest breastfeeding success rates (CDC, 2016).



Figure 2. States that met HP2020 goal of initiation - United States, 2013

Reprinted from the Centers for Disease Control and Prevention 2016. Retrieved from https://www.cdc.gov/breastfeeding/pdf/2016breastfeeding reportcard.pdf



Figure 3. States that met HP2020 goal of 6 months duration - United States, 2013

Met the HP2020 goal Did not yet meet the HP2020 goal

Reprinted from the Centers for Disease Control and Prevention 2016. Retrieved from https://www.cdc.gov/breastfeeding/pdf/2016breastfeeding reportcard.pdf

Experts believe the high rate of breastfeeding initiation is a strong indication that women desire and are attempting to breastfeed. Despite these efforts, the percentage of breastfed babies between the ages of 6 and 12 months demonstrates a failure to meet breastfeeding recommendations. More concerning is this may partially signify a lack of support from providers, family, and employers to sustain breastfeeding.

These identified individuals play a crucial role in supporting breastfeeding mothers at every step. Research indicates that immediate and continual support during postpartum is essential. One significant impact to increased breastfeeding initiation and duration is the Baby-Friendly hospital initiative. The Baby-Friendly hospital initiative is an international program, sponsored in partnership with the World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF). The Baby-Friendly hospital initiative is designed to support facilities (hospitals and birth centers) that have institutionalized the most advantageous care and environments for breastfeeding as outlined in the *Ten Steps to Successful Breastfeeding*. The guideline, *Ten* *Steps to Successful Breastfeeding*, was organically published in 1989 by the WHO and the UNICEF. Spanning from 2014 to 2016 the birthrate of babies born at Baby-Friendly facilities increased from 7.8% to 18.3% respectively (CDC, 2016).

While research shows vast improvements in breastfeeding initiation and duration there are alarming trends in breastfeeding rates among racial groups. In the U.S., there are significant racial disparities among mothers who breastfeed. African American women are least likely to initiate and sustain breastfeeding recommendations in comparison to Hispanic and Caucasian women. In a 2008 study, only 58.9% of African American women initiated breastfeeding compared to 75.2% of Caucasians and 80% of Hispanics (Allen et al, 2013; US Department of Health and Human Services [HHS], 2000).

Persistent low breastfeeding rates among African American women were thought to be solely related to socio-demographic factors, cultural factors, and issues related to lactation support (i.e. family, community, and health systems) (HHS, 2010; Sharps et al, 2003; Saadeh and Akré, 1996). The CDC has provided evidence suggesting there are other contributing factors. The CDC linked its 2011 Maternity Practices in Infant Nutrition and Care (mPINC) survey results to the U.S. census data. The census data focused on the percentage of African Americans living within the zip code area of each participating hospital and maternity facility (hospital or stand-alone birth center) (CDC, 2019). Analysis of this census data found that facilities in communities consisting of >12.2% African American residents are less likely than facilities with <12.2% African American residents to meet 5 of the 10 mPINC recommended practices (CDC, 2019; Lind et al, 2014). The mPINC recommended practices include: 1. "Have a written breastfeeding policy that is routinely communicated to all health care staff;

2. Train all health care staff in skills necessary to implement this policy;

3. Inform all pregnant women about the benefits and management of breastfeeding;

4. Help mothers initiate breastfeeding within an hour of birth;

5. Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants;

6. Give breastfeeding newborn infants no food or drink other than breastmilk unless medically indicated;

7. Practice rooming in - that is, allow mothers and infants to remain together 24 hours per day;

8. Encourage breastfeeding on demand;

9. Give no artificial teats or pacifiers to breastfeeding infants; and10. Foster the establishment of breastfeeding support groups and refer mothers tothem on discharge from the hospital or clinic (CDC, 2019)"

Results from the analysis seemingly indicate mPINC recommendations are not evenly executed among communities regardless of the individual mothers' racial demographic. This means mothers, regardless of race, living in areas with a higher population of African Americans are less likely to have access to services designed to increase breastfeeding (Lind et al, 2014). The results from this data analysis are inconclusive but may offer a deeper understanding into the consistent racial disparities among breastfeeding rates reported for African American women and Caucasian women (Lind et al, 2014).

Another highly correlating factor that contributes to decreased breastfeeding is working outside the home. An estimated 70% of all full-time working mothers have children under the age of three (Lind, et al., 2014). Of this population, approximately 23.3% return to work within three months after giving birth, while 46.6% returned within six months (Lind, et al., 2014). According to, Stephanie Wyatt (2002), successful breastfeeding at work requires the following:

- Access to a breast pump;
- Access to a private room;
- Sufficient breaks to pump;
- Access to a refrigerator to store breastmilk; and
- Support of employer (Wyatt, 2002)

An absence or inconsistency of one or more of the identified needs for successful breastfeeding following a mother's return to work can create barriers to breastfeeding. Each barrier decreases a woman's likelihood of successfully sustaining her breastfeeding plan (Wyatt, 2002). Racial and socio-demographic differences are evident as African Americans are more likely to return to work sooner and hold jobs with inherent barriers to breastfeeding. Workplace barriers for African American women include a shorter maternity leave, less job flexibility, an unsupportive work environment, and less breastfeeding protections in their workplace (Li, et al., 2004; Johnson, Kirk, & Muzik, 2015; Spencer & Grassley, 2013; Shealy, et al, 2005; and Conrad, 2006). In addition, African American women disproportionately hold low income and non-managerial positions. These positions are often accompanied with high stress work environments with limited flexibility or part-time schedules. African American women are also less likely to have social support surrounding breastfeeding (Johnson, Kirk, and Muzik, 2015). Unsurprisingly, experts have identified African American women as the group with the lowest breastfeeding initiation and duration rates.

Kimberly Seals-Allers, draws parallels with barriers seen among African American communities and communities who meet the criteria of a first food deserts. A first food desert is a new concept characterized by limited or nonexistent access to support needed for optimal breastfeeding initiation and duration. First food deserts also exhibit alarmingly higher rates of infant mortality, decreased overall infant health, as well as increased rates of childhood obesity. Targeted interventions for these communities are essential in order to meet HP2020 goals for breastfeeding initiation and duration while simultaneously reducing infant mortality, childhood obesity, and increase infant health overall (First Food Friendly, n.d).

Evidence based research studies have illustrated the importance of breastfeeding and its corresponding positive impacts on child and maternal health. It is evident that breastfeeding is instrumental in decreasing critical illness in children and infants. Breastfeeding is known to reduce an infant's or child's risk of developing asthma, Type II Diabetes, eczema, ear infections, respiratory infections, irritable bowel syndrome (IBS), obesity, sudden infant death syndrome (SIDS), necrotizing enterocolitis in premature infants, acute lymphocytic leukemia, acute myelogenous leukemia, and gastrointestinal infections (CDC, 2016). In the opinion of Lind et al (2014), every institution has a responsibility to those they serve, regardless of race or ethnicity. Included in this role, the institution must actualize evidence-based policies and practices known to be critical for successful breastfeeding. By doing so, more babies are ensured the multiple health benefits of breastfeeding (Lind et al, 2014). Nonetheless, efforts to increase breastfeeding initiation and duration should not infringe on a patient's autonomy. A patient's autonomy is a major principle in medical ethics and should always be respected (except for in cases of self harm) (Rahmani, Ghahramanian, & Alahbakhshian, 2010).

PROBLEM STATEMENT

Evidence based research clearly indicates that decreased breastfeeding initiation and duration among the African American community adversely impacts maternal, infant, and child health. The rates of breastfeeding duration and initiation within the African American population consistently fail to meet the goals set by Healthy People, CDC, and WHO, contributing to larger public health issues such as higher risks for asthma, diabetes, eczema, ear and respiratory infections, IBS, obesity, and SIDS (CDC, 2016).

THEORETICAL FRAMEWORK:

Health behaviors, environment, and interaction and relationships centered around breastfeeding initiation and duration of new and expectant mothers are complex. Based on this complexity, the theoretical framework selected for this grant proposal is the social ecological model. This model emphasizes the interconnectivity of overlapping levels of influence. These levels of influence include individual, interpersonal, community, organizational, and policy. In addition, the social ecological model highlights the impact behaviors can have on a social environment and vice versa (Glanz and Bishop, 2010). This concept of interconnectivity and compounding impact is illustrated for each level in figure 4 below.

Individual - This level examines behavioral determinants such as knowledge, attitude, goals, economic status/resources, maternal confidence, beliefs, race/ethnicity, etc. of new and expecting mothers with the aim of influencing desired behavior change of increased breastfeeding initiation and duration. The objective of this level is to positively influence individual behavior through increased knowledge, support, and resources to improve breastfeeding initiation and duration rates among African American women in the targeted population (UNICEF, n.d.; Radzyminski et al, 2016).

Interpersonal - This level describes the network of formal and informal relationships in the individual's primary social circle that can potentially influence breastfeeding initiation and duration rates. Examples include family, friends, peers, co-workers, religious networks, and customs or traditions (UNICEF, n.d.). By changing behavior at the individual level, those persons who witness the changed behavior are also impacted. This level is crucial as generational behaviors, cultural norms, and both religious and nonreligious beliefs can be deeply seated in a community and are often difficult to modify (UNICEF, n.d.; Radzyminski et al, 2016). **Community** - At the community level social settings such as neighborhoods, churches, local businesses, etc. are explored. This level also takes into consideration physical environments such as lactation spaces, baby cafés or lack thereof. Associated characteristics of a community are identified and their role in facilitating breastfeeding initiation and duration. This level promotes, encourages, and supports families and mothers to initiate and maintain breastfeeding as recommended (UNICEF, n.d.).

Organizational - At this level institutions and organizations are analyzed for their role in promoting breastfeeding initiation and duration, strategies, and recommendations. Institutions that fit this category include local health departments, health care systems, places of employment, birthing facilities, professional medical societies (such as American Society of Pediatrics), non profit organizations (such as March of Dimes or First Food Friendly), etc. (UNICEF, n.d.).

Policy - The focus of this level is to evaluate the policies and laws at the local, state, and federal levels. This level specifically looks at how these entities work in conjunction with each other and the lower levels for the allocation of resources for breastfeeding initiation and duration, access to care, lack of policies, and/or restrictive policies (for example requiring fees or taxes for health services) (UNICEF, n.d.). A focal point surrounding the policy level is the advocacy for education and behavior change at the federal and state government level (CDC, 2019).



Figure 4: Social Ecological Model for Breastfeeding

Adopted from the Centers for Disease Control and Prevention 2020b. The Social Ecological Model: A Framework for Prevention, Retrieved from http://www.cdc.gov/violenceprevention/overview/social-ecologicalmodel.html

PURPOSE STATEMENT

The purpose of this grant proposal is to establish interventional measures to increase breastfeeding initiation and duration targeting the African American community in Mississippi. The proposed program aims to close the gap of racial disparities among women in the United States who breastfeed through continuity of care, education, awareness, and provided private lactation areas. Implementation of these intervention measures will promote breastfeeding by women who utilized the identified community health center (CHC):

 Jefferson County Health Department located in Jefferson County, Mississippi

A community-based program would provide resources and education to new and expecting mothers while also positively encouraging them to initiate and maintain recommended breastfeeding practices. This community-based program will ensure a strong foundation for the baby's health as well as benefits to the mother's health. This approach will also decrease known public health issues such as asthma, diabetes, eczema, ear/respiratory infections, IBS, obesity, and SIDS.

OBJECTIVES TO BE ADDRESSED BY THE GRANT PROPOSAL

The main objective of this grant is to increase breastfeeding initiation and duration among African American women residing in Jefferson County, Mississippi. Additional objectives of this grant proposal are as follows:

- 1. Increase breastfeeding awareness in the Jefferson County community;
- 2. Provide safe and private lactation spaces for breastfeeding mothers; and
- 3. Provide lactation services to new and expecting mothers such as access to a lactation specialist

STATEMENT OF SIGNIFICANCE

Mississippi currently ranks 49 out of all states in the U.S. for meeting the recommended breastfeeding rates (MSDH, 2011). As illustrated in figure 5, from 2007 to 2014, Mississippi ranked well below the national rates in each category. Figure 6 illustrates the national breastfeeding rates from 2009 to 2016. Additionally, the state failed to meet the objectives outlined in Healthy People 2010 and is currently off track to meet objectives outlined in Healthy People 2020. Given Mississippi's poor breastfeeding rates it is imperative to evaluate barriers to breastfeeding initiation and duration in order to effectively increase breastfeeding and increase overall population health (CDC, 2016; HHS, 2010). The implementation of a baby café can aid in the increase in of breastfeeding rates and result in positive health benefits for mothers and infants (CDC, 2016). A baby café is a free resource for pregnant and breastfeeding mothers that provides support from trained staff, opportunities to share experiences and network with fellow mothers, workshops, and open-forum discussions (Baby Café, 2016). The health benefit starts immediately for mothers and infants and into adulthood (CDC, 2016). A baby café is an inaugural step to contributing to the overall goal of improving breastfeeding initiation and duration of African American women residing in Jefferson County, Mississippi.



Figure 5 Mississippi Breastfeeding Initiation and Duration, 2009 - 2016

Note: Data from 2015 not available

Reprinted from the Centers for Disease Control and Prevention 201. Retrieved from https://www.cdc.gov/breastfeeding/data/index.htm



Figure 6 National Breastfeeding Initiation and Duration, 2009 - 2016

Note: Data from 2015 not available

Reprinted from the Centers for Disease Control and Prevention 201. Retrieved

from https://www.cdc.gov/breastfeeding/data/index.htm

DEFINITION OF KEY TERMS

Breastfeeding Initiation: For the purposes of the data used for this grant proposal breastfeeding initiation is defined as any attempt to breastfeed.

Baby Café: A free resource for pregnant and breastfeeding mothers by providing support from trained staff, opportunities to share experiences and network with fellow mothers, workshops, and open-forum discussions.

Breastfeeding Duration: For the purposes of the data used for this grant proposal breastfeeding duration is defined as the time period from initiation of breastfeeding until the time at which the mother stops breastfeeding. For the purposes of this grant proposal breastfeeding duration does not refer to the time spent in a single feeding.

Baby-Friendly: A term used to refer to hospitals who have received accreditation from Baby-Friendly USA, Inc.

Baby-Friendly USA, Inc.: The accrediting agency responsible for granting hospitals and other birthing facilities a Baby-Friendly designation as a form of recognition for facilities who provide the information and support to mothers for breastfeeding initiation and duration.

CDC: Centers for Disease Control and Prevention

Community Health Center (CHC): A private, non-profit center charged with providing health services based on need and participation in the area. CHCs, generally, focus their care in the areas of primary and preventive care. Those served are medically underserved and uninsured people.

First Food Desert: A new concept characterized by limited or nonexistent access to support needed for optimal breastfeeding initiation and duration.

Healthy People: National health objectives defined every 10 years with the goal of improving overall health of all Americans.

Maternity Practices in Infant Nutrition and Care (mPINC): National CDC survey used to determine maternity care practices and provide feedback to encourage birthing facilities to make improvements that better support breastfeeding

NACCHO: National Association of County & City Health Officials

PSEs: Policies, Systems, and Environments

WHO: World Health Organization

CHAPTER II: REVIEW OF LITERATURE

INTRODUCTION

This document seeks to provide the full scope and context of current breastfeeding initiation and duration rates, efforts, and barriers for mothers in the United States, focusing on the national level, state level, and within the specific county of Jefferson, Mississippi. The aim is to build a practical and comprehensive intervention for increasing the rates of breastfeeding initiation and duration specifically in Mississippi. The included literature is intended to provide context for the proposed baby café intervention within Jefferson County, Mississippi.

It is important to recognize the current magnitude that a lack of breastfeeding initiation and duration plays in the state of Mississippi, particularly as it relates to the implications on public health. This chapter will also present current recommendations and the available body of evidence for breastfeeding initiation and duration approaches.

LITERATURE REVIEW STRATEGY

The focus of this literature review is to summarize the published research articles on the current rates, trends, benefits, and racial disparities of breastfeeding initiation and duration. This literature review will focus specifically on the state of Mississippi and compare these rates to national rates and other states. In order to identify the most relevant articles, categories of search terms were identified as shown below:

<u>Breastfeeding</u>: Breastfeeding initiation and duration; Breastfeeding rates; Breastfeeding rates in African American community; Breastfeeding in Mississippi; Barriers to breastfeeding; Why does returning to work impact breastfeeding; Breastfeeding

challenges for working mothers; Breastmilk composition; Benefits of breastfeeding increase with exclusivity; and Benefits of breastfeeding.

<u>Breastfeeding interventions</u>: Baby Cafés; Breastfeeding Cafés; Evaluation of baby cafés; Baby Friendly designation; Maternity Practices in Infant Nutrition and Care (mPINC); What type of interventions are there for breastfeeding; Health literacy; Health education; Peer support intervention in breastfeeding; Lactation support; social support for breastfeeding; lack of social support impact on breastfeeding; and Peer support and breastfeeding.

<u>Racial disparities/inequalities associated with breastfeeding</u>: Barriers to breastfeeding for black women; Health disparities; Health Equity; Health disparities faced by African Americans; and First food deserts.

<u>Historical perspective on breastfeeding trends</u>: Paradigm shift in breastfeeding as a public health concern; nutrition guidelines; and first nutrition guidelines.

Racial disparities/inequalities associated in healthcare: Top 10 causes of death in African Americans compared to other racial groups; Causes of death by race and ethnicity; Deaths African American women during childbirth; Maternal mortality rates; and Maternal mortality rates African American women.

This literature review will be exploring the impact of decreased breastfeeding initiation and duration on population health and how it can exacerbate other public health concerns. A crucial discussion is the alarming and growing racial disparities that disproportionately impact the African American population. The selected articles referenced in this chapter date back to 1989. Articles were retrieved from Emory University's research database and Google Scholar.

CURRENT BREASTFEEDING INITIATION AND DURATION RECOMMENDATIONS

According to the CDC (2016), current breastfeeding recommendations encourage women to initiate and sustain exclusive breastfeeding for the first 6 months of life. After this time, women are recommended to continue to breastfeed from 6 months to 1 year while slowly introducing solid foods. After 6 months of exclusive breastfeeding, the American Academy of Pediatrics (AAP) promotes breastfeeding to be continued longer than the first year of life if mom and baby desire (American Academy of Pediatrics, 2014). Similarly, the World Health Organization recommends exclusive breastfeeding for 6 months but to continue breastfeeding until the child reaches the age of 2 or older (WHO, 2011).

While the desired length of breastfeeding varies depending on the recommending organization, the consensus is for breastfeeding to begin as immediately as possible following birth, ideally within the first hour after birth (CDC, 2016), and to continue as the exclusive food for a minimum of 6 months.

BENEFITS OF BREASTFEEDING

The numerous benefits of breastfeeding have been clearly demonstrated with evidence-based research. Breastfeeding is considered the best source of nutrition for babies (CDC, 2016). Studies on breast milk indicate that a mother's milk will change to meet the needs of the growing child (Ballard & Morrow, 2013). Breastfeeding also provides protective factors for a baby against certain long-term and short-term health concerns (CDC, 2016). Babies who are breastfeed are at a lower risk of developing asthma, Type II Diabetes, Eczema, ear infections, respiratory infections, IBS, obesity, SIDs, necrotizing enterocolitis in premature infants, acute lymphocytic leukemia, acute myelogenous leukemia, and gastrointestinal infections (CDC, 2016). Studies have also shown benefits in immune system development for babies. Breast milk composition changes over time, providing the right proportions of nutrients needed as the baby grows. For example, immediately following birth colostrum (or first milk) is produced by the mother and is high in protein and low in sugar (Ballard & Morrow, 2013). While further research is needed, this is suggestive that benefits of breastfeeding are associated with exclusivity and lengthen of breastfeeding.

Benefits of breastfeeding also extend to the mother. Mothers who breastfeed are at lower risk for developing Type II Diabetes, hypertension, breast cancer, and ovarian cancer (CDC, 2016; Office of the Surgeon General et al., 2011; Martens et al., 2016).

In addition to the benefits listed above, several positive correlations have been observed with breastfeeding, however additional research is needed for a reliable conclusion. These benefits range from increased postpartum weight loss for the mother to motor development during childhood (Jarlenski et al., 2014; Luengo et al., 2019; Jackson & Nazar, 2006).

BREASTFEEDING AS A PUBLIC HEALTH PRIORITY

Breastfeeding initiation and duration are major public health priorities because of their numerous benefits in helping to prevent disease and decrease health disparities. In a 2013 presentation at the World Health Organization Seminar in Geneva Switzerland, Grummer-Strawn, PhD described a national paradigm shift in the US, between 1990 and 2010. As illustrated in figure 7 below, breastfeeding efforts in the United States shifted away from individual choice and responsibility and towards shared public health (Grummer-Strawn, 2013).



Figure 7

Reprint from Grummer-Strawn, Laurence 2013. Making Breastfeeding a Public Health Priority in the United States, slide 2. Retrieved from https://www.who.int/nutrition/ topics/seminar_ Breastfeeding was such a priority that in January of 2011 the Department of Health and Human Services (HHS) released *The Surgeon General's Call to Action to Support Breastfeeding*. This publication is meant to serve as a detailed guide on how everyone can join in a community-based approach to ensure the success of mothers who choose to breastfeed. The idea was to amplify the potential public health impact, decrease health inequalities for mothers and babies, and create a stronger support approach in the community (Office of the Surgeon General et al., 2011).

To understand this shift in thinking surrounding breastfeeding, it is important to review past ideologies centered on nutrition. During the late 1940s until the early 1950s, nutritionists started to explore the relationship between the consumption and over consumption of various nutrients to chronic diseases. As a result, several studies were conducted with thousands of research participants over a period of time. The Framingham Study is of particular interest because through this study researchers identified several risk factors for cardiovascular disease (CVD) (Ridgway, Baker, Woods, & Lawrence, 2019). Consequently, dietary recommendations to prevent CVD were published throughout the 1960s by several health organizations. These organizations were not affiliated with any government agency but unanimously agreed the reduction of total fats could prevent CVD. While the groups agreed on how to prevent CVDs, they did not agree on dietary recommendations. In 1970 the US government started to develop dietary goals. In 1980, the US became the second country to publish a set of national dietary recommendations. By 1990, nutritionists and policymakers recognized that people consumed food and not nutrients. This change in thought shifted the focus to the foods people were eating and the complexity of food in the country. In an effort to improve

nutrition health and food consumption, a closer look into the foods people were eating was done. As a result, in 1992 guidelines were adopted to publish nutrition information through food-based dietary guidelines. During this time breastfeeding and other sustainable foods were made a priority (Ridgway, Baker, Woods, & Lawrence, 2019). Figure 8 illustrates the shift in dietary guidelines and thinking.



Figure 8: Shift in Public Nutrition Science

Reprinted from Ridgway, E., Baker, P., Woods, J., & Lawrence, M 2019. Historical developments and paradigm shifts in Public Health Nutrition Science, guidance and policy actions. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6471843/

This shift marked a major departure from traditional polices developed exclusively by nutrient requirements and towards an agenda set by public health concerns. During that time, breastfeeding became an important goal (Ridgway, Baker, Woods, & Lawrence, 2019). Early policies focused on dietary guidelines for everyone 2 years of age and older. Following the shift towards public health concerns, dietary guidelines were included for those at risk for chronic diseases. The guidelines are not intended to be treatment but are often used in conjunction with professional medical care. Medical professionals often promote dietary guidelines to reduce risk of conditions such as heart disease, type II diabetes, and cancer (Dietary Guidelines for Americans, n.d.).

LOOKING BACK: REVIEW OF HEALTHY PEOPLE, HEALTHY PEOPLE 1990, AND HEALTHY PEOPLE 2010

In 1990 the Department of Health and Human Services (HHS) established national objectives to increase overall national health. Included in these efforts were efforts to increase the rate of breastfeeding initiation and duration. These objectives are outlined in Healthy People (U.S. Department of Health and Human Services [HHS] 2019; Cadwell, 1999). Prior to the establishment of Healthy People, the World Health Organization developed a goal of "health for all" by 2000 (WHO, 1988). As a partner in this goal, the United States developed national goals to be achieved every 10 years.

As explored above, the establishment of national breastfeeding goals in 1990 marked the beginning of the paradigm shift. In its infancy, Healthy People objectives for breastfeeding did not include specifics on exclusive breastfeeding or at 3 months and 1 year as seen in future Healthy People objectives. These objectives were added in Healthy People 2010 (U.S. Department of Health and Human Services 2019; Cadwell, 1999).
| Objective | 2000 Target % | 2010 Target % | 2020 Target % |
|--|---------------|---------------|---------------|
| Ever Breastfeed *at time of discharge for 2000 | 75 | 75 | 81.9 |
| At 6 months | 35 | 50 | 60.6 |
| At 1 year | - | 25 | 34.1 |
| Exclusively through 3 months | - | 40 | 46.2 |
| Exclusively through 6 months | - | 17 | 25.5 |

Figure 9: Healthy People Breastfeeding Objectives; 2000-2020

Adopted from Healthy People 2000, 2010 and 2020. Retrieved from

https://www.cdc.gov/nchs/healthy_people/index.htm

According to the CDC's 2013 breastfeeding report card an estimated 76.5% of all new mothers in the U.S. initiated breastfeeding. The percentage of newborns breastfed at 6 and 12 months meets the 2010 goal but drops significantly to 49% and to 27% respectively. In 2013, 40.7% of all newborns were breastfed exclusively at 3 months and 18.8% were breastfed exclusively at 6 months (U.S. Department of Health and Human Services 2019).

EXPANSION OF BREASTFEEDING OBJECTIVES UNDER HEALTHY PEOPLE 2020

In addition to the national objectives explored above, Healthy People 2020 added three new objectives. MICH-22 aimed to increase the percentage of employers who provide lactation support programs on site to 38%; MICH-23 aimed to lower the number of breastfed infants who receive formula within the first 48 hours to 14.2%; and MICH-24, aimed to increase the number of live births at facilities who adhere to recommendations outlined for breastfeeding mothers and their newborns (Office of the Surgeon General et al., 2011).

LOOKING FORWARD: HEALTHY PEOPLE 2030

Development of the national objectives for Healthy People 2030 are still underway. Public comments for these objectives were accepted from December 2018 until January 2019. Currently, the Secretary's Advisory Committee is reviewing the public comments. These comments will help to inform the national objectives for Healthy People 2030 (ODPHP, 2020).

CURRENT NATIONAL BREASTFEEDING INITIATION AND DURATION TRENDS

In the CDC's 2018 breastfeeding report card, an estimated 83.2% of all new mothers initiated breastfeeding. Within six months only 57.6% of newborns were breastfed and this further declines to 30.7% at 12 months. Only 46.9% of all newborns were breastfed exclusively at three months and 24.9% were breastfed exclusively at six months (CDC, 2018).

In the United States the rate of mothers who initiated breastfeeding has increased significantly. National breastfeeding rates continue to be on the rise. Trends in breastfeeding initiation have shown a mostly upward trend since 1990 (OSG, 2011). As seen in Figure 10, national breastfeeding rates are on the rise.



Figure 10: National Breastfeeding Rates - United States, 1970-2010

Note: Graph contains data from two sources as indicated by break in line

Reprinted from the United States Office of Surgeon General 2011. Retrieved from https://www.surgeongeneral.gov/library/calls/breastfeeding/calltoactiontosupportbreastfe eding.pdf

Over half the country (figure 10) has met the MICH-21 objective of 81.9% for breastfeeding initiation (figure 11) (CDC, 2016). While this is encouraging, and breastfeeding duration is on the rise, most states are not meeting breastfeeding duration and exclusivity goals set by Healthy People 2020. For infants born in 2013, only 12 states met the 6 months duration goal; (figure 12) (CDC, 2016).



Figure 11: States that met HP2020 goal of initiation - United States, 2013

Reprinted from the Centers for Disease Control and Prevention 2016. Retrieved from https://www.cdc.gov/breastfeeding/pdf/2016breastfeeding reportcard.pdf

Figure 12: States that met HP2020 goal of 6 months duration - United States, 2013



Reprinted from the Centers for Disease Control and Prevention 2016. Retrieved from

https://www.cdc.gov/breastfeeding/pdf/2016breastfeeding reportcard.pdf

Experts believe the high rate of breastfeeding initiation is a strong indication that women want to and are attempting to breastfeed. Despite these efforts, the percentage of breastfeed babies between the ages of 6 and 12 months demonstrates a failure to meet breastfeeding recommendations. More concerning is this may partially signify a lack of support needed to sustain breastfeeding from providers, family, and employers. These identified individuals play a crucial role in supporting breastfeeding mothers at every step. Research indicates that immediate and continual support during postpartum is essential (CDC, 2016).

BARRIERS TO BREASTFEEDING

Numerous barriers to breastfeeding persist in the United States. Commonly cited barriers include lack of knowledge, social norms, lack of support (i.e. family and social), embarrassment, lactation complications, employment and childcare, and access to associated to health services (Office of the Surgeon General et al., 2011). A study conducted by Ahluwaila, Morrow and Hsia (2005) reported initiation barriers included the mother's preferences, unsupportive partner, concerns about pain, and physical/medical problems. The same study reported that when breastfeeding was initiated, women who stopped reported their reasons for stopping to include sore nipples, concerns about milk supply, difficulty with the infant latching to the breast, and perceived concerns of infant satisfaction (Ahluwalia, Morrow, Hsia, 2005). Another study found that among mothers who initiated breastfeeding some stopped because of efforts related to pumping breast milk (Odem, et al., 2013).

An important barrier to explore is the high correlation of working outside the home as a contributing factor to decreased breastfeeding. The percentage of US women who worked in 1940 was 28%. The percentage of working women more than doubled to 56.6% by 1988. Thus, working women with infants and young children were the fastest growing work population (Wyatt, 2002). As of now, an estimated 70% of all full-time working mothers have children under the age of three. Of this population approximately 23.3% return to work within three months after giving birth while 46.6% returned within six months (Lind, et al., 2014). This potentially has implications for the feasibility of continued breast feeding.

In a study designed to look at the impact of lengthening maternity leave and return to work on breastfeeding, the authors concluded that delaying return to work can potentially increase duration of breastfeeding (Ogbuanu, Glover, Probst, & Hussey, 2011). In the study population, it was observed that women who returned to work between one and six weeks, compared to women who had not returned to work, had a lower probability of maintaining breastfeeding. The greatest success rate beyond 3 months was observed among mothers who returned to work at 13 weeks postpartum or later (Ogbuanu, Glover, Probst, & Hussey, 2011).

As shown in the study conducted by Ogbuanu, Glover, Probst, and Hussey, returning to work is a defining moment due to changes in a mother's breastfeeding routine. In most cases, the baby is not with the mother and as a result a mother will need to pump. According to, Stephanie Wyatt (2002), successful breastfeeding at work requires the following:

• Access to a breast pump;

33

- Access to a private room;
- Sufficient breaks to pump;
- Access to a refrigerator to store breastmilk; and
- Support of employer (Wyatt, 2002)

An absence or inconsistency of the five identified needs for successful breastfeeding following a mother's return to work can create barriers to breastfeeding. Each barrier decreases a woman's likelihood of successfully sustaining her breastfeeding plan (Wyatt, 2002). When this occurs a loss of breastfeeding benefits can be seen. This is especially important to note as many mothers face more than one major barrier to initiating and sustaining their breastfeeding plan. Additionally, working mothers often have multiple roles; such as household chores, care of other children, and/or role as a spouse or partner. Multiple demanding roles can lead to role overload and if a mother is forced to eliminate a role breastfeeding is often forfeited first (Ogbuanu, Glover, Probst, & Hussey, 2011; Wyatt, 2002).

EXPLORING RACIAL DISPARITIES IN HEALTHCARE AND BREASTFEEDING

While breastfeeding presents barriers for all women, regardless of race, there are barriers that disproportionally impact African American women at alarming rates. This comes as no surprise as national data indicates African Americans face numerous disparities within the healthcare system. Even when socioeconomic factors such as income, age, insurance coverage, and severity of condition(s) are equivalent, racial and ethnic inequalities are still observed (Nelson, 2002). The historic social and economic contexts of the United States play a crucial role in the inequality and persistent racial and ethnic discrimination in the American healthcare system. Clinical bias, prejudice, and stereotyping by healthcare providers and staffers all contribute to health disparities. More research is needed to characterize these existing biases, the prevalence of these biases in the healthcare system, and their impact on outcomes of care. It is important to note refusal rates for treatment are more common among minorities than Caucasians, but these rates are small and do not fully account for the racial disparity gaps in healthcare (Nelson, 2002).

Health disparities in the United States have been identified as such an important public health concern that the CDC appointed a special federal advisory committee, the Health Disparities Subcommittee. The committee meets biannually and is charged with advising the Director of the CDC on current health disparities and creating innovative strategies that can assist the CDC in its goal of permanently closing health disparity gaps (CDC, 2017).

African Americans are more likely to suffer from diabetes, hypertension, and heart disease than any other racial group. Research suggests African American children are 500% more likely to die from asthma related deaths than Caucasian children (Harvard University, 2016). African American women are at an increased risk of dying from conditions such as breast and gynecological cancer. Previous research shows, African American women are at nearly four times greater risk to die as a result of pregnancy complications than Caucasian women (Tucker, et al, 2007). There is an increased risk for pregnancy complications among African American women that is independent of age, parity, or education (Tucker, et al, 2007). Further research is still needed to understand why these inequalities exist.

These observed health disparities among African American paint a parallel story for decreased breastfeeding initiation and duration among African American women. Successful breastfeeding initiation and duration may also be dependent on healthy mothers. Disruption to breastfeeding due to a mother's illness such as hospitalization can decrease breastfeeding duration. More research is needed to explore the impact hospitalization and other illnesses of a mother health plays in breastfeeding initiation and duration (Courtois & Thibault, 2010). An additional challenge faced by African American women is accessing reproductive care that meets their needs. Access to reproductive care helps with family planning and subsequently improves health outcomes for mom and baby. African American women are more likely to have unintended pregnancies than any other racial group, in part due to gaps in access to quality contraceptive care and counseling (Finer & Zolna, 2011; Dehlendorf, et al, 2013).

Moreover, hospitals that serve communities that are majority African American are shown to provide subpar maternity care. An estimated 75% of African American women give birth at these facilities (Howell, 2016). Creanga, et al (2014), conducted a retrospective study that included 1021 Caucasian, 56 African American, and 530 individuals who identify as Hispanic. The study included numerous hospitals in 7 states with an average annual delivery of 2291, 2922, and 2749, respectively (Creanga, 2014). The researchers linked inpatient data from state databases and data from the American Hospital Association in the 7 selected states. Hospitals were designated as follows; hospitals with >50% of deliveries to non-Hispanic white, non-Hispanic black, and Hispanic women as white-serving, black-serving, or and Hispanic-serving, respectively. The researchers found hospitals serving African Americans had increased frequencies of maternal complications than other hospitals. Furthermore, African American serving hospitals performed worse on 12 of 15 identified study identified birth outcomes, including elective deliveries, non-elective cesarean births, and maternal mortality (Creanga, 2014).

Over the past ten years there has been an increase nationwide in breastfeeding initiation and duration. While rates of breastfeeding vary in each state, non-Hispanic African American women are least likely to breastfeed in comparison to other racial/ethical groups in the United States. In 23 states the rates for non-Hispanic African Americans was significantly lower, in fourteen states a difference of at least 15% was observed (Anstey, et al., 2017). Among all infants who were exclusively breastfed for the first 6 months of life a difference of at least 10% was observed in 12 states. At 12 months of breastfeeding, 22 states showed a difference of at least 10% among all infants (Anstey, et al., 2017).

Persistent low breastfeeding rates among African American women is known, in part, to be related to a number of socio-demographic and cultural factors, in addition to issues of lactation support (i.e. family, community and health system) for new African-American mothers (HHS, 2010; Sharps et al, 2003; Saadeh and Akré, 1996). A 2011 CDC study surveyed 2,643 facilities across the United States and found additional rationale for decreased breastfeeding rates among African American women. Similar to the study conducted by Creanga, et al, the study was conducted to look at racial disparities. Identified by zip code, it was found that facilities with a patient base

consisting of >12.2% African Americans are less likely than facilities with <12.2%African American residents to meet 5 of 10 Maternity Practices in Infant Nutrition and Care (mPINC) recommended practices. mPINC is derived from the CDC and is a national survey conducted to evaluate evidence based maternity care practices. Additionally, the survey provides suggestions aimed at supporting and encouraging hospitals to improve specific areas in an effort to improve rates of successful breastfeeding. Approximately every 2 years, the CDC invites all hospitals across the United States and its territories to participate in the mPINC survey. The survey is considered a national census of maternity care facilities. The survey was initiated in 2007 and the questions concentrate on the specific elements of a hospital's maternity care strategies that influence how babies are fed. From the conception of the survey until 2015, it monitored and examined practice changes over time. After 2015, the CDC revamped the survey to reflect changes in maternity care practices in the United States over the previous 10 years. A newly designed survey was initiated in 2018. Every participating facility will be given a detailed report from the CDC that outlines changes that can be implemented at their hospital. In this way, data collected from the mPINC survey can be utilized by hospitals (i.e. physicians, nurses and hospital administrators) to advance care practices and policies to better assist moms and babies. mPINC data is also shared with state health departments and identified stakeholders. Stakeholders and health departments can use the information gained to collaborate with partnering groups, policy makers, and health providers to implement proven methods for maternity care practices and policies at hospitals (CDC, 2019). The mPINC indicators include:

1. "Have a written breastfeeding policy that is routinely communicated to all health care staff;

2. Train all health care staff in skills necessary to implement this policy;

3. Inform all pregnant women about the benefits and management of breastfeeding;

4. Help mothers initiate breastfeeding within an hour of birth;

5. Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants;

6. Give breastfeeding newborn infants no food or drink other than breastmilk unless medically indicated;

7. Practice rooming in - that is, allow mothers and infants to remain together 24 hours per day;

8. Encourage breastfeeding on demand;

9. Give no artificial teats or pacifiers to breastfeeding infants; and10. Foster the establishment of breastfeeding support groups and refer mothers tothem on discharge from the hospital or clinic (CDC, 2019)."

Results from the analysis seemingly indicate mPINC recommendations are not evenly executed among communities regardless of the mother's racial demographic. This means mothers, regardless of race, living in areas with a higher population of African Americans are less likely to receive access to services designed to increase breastfeeding (Lind et al, 2014). The results from this data analysis are inconclusive but may offer a deeper understanding into the consistent racial disparities among breastfeeding rates reported for African American women and Caucasian women (Lind et al, 2014).

Racial and other socioeconomic differences are also evident as African Americans are more likely to return to work sooner and hold jobs with inherent barriers to breastfeeding. As discussed earlier the duration of maternity leave is positively correlated with increased breastfeeding initiation and duration. Women returning to work within 12 weeks or work fulltime are less prone to exclusive breastfeed. African American women are more likely than other racial groups to be employed at jobs with shorter maternity leave and have less job flexibility (Li, et al., 2004; Johnson, Kirk, and Muzik, 2015). Studies also indicate that African American women generally return to work two weeks earlier than non-black women and women of other ethnic groups. African American mothers are also less likely to have supportive work environments for breastfeeding (Johnson, Kirk, & Muzik, 2015). African American women tend to hold positions such as retail and food services that offer less flexibility and less breastfeeding protections (Spencer & Grassley, 2013; Shealy, et al, 2005; Conrad, 2006).

Lack of protections in the workplace can include inadequate break duration and demanding work schedules which make pumping challenging. In addition, African American women disproportionately hold low income and non-managerial positions. These positions are often accompanied with high stress work environments with limited flexibility or part-time schedules. African American women are also less likely to have social support surrounding breastfeeding (Johnson, Kirk, and Muzik, 2015). Social support for breastfeeding can include emotional support, tangible support, educational elements from informal social groups (i.e. partner, mother, friends, or family) and/or

40

professional support (i.e. providers, lactation specialists, or nurses). Lack of support may decrease breastfeeding (Raj, & Plichta, 1998). Cultural attitudes and ideas surrounding breastfeeding among African Americans are suggested results of slavery, wet-nursing, and other historical health experiences. Wet-nursing is the act of feeding another woman's child with your own breast milk. In general, wet-nursing can only be achieved when a woman is lactating. During slavery, wet-nursing was an additional form of forced labor for African American women who had recently given birth. Authors West and Knight (2017), suggest that white women used wet-nursing as a form of manipulation of enslaved women's motherhood for their own benefit. African American women who were forced to wet-nurse often had to neglect the needs of their own child(ren). Wetnursing also allowed Caucasian women to avoid painful swollen breast and the pain associated with breastfeeding. It also gave Caucasian women the ability to avoid leaking breasts. As a result, Caucasian women, unlike enslaved African Americans, enjoyed a position of "power and privilege" that granted them the freedom to decide to breastfeed their own children or not (West & Knight, 2017). While more research is needed, cultural beliefs leading to African American women deciding not to breastfeed may in part related to their ability to choose not to breastfeed.

MISSISSIPPI: DEMOGRAPHICS, CURRENT BREASTFEEDING INITIATION AND DURATION TRENDS:

One of the three pillars of public health is to improve population health and as such special attention should be placed on populations with the lowest health outcomes. Experts have identified African American women as the group with the lowest percentage of breastfeeding initiation and sustained. According to the CDC's national breastfeeding report card, Mississippi has the lowest breastfeeding initiation and duration rates nationwide (CDC, 2016). According to the US census 2018, Mississippi is also among states with a large black population as illustrated in figure 12 below (US Census Bureau, 2018).



Figure 13: 2018 US African American Population

Adopted from the US Census Bureau, 2018 Quickfacts

Additionally, the US Census Bureau has identified Mississippi to have one of the highest levels of poverty in the United States. Its median household income was the lowest state at \$42,781 in 2018 (U.S. Census Bureau, 2019). There are numerous factors that correlate with women with low-incomes and poor breastfeeding rates (Kistin, et al., 1990).

Furthermore, First Food Friendly, Inc. identified Mississippi as a state with existing first food deserts (Seals-Allers, 2012).

First food desert is a term coined by author and breastfeeding advocate Kimberly Seals-Allers. This new concept characterizes areas by limited or nonexistent access to support needed for optimal breastfeeding duration. Her founding organization, First Food Friendly, Inc. defines a first food desert as a community where 60% of employers lack a breastfeeding policy, 40% of physicians do not refer to a lactation specialist for consultation, and there is a complete lack of baby-friendly hospitals within 35 miles. The nonprofit highlights the importance of decreasing the disparities in communities listed above as a first step to ensure successful breastfeeding. While other factors play a part, where someone lives has also been demonstrated to influence the chances to initiate and sustain breastfeeding. Previous interventions in low-income and/or African American communities have focused on messaging with little regard to the physical environment, and resource availability. In public health, messaging refers to influential messages that are intended to change a behavior (Morrison, Kukafka, & Johnson, 2005). Interventions focused on messaging have some success on increasing breastfeeding initiation but not significant impact on increasing breastfeeding duration. This is a critical factor to consider because breastfeeding over the recommended time impacts the health benefits of breastfeeding (Seals-Allers, 2012).

<image><image><image><image><text><text><text><text><text><text><text><text><text><text><text>

Figure 14: First Food Desert

Reprinted from Baby Friendly, Inc. 2013. Retrieved from http://befirstfoodfriendly.org/what-is-a-first-food-desert/

The concept of first food deserts is in its infancy and further research is needed to confirm the validity of the claims made by the founding organization Baby Friendly, Inc. Review of the literature found no external sources surrounding the concept of first food deserts. While the concept of first food deserts has not been externally validated, it was included in the literature review because the concept is an accumulation of identified breastfeeding barriers.

Given Mississippi's low breastfeeding rates and compounding factors, its residents are a public health priority. Current breastfeeding programs aimed at increasing breastfeeding rates include programs such as baby cafés, Baby-friendly designated hospitals, First Food Friendly, and Breastfeeding support for WIC programs (Baby Café USA, 2019; Baby Friendly USA, 2019; First Food Friendly 2019; Mississippi State Department of Health, 2018). Despite the efforts of these programs and others, Mississippi still does not meet national objectives for breastfeeding.

CURRENT NATIONAL APPROACHES AIMED AT INCREASING BREASTFEEDING INITIATION AND DURATION

Approaches aimed at increasing breastfeeding initiation and duration vary. Some programs are solely education or messaged based. Peer support interventions are generally considered to be highly successful in increasing breastfeeding rates. In a randomized trial among 256 breastfeeding mothers it was shown that considerably more mothers randomized (81.1%) to the peer support group sustained breastfeeding than mothers randomized in the control group (66.9%). This further illustrates the effectiveness of peer support programs in combination with professional care (Dennis, Hodnett, Gallop, & Chalmers, 2002).

Efforts for peer support can vary depending on the stage an intervention is introduced. Peer support interventions usually occur during the postnatal stage. During pregnancy, hospitalization, and the postnatal period, individual support and education were most frequently used. Upon evaluation, studies have found that the most effective efforts aimed at increasing breastfeeding rates combine continuous strategies during the different stages of pre and post-natal care (Kaunonen, et al., 2012). Identifying an appropriate intervention is not always easy given the diversity within a population, environment, and the multiple options. As a result of this, the CDC compiled a guide entitled *The CDC guide to Breastfeeding Interventions*. The guide was compiled with input from experts in breastfeeding and public health intervention design. The guide can be utilized on community, organizational, policy level to assist key stakeholders in making informed decisions. This can be especially helpful when allocating resources. Interventions can be divided between evidence based and interventions that require more research to determine effectiveness as seen in figure 14 below (Shealy, et al., 2005).

| Evidence – Based Interventions | Interventions Requiring Further Research | |
|--|--|--|
| Maternity Care Practice | Countermarketing and the WHO International | |
| | Code | |
| Support for Breastfeeding in Workplace | Professional Education | |
| Peer Support | Public Acceptance | |
| Educating Mothers/Health Literacy | Hotlines and Other Information Resources | |
| Professional Support | | |
| Media and Social Marketing | | |

Figure 15

Adopted from Shealy, K. R., Li, R., Benton-Davis, S., & Grummer-Strawn, L. M. (2005).

The CDC guide to breastfeeding interventions.

In this literature review common types of interventions and examples are explored

below. These interventions include; health literacy, peer support, baby-friendly

designation, and baby cafés. The interventions explored below are not an exhaustive list.

HEALTH LITERACY

An importance concept surrounding public health interventions is health literacy. Health literacy is defined as an individual's ability to find, process, and comprehend essential health information and care in order to make decisions regarding their health appropriately. According to the authors of *Health Literacy: A Prescription to End Confusion* (2004), health literacy is comprised of individual abilities in the four areas of "cultural and conceptual knowledge, speaking and listening skills, writing and reading skills and numeracy (Kindig, Panzer, & Nielsen-Bohlman, 2004)." This suggests health literacy is partially based on providing information and can be further developed by interventions focused on educating the targeted audience. This also suggests that health literacy is situational and influenced by an individual's experiences with health care. For example, how an organization is structured for services and delivery of those services (Nutbeam, 2008; Kindig, Panzer, & Nielsen-Bohlman, 2004)

A relationship between low health literacy and poor health outcomes has been observed and is viewed as a factor to be managed as part of providing care. Improved health literacy can be mobilized as a tool to empower individuals to exercise their individual control of their health and corresponding personal determinants of health (Nutbeam, 2008). Previous research shows the majority of physicians report regularly handing out patient education materials (PEMs). As PEMs can be effective tool, it is important for these materials to be written at an appropriate grade level. Data shows the average reading level among US residents is at 8th grade and the average Medicare recipient reads at a 5th grade level. The Joint Commission recommends PEMs to be written at a 5th grade reading level or lower (Stossel et al., 2012). Furthermore, the CDC recommends healthcare facilities to ensure readability by using tests to determine reading level and revise as needed (CDC, 2010). The importance of PEM readability can further be shown from the results of a cross sectional survey conducted among emergency room patients. The study was conducted in two northeastern metropolitan emergency departments over the course of 1 week and 249 adults. The investigators found almost 80% of the participants could not define hemorrhage as bleeding, myocardial infarction as heart attack, or fractured as broken. Among this group, 50% were college educated (Lerne, Jehle, Janicke, & Moscati, 2000). The results from this study indicate health literacy is a critical issue. Figure 16 illustrates the interdependency of health literacy on health messaging, health practices and subsequently health outcomes.

Figure 16



Reprinted from Nutbeam, Don 2008. The evolving concept of health literacy. Retrieved from https://www.sciencedirect.com/science/article/pii/S0277953608004577

Given the tremendous potential for health literacy on health outcomes it has become instrumental in public health interventions.

PEER SUPPORT INTERVENTIONS

Peer Support designed interventions aim to promote the continuation of breastfeeding among women who are currently breastfeeding through reassurance and support. Peer support, which comes from current or past breastfeeding moms, can be in the form of independent counseling or mommy support groups. Peer supporters, or women who provide the support, obtain breastfeeding specific training and can work in formal or informal settings via phone and in home, clinic, or hospital visits. Examples can include health literacy (i.e. education), support (including emotional support), encouragement, and problem solving regarding challenges to breastfeeding (Shealy, et al., 2005).

Peer Support programs are considered important because the social constructs among women are considered very influential when making decisions. These influences can be either a barrier or facilitator to breastfeeding (McLorg & Bryant, 1989). When seeking advice on their concerns about their children, new mothers prefer resources from other mothers. Results from research studies show mothers often name "advice from friends" as a rationale for deciding how to feed their infant (Shields, 2004). Social support, even if just perceived, has been shown to be a predictor of successful breastfeeding (Mitra, Khoury, Hinton, & Carothers, 2004). Chapman et al. (2004) suggests peer support interventions are an advantageous and cost-effective method. Peer support can provide a personalized approach that is sensitive and culturally competent while still promoting breastfeeding for women regardless of background. This is especially important when professional breastfeeding services are not easily accessible (Chapman, et al., 2004).

The effectiveness of peer support interventions is grounded in evidence based research. Fairbank et al. (2000) found such programs to be independently effective in increasing breastfeeding initiation and duration. Substantial initiation and duration rates were seen in women who showed interest in breastfeeding and requested support from a peer counselor. Interventions with multiple approaches that include peer support as a primary factor are also determined to be effective in increasing breastfeeding initiation

50

and duration (Sikorski, Renfrew, Pindoria, & Wade, 2003). A study conducted among low-income Latina women showed women who participated in peer counseling programs were more likely to breastfeed for 1- 3 months in comparison to their peers who were randomized to receive only routine support. This group was also more likely to initiate breastfeeding (Chapman et al, 2004).

BABY-FRIENDLY DESIGNATION

One significant impact to increased breastfeeding initiation and duration is the Baby-Friendly hospital initiative. The Baby-Friendly hospital initiative is an international program founded in 1991, sponsored in partnership with the WHO and the UNICEF designed to support facilities (hospitals and birth centers) that have institutionalized the most advantageous care and environments for breastfeeding (Baby Friendly USA, 2019; CDC, 2016). These facilities have adopted a model to support breastfeeding as outlined in the *Ten Steps to Successful Breastfeeding* published by the WHO and UNICEF (Baby Friendly USA, 2019; WHO, 2018). The number of Baby-Friendly hospitals grown in the United States (Rutledge, et al, 2015). Spanning from 2014 to 2016 the birthrate of babies born at Baby-Friendly facilities increased from 7.8% to 18.3% respectively (Baby Friendly USA, 2019; CDC, 2016). While this increase is not large it is encouraging and is expected to continue to increase. Figures 17 and 18 below demonstrate the growth of the baby friendly hospital initiative (Baby Friendly USA, 2019).



Reprinted from Baby Friendly USA 2019. The Baby-Friendly Hospital Initiative.





Reprinted from Baby Friendly USA 2019. The Baby-Friendly Hospital Initiative.

Retrieved from https://www.babyfriendlyusa.org/about/

In order to receive a baby-friendly designation Hospitals and birthing facilities are required to implement the *Ten Steps to Successful Breastfeeding*. Additionally, the hospital is required to follow all established criteria outlined by the *International Code of* *Marketing of Breast-Milk Substitutes* to receive and maintain their designation (Baby Friendly USA, 2019). Originally published in 1981 by WHO, *The International Code of Marketing of Breast Milk Substitutes* was developed out of concerns for declining breastfeeding rates. In 1974, the 27th World Health Assembly attributed the declining breastfeeding rates to several factors including breast milk substitutes. The World Health Assembly advised member countries on its concerns the promotion of breast milk substitutes had on decreased breastfeeding and urged member countries to implement changes. Approximately 5 years later at the 33rd World Health Assembly in 1980, the WHO and UNICEF endorsed their recommendations for how breast milk substitutes are marketed (WHO, 2020). This publication was subsequently updated in 2017. The 10 recommendations included in the code are as follows:

- 1. "No advertising of breast-milk substitutes to families;
- 2. No free samples or supplies in the health care system;
- No promotion of products through health care facilities, including no free or lowcost formula;
- 4. No contact between marketing personnel and mothers;
- 5. No gifts or personal samples to health workers;
- No words or pictures idealizing artificial feeding, including pictures of infants, on the labels or product;
- 7. Information to health workers should be scientific and factual only;
- 8. All information on artificial feeding, including labels, should explain the benefits of breastfeeding and the costs and hazards associated with artificial feeding;

- 9. Unsuitable products should not be promoted for babies; and
- 10. All products should be of high quality and take account of the climate and storage conditions of the country where they are used (WHO, 2017)."

The effectiveness of the US-based program has been examined by numerous studies and it was found that, when fully executed, the guideline requirements for a Baby-Friendly designation resulted in increased breastfeeding rates. The number of Baby-Friendly designated hospitals has increased in the United States; however, barriers are observed in the hospitals' ability to fully comply with step 10; "foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or birth center (Baby Friendly USA, 2019; CDC, 2016)." The barriers most often described are the hospitals' ability to establish peer counseling, referrals to outside entities that offer postpartum breastfeeding support, and the hospitals' lack of control to outside services (Baby Friendly USA, 2019; CDC, 2016; Rutledge, et al, 2015). According to one study conducted among Mississippi hospitals, it was observed that Mississippi hospitals have a difficult time implementing the 10 steps required for the Baby Friendly designation. The objective of the researcher was to examine the degree to which hospitals established the 10 steps and to identify barriers to the full implementation of the steps. Among the 43 Mississippi hospitals included in the study, the level of implementation was seen to be positively associated with the hospital's delivery and cesarean rates per year. The primary barriers reported to executing the ten steps included resistance to policy changes, inadequate resources (both financial and human), and lack of support from government at the national and state level. The authors of the study

concluded that breastfeeding practices needed to be improved through new policies to encourage adoption of the ten step policies and practices (Alakaam, Lemacks, Yadrick, Connell, Choi, & Newman, 2018).

BABY CAFÉS

Baby cafés are a national intervention program geared towards empowering women and their families to successfully meet the breastfeeding recommendations. A baby café is an example of a program that combines several types of interventions such as health literacy, peer support, professional support, and community based. In the United States, baby cafés are licensed by Baby Café USA. Baby Café USA is a nonprofit 501(c)3 organization dedicated to the development and licensure of baby cafés nationwide. This free resource targets pregnant and breastfeeding mothers and provides support from trained staff, social engagement, open discussions, etc. Staffing at baby cafés includes health professionals such as board certified lactation consultants (IBCLCs), midwives, nurses, and other qualified and accredited breastfeeding counselors. Each member of the staff is specifically trained and has experience in helping breastfeeding families. These centers are generally open one day a week and do not require appointments. Various locations offer toddler friendly play areas for moms with older children. Baby cafés can be located inside hospitals, clinics, churches, community centers, etc. The baby café model uniquely places the intervention at an advantage to serve the local community in improving breastfeeding rates by supporting all areas of breastfeeding and its effect on everyday life at every stage.

Evaluations of baby cafés are often conducted by the founding group. Evaluation methods vary. Baby Café USA does require café management to collect certain data points such as statistics of the café and annual feedback in efforts to gauge program effectiveness. During the initial phase of the café set up data is collected about the population's demographics, current breastfeeding trends (including exclusivity), and a survey completed by moms (Baby Café USA, 2019).

Baby Café USA currently operates in 30 states including Mississippi. In Mississippi there are 15 baby cafés licensed through Baby Café USA. The first of the 15 cafés was established in Greenville, Mississippi in 2016 (Baby Café USA, 2020). The baby café in Greenville, the Delta Hills Baby Café, was established through a partnership between the Mississippi State Department of Health and Communities and Hospitals Advancing Maternity Practices (CHAMPS). Mississippi became the 18th state to adopt the CHAMPs initiative. CHAMPs is an initiative through the Center for Health Equity, Education, and Research (CHEER) that has a major focus on improving breastfeeding outcomes in several states. While Jefferson County does not currently have a baby café, the success of the Delta Hills Baby Café serves as a model for implementation of a baby café in Jefferson County (Mississippi State Department of Health, 2016; CHEER, n.d.).

SUMMARY

There is a substantial evidence to support a public health intervention that will promote positive behavioral changes with the increase of health literacy, access to resources, and inspire individual behavior changes, especially among the African American residents of Mississippi. Previous studies have examined how interventions aimed at prenatal education aid in increasing breastfeeding rates, despite known barriers to breastfeeding (Kistin, et al., 1990). A comprehensive approach such as a baby café allows public health officials the opportunity and physical space to provide education and needed resources. **CHAPTER III-METHODOLOGY**

INTRODUCTION

Included in this chapter is the primary methodology for the review of the request for proposal (RFP) by the National Association of County and City Health Officials (NACCHO). The NACCHO announced its funding initiative aimed at increasing breastfeeding initiation and duration. Additionally, a summary of the grant announcement for this proposal, grant review process, a description of the grant proposal reviewers, and their expertise is found in this chapter.

FUNDING AGENCY- NATIONAL ASSOCIATION OF COUNTY AND CITY HEALTH OFFICIALS

This grant is provided by the National Association of County and City Health Officials (NACCHO). The organization was founded and designed to provide services to health departments countrywide by offering educational tools and resources to each department. Nationally, 3000 local level health departments are supported by NACCHO. As an advocate for local health departments, NACCHO's efforts include promoting national policy, developing resources and programs, seeking health equity, and supporting effective local public health practice and systems (NACCHO, n.d.).

NACCHO identifies its initiatives in the four main categories of community health, environmental health, public health infrastructure and systems, and public health preparedness. The founding mission of NACCHO is to "improve the health of communities by strengthening and advocating for local health departments (NACCHO, n.d.)." The funding priorities targeted by the NACCHO include:

• "Prevention and Public Health Fund

- Public Health Emergency Preparedness Cooperative Agreement
- Hospital Preparedness Program
- Medical Reserve Corps
- Section 317 Immunization Program
- Core Infectious Disease
- Epidemiology and Lab Capacity Grants
- Heart Disease and Stroke Prevention
- Diabetes Prevention
- Prescription Drug Overdose
- Preventive Health & Health Services Block Grant
- Childhood Lead Poisoning Prevention
- Public Health Workforce (NACCHO, n.d.)"

REQUEST FOR PROPOSAL: REDUCING DISPARITIES IN BREASTFEEDING THROUGH CONTINUITY OF CARE. BREASTFEEDING SUPPORT MODEL FOR COMMUNITY HEALTH CENTERS

This RFP was selected as a funding source for a breastfeeding pilot program aimed at increasing national rates of breastfeeding initiation and duration. The RFP is specifically intended to target the African American community and other underserved communities. The goals outlined in this RFP support the efforts of local health departments and health officials to increase breastfeeding initiation and duration. As a result of this support, national breastfeeding rates should increase among underrepresented communities. A maximum of 3 awards will be awarded to community health centers, such as local health departments, by NACCHO for a 6-month breastfeeding project. Each grantee will be eligible for a maximum award of \$20,000 in support of their project activities. This grant proposal will fund an interventional program, which will extend the work of the local Mississippi Health Department in Jefferson County, Mississippi. A completed grant announcement can be found in Appendix A.

THE GRANT REVIEW PROCESS

Each reviewer was provided with an 8-day timeframe to complete her independent evaluation of the grant proposal. The identified reviewers (listed below) were given a copy of the grant proposal for evaluation on 09MAR2020. A copy of the email sent to each reviewer can be found in Appendix B. Additionally, a copy of the NACCHO RFP was provided along with instructions for answering 3 open-ended questions and 8 multiple-choice questions. The 8 multiple-choice questions used were adapted from the La Crosse Community Foundation (La Crosse Community Foundation, 2018). The La Crosse Community Foundation has 90 years of experience in providing grants to organizations who are working to meet the needs within a community. A scoring rubric was provided to rate each multiple-choice question. The scoring rubric and rubric criteria were also adapted from the La Crosse Community Foundation (La Crosse Community Foundation, 2018). Questions are outlined below:

FUNDING APPLICATION SCORING RUBRIC:

Instructions: Using the scoring criteria on the following two pages as a guide, please select a rating of 1 - weak, 2 - average, or 3 - excellent for each of the 8 categories below:

| Categories/Questions | Rating | | | |
|---|----------|-------------|---------------|--|
| | 1 – Weak | 2 – Average | 3 – Excellent | |
| Community Need | | | | |
| Strategy/Feasibility | | | | |
| Impact | | | | |
| Organizational Fit | | | | |
| Partnerships and Local Collaboration | | | | |
| Budget | | | | |
| Sustainability | | | | |
| Funding Opinion | | | | |

Adopted from La Crosse Community Foundation, 2018.

FUNDING APPLICATION SCORING CRITERIA:

NOTE: The below criteria are intended to be a guide for rating grant proposal.

| Categories/Questions | Rating | | | |
|----------------------|--|---|---|--|
| | 1 – Weak | 2 – Average | 3 – Excellent | |
| Community Need | There is not a demonstrated need in community. | Community need is demonstrated but moderate. | A strong and immediate community need is demonstrated. The organization is in a unique position to implement the proposed intervention. | |
| Strategy/Feasibility | Proposal goals are not well defined and/or unrealistic. The goals do not relate to the need identified. Project is not feasible. | Identified proposal goals relate to the identified need and are realistic. Project is feasible. | Proposal goals strongly related to identified need. Proposal goals utilize evidence-based strategies for accomplishing anticipated goals. The proposal is thoughtfully planned and feasible. | |
| Program Impact | The program will not or is unlikely to improve identified public health concern. | The program is likely to improve identified public health concern but overall impact will not be significant. | The program will improve identified public health concern significantly. The resulting impact will be lasting. | |
| Organizational Fit | The mission of the organization does not support the proposed intervention. | The mission of the organization does support the proposed intervention; however, the organization does not have a demonstrated history in implementing evidence-based programs. | The mission of the organization strongly supports the proposed intervention. The organization has demonstrated commitment and history to serving the targeted population. The organization has proven success in implementing evidence-based programs. | |
| Partnerships and | Proposal does not identify | Proposal identifies | Proposal identifies 3-5 strong |
|---------------------|--|---|--|
| Local Collaboration | partnerships/local collaborations and/or identified partnerships/local collaborations are insufficient. Identified partnerships/local collaborations are inappropriate. | partnerships/local collaborations but is limited to 1 or 2 or too many partners are included. Identified partnerships/local collaborations are appropriate. | partnerships/local collaborations within the community. These partnerships strengthen the proposed intervention and will directly contribute to the success of the proposed intervention. |
| Budget | The budget is unrealistic and/or incomplete. Budget exceeds funding limit. Justifications for expenses are not provided. | Budget appears complete and realistic. NACCHO is the only funding source identified. Rationale is provided for each expense. | Budget is complete and includes all project expenses. Proposal identifies other funding sources for expenses not covered or expenses that exceed funding limit. Strong rationale is provided for each expense. |
| Sustainability | The proposed intervention is not sustainable. | The organization has demonstrated capacity for sustainability but plans for sustainability are unclear. | The organization has proposed a sustainable intervention and has exhibited capacity. The organization has demonstrated clear and concise plans for sustainability. The organization has capacity and shown commitment to sustaining the intervention past funding period. |
| Funding Opinion | In your opinion, the project should not be funded for any amount regardless of proposal quality. | You are undecided but believe the proposal is well written and should be considered for funding or partial funding | You strongly believe the proposal should be a funding priority for the identified community. You are confident the organization capacity and capability to implement its proposed intervention. |

Adopted from La Crosse Community Foundation 2018

REVIEWER OPEN ENDED QUESTIONS:

Instructions: Please write 5-10 sentences in response to the below questions:

- Goal 1, as outlined in the grant call, aims to increase implementation of evidence– based and innovative peer and professional breastfeeding support programs, practices, and services in predominantly African American communities. To what extent did the grant proposal address this goal and what would make the proposal more compelling?
- 2. Goal 2, as outlined in the grant call, aims to increase local, state and national partnerships and awareness of the processes, successes, and challenges of implementing and expanding access to local peer and professional lactation support services. How does the proposed intervention uniquely address this goal?
- 3. What deficits exist in the grant proposal? How can these deficits lead to program failure?

Information gained from reviewer feedback was carefully reviewed and taken into consideration for incorporation into the final grant proposal. Analyses of multiple-choice questions were also taken into consideration. The reviewer feedback and author's response are included in Chapter IV.

GRANT PROPOSAL REVIEWERS

This grant proposal was evaluated by five grant reviewers who were charged with providing feedback on the validity and comprehension of the proposal. Reviewer selection was based on their area of expertise either in child and maternal health, breastfeeding initiation and duration, public health, and/or RFP writing and approval. Two of the reviewers also served in an additional capacity as the thesis committee chair and thesis committee filed advisor as designated below.

GRANT REVIEWERS:

Johanna M. Hinman, MPH, MCHES, Thesis Committee Chair, is the Director of Education and Global Surgery for the Department of Surgery at Emory University's School of Medicine. She has more than 20 years of experience in public health education, health communication, and program planning and project management. A graduate of Emory's Rollins School of Public Health (RSPH) and a Master Certified Health Education Specialist, she has worked for the CDC and the Arthritis Foundation National Office.

Natalie A. Fields, MPH, Thesis Committee Field Advisor, has a Master of Public Health with a concentration in Behavioral Health Sciences from Emory University's Rollins School of Public Health. She has led breastfeeding support promotion and evaluation projects. Additionally, she is an active ROSE Community Transformer and Emory University lactation room manager. As an advocate for breastfeeding mothers within her community, she also works to provide support and breastfeeding resources.

Renata Dennis, BSN, RN MPH, has a Bachelor of Science from Wheaton College, a Bachelor of Nursing, and a Master of Public Health from Emory University. She is currently a Clinical Research Nurse III in the department of Infectious Disease at Emory University's Hope Clinic, specializing in HIV vaccine research. Previously, she worked as a pediatric nurse for 30 years. Her focus has been in continuing education and outreach for various public health concerns.

Sharon Ingram-Cute, BSN, RN, CCRP, has a Bachelor of Nursing from City University of New York. She is currently a Lead Clinical Research Nurse in the department of Infectious Disease at Emory University's Hope Clinic, specializing in HIV vaccine research. Previously she worked as a labor and delivery nurse for 23 years. Her field of expertise includes breastfeeding initiation immediately postpartum.

Kenisha Barron, MBA, BS, CCRC, has a Bachelor of Science in Biology from Spelman College and a Master of Business Administration from Emory University's Goizueta Business School. She is currently an Associate Project Leader with PAREXEL International, specializing in providing global operational and logistical oversight for clinical research projects in various therapeutic areas. CHAPTER IV- INCORPORATION OF REVIEWER COMMENTS

GRANT REVIEWERS COMMENTS ON REQUEST FOR PROPOSAL

REVIEWER 1 COMMENTS: JOHANNA M. HINMAN, MPH, MCHES

FUNDING APPLICATION SCORING RUBRIC:

Instructions: Using the scoring criteria on the following two pages as a guide, please select a rating of 1 - weak, 2 - average, or 3 - excellent for each of the 8 categories below:

| Categories/Questions | Rating | | |
|---|----------|-------------|---------------|
| | 1 – Weak | 2 – Average | 3 – Excellent |
| Community Need | | | 3 |
| Strategy/Feasibility | | | 3 |
| Impact | | 2 | |
| Organizational Fit | | 2 | |
| Partnerships and Local Collaboration | | | 3 |
| Budget | | | 3 |
| Sustainability | | 2 | |
| Funding Opinion | | 2 | |

REVIEWER 1 OPEN ENDED QUESTION RESPONSES:

Instructions: Please write 5-10 sentences in response to the below questions:

1. Goal 1, as outlined in the grant call, aims to increase implementation of evidence-based and innovative peer and professional breastfeeding support programs, practices, and services in predominantly African American communities. To what extent did the grant proposal address this goal and what would make the proposal more compelling? The proposal addresses this goal to a great extent. It is clear the applicant organization serves predominantly African American communities in an otherwise underserved area and region. The proposal could be strengthened with the inclusion of more specific statements as to the JCHD's history of implementation of evidence-based programs in maternal/child health or other related areas. Partners are mentioned, but their specific roles and history with evidence-based programming could be described in more detail.

Response to Open-Ended Question 1: Drawing parallels to similar programs with a similar demographic will strengthen the basis of the proposed baby café and its effectiveness. This suggestion has been incorporated into the final grant proposal.

2. Goal 2, as outlined in the grant call, aims to increase local, state and national partnerships and awareness of the processes, successes, and challenges of implementing and expanding access to local peer and professional lactation support services. How does the proposed intervention uniquely address this **goal?** It is not exactly clear how the proposed Baby Café intervention specifically relates to national partnerships but the proposed intervention definitely addresses the goal of increasing local awareness of best practices and addressing some challenges to implementation of evidence-based programs. The proposed intervention fits a very particular niche in terms of providing trained personnel and location for the evidence-based interventions needed to support and increase breastfeeding in these communities.

Response to Open-Ended Question 2: The National partnership proposed is with Baby Café USA. Baby Café USA will provide the training, certification, and accreditation of the proposed baby café.

3. What deficits exist in the grant proposal? How can these deficits lead to

program failure? The proposal is generally clear and well-written but could be improved through further homing in on JCHD's measurable and demonstrable history with evidence-based programs. In addition, the PSE changes proposed rest heavily on making referrals mandatory for providers and flagging those that fail to meet 95% compliance; it is not clearly described how the policy changes will be initially communicated to providers and how any potential challenges on the provider side will be identified and mitigated. If providers feel they are being expected to comply with arbitrary requirements, this could lead to program failure. Sustainability plans are not very clear; JCHD is apparently very supportive of the Baby Café in terms of providing location and staffing. How JCHD is funding that engagement is not clear and, therefore, the future of that support is not clearly defined. If JCHD cannot provide a guarantee of future Baby Café staffing, etc., that would be an obvious failing for the program.

Response to Open-Ended Question 3: Further Details regarding the roll out of the referral based policy changes within JCHD was incorporated into the final grant proposal. The incorporated change details how the policy roll out at JCHD will be handled in an effort to proactively address JCHD employee concerns about expectations to comply with seemingly arbitrary requirements. Additionally, this incorporated change will cultivate a continual supportive environment and aid in the success of the baby café. Additionally, information regarding sustained funding by JCHD for the baby café was also included into final grant proposal.

REVIEWER 2 COMMENTS: NATALIE A. FIELDS, MPH

Funding Application Scoring Rubric:

Instructions: Using the scoring criteria on the following two pages as a guide, please select a rating of 1 - weak, 2 - average, or 3 - excellent for each of the 8 categories below:

| Categories/Questions | Rating | | |
|---|----------|-------------|---------------|
| | 1 – Weak | 2 – Average | 3 – Excellent |
| Community Need | | | X |
| Strategy/Feasibility | | X | |
| Impact | | X | |
| Organizational Fit | | | X |
| Partnerships and Local Collaboration | | | X |
| Budget | | X | |
| Sustainability | | X | |
| Funding Opinion | | | X |

REVIEWER 2 OPEN ENDED QUESTION RESPONSES:

Instructions: Please write 5-10 sentences in response to the below questions:

1. Goal 1, as outlined in the grant call, aims to increase implementation of evidence-based and innovative peer and professional breastfeeding support programs, practices, and services in predominantly African American communities. To what extent did the grant proposal address this goal and what would make the proposal more compelling? The Baby Café is an effective intervention and can certainly address the goal. To make the proposal more compelling the referral program's set-up, tracking, stainability and impact could be more detailed. The referral program is a great idea and has potential to improve bf rates but as a reviewer I was left wondering how effective it will really be because I didn't have the above mentioned details. Also, expanded ideas about the talking points for mothers, the follow-up support after those conversations that the Baby Café would provide are important to describe based on the impact interpersonal relationships have on breastfeeding practices.

Response to Open-Ended Question 1: Providing more details for the program set-up, tracking, stainability, and projected impact can strengthen the grant proposal. Additionally, adding more detail regarding the talking points and how those conversations can impact the interpersonal level. These suggestions have been incorporated into the final grant proposal.

2. Goal 2, as outlined in the grant call, aims to increase local, state and national partnerships and awareness of the processes, successes, and challenges of implementing and expanding access to local peer and professional lactation support services. How does the proposed intervention uniquely address this goal? The board of directors composition and the professional development plans are unique ways to address this goal. Good job on this!

Response to Open-Ended Question 2: No changes indicated.

3. What deficits exist in the grant proposal? How can these deficits lead to program failure? I think you could benefit from revisiting the workplan. There are key areas in your proposal that would require inclusion in the workplan that are missing. Also, I think you may be underestimating the program director's effort (5 hours per week) on the budget.

Response to Open-Ended Question 3: The program director's hours, 5 hours was selected to reflect the hours of operation of the baby café. The grant proposal included hours of operation for 3 days a week (8 hours per day). Additionally, the role of the accountant/administrator was designed to oversee baby café operations and operational cost, baby café compliance, and to serve as a liaison for the director and board of directors. The program director role was designed to oversee highly level details of the intervention versus day to day operations. The operational structure and role of the program director was reviewed to ensure adequate time for baby café supervision. Following review, the suggestion to

increase allotted time for the program director was incorporated into the final grant proposal. The increased time will ensure efficient implementation and future success of the baby café.

REVIEWER 3 COMMENTS: RENATA DENNIS, MPH, BSN, RN

Funding Application Scoring Rubric:

Instructions: Using the scoring criteria on the following two pages as a guide, please select a rating of 1 - weak, 2 - average, or 3 - excellent for each of the 8 categories below:

| Categories/Questions | Rating | | |
|---|----------|-------------|---------------|
| | 1 – Weak | 2 – Average | 3 – Excellent |
| Community Need | | | X |
| Strategy/Feasibility | | X | |
| Impact | | X | |
| Organizational Fit | | X | |
| Partnerships and Local Collaboration | | X | |
| Budget | | | X |
| Sustainability | | X | |
| Funding Opinion | | | X |

REVIEWER 3 OPEN ENDED QUESTION RESPONSES:

Instructions: Please write 5-10 sentences in response to the below questions:

1. Goal 1, as outlined in the grant call, aims to increase implementation of evidence-based and innovative peer and professional breastfeeding support programs, practices, and services in predominantly African American communities. To what extent did the grant proposal address this goal and what would make the proposal more compelling? this response actually goes for #3 also. Breastfeeding in the Black community has very deep and complicated factors...slaves were nursemaid to their mistresses children, Black men tend not to like it as they see breasts as sexual organs, and black women have poor body image and feel like they will end up with sagging boobs. Any intervention needs to at least acknowledge these factors and help women work through those issues. It is still seen as something white women do...plus if you are working, pumping rooms are something only high end establishments have. Unless I missed it, I didn't see anything addressing that...is it in the CDC guidelines you referenced? Any guidelines used need to specifically aimed at Black women. Also, is there lay health worker involved? Any program brought in from the outside has a problem with sustainability unless there is a local champion.

Response to Open-Ended Question 1: No changes indicated.

2. Goal 2, as outlined in the grant call, aims to increase local, state and national partnerships and awareness of the processes, successes, and challenges of implementing and expanding access to local peer and professional lactation

support services. How does the proposed intervention uniquely address this goal? I like the idea of a baby cafe...ideally, it would be a place like a beauty shop/hairdresser where women could share local gossip, have something done for them, and a safe place for those who aren't ready for never will breast feed. The only other group I can think of that is a parallel in the black community is mocha moms or jack and jill...but of course, those women are in a much higher socioeconomic status.

Response to Open-Ended Question 2: No changes indicted.

3. What deficits exist in the grant proposal? How can these deficits lead to program failure? this response actually goes for #3 also. Breastfeeding in the Black community has very deep and complicated factors...slaves were nursemaid to their mistresses children, Black men tend not to like it as they see breasts as sexual organs, and black women have poor body image and feel like they will end up with sagging boobs. Any intervention needs to at least acknowledge these factors and help women work through those issues. It is still seen as something white women do...plus if you are working, pumping rooms are something addressing that...is it in the CDC guidelines you referenced? Any guidelines used need to specifically aimed at Black women. Also, is there lay health worker involved? Any program brought in from the outside has a problem with sustainability unless there is a local champion.

Response to Open-Ended Question 3: Due to RFP word limitations, the grant proposal will not include historic and cultural perceptions, stereotypes, or negative associations of breastfeeding held among African Americans. The grant proposal did include information regarding barriers to breastfeeding under section A, problem statement. In this section barriers are identified as poverty, unemployment, lack of support (peer and/or professional), and the lack of culturally sensitive and competent approaches and consideration of social norms. This section also explored the identified barriers impact or significance in the African American community.

REVIEWER 4 COMMENTS: SHARON INGRAM-CUTE, BSN, RN, CCRP

Funding Application Scoring Rubric:

Instructions: Using the scoring criteria on the following two pages as a guide, please select a rating of 1 - weak, 2 - average, or 3 - excellent for each of the 8 categories below:

| Categories/Questions | Rating | | |
|---|----------|-------------|---------------|
| | 1 – Weak | 2 – Average | 3 – Excellent |
| Community Need | | | 3 |
| Strategy/Feasibility | | 2 | |
| Impact | | | 3 |
| Organizational Fit | | 2 | |
| Partnerships and Local Collaboration | | | 3 |
| Budget | | | 3 |
| Sustainability | | 2 | |
| Funding Opinion | | 2 | |

REVIEWER 4 OPEN ENDED QUESTION RESPONSES:

Instructions: Please write 5-10 sentences in response to the below questions:

1. Goal 1, as outlined in the grant call, aims to increase implementation of evidence-based and innovative peer and professional breastfeeding support programs, practices, and services in predominantly African American communities. To what extent did the grant proposal address this goal and what would make the proposal more compelling? Goal was well expressed. In that it clearly documented the areas of disparities and how those areas would be addressed. Based on the population cultural insensitivity would be a barrier to the success of such a program. This was identified in the proposal. The proposal could be more compelling if better explanation on how exactly breastfeeding is beneficial were identified.

Response to Open-Ended Question 1: Due to RFP word limitations, the grant proposal will not include extensive background on the benefits of breastfeeding. The grant proposal did include, under section A. Problem Statement, the following statement, "Experts acknowledge breastfeeding as the best form of nutrition for babies."

2. Goal 2, as outlined in the grant call, aims to increase local, state and national partnerships and awareness of the processes, successes, and challenges of implementing and expanding access to local peer and professional lactation support services. How does the proposed intervention uniquely address this goal? This program will need state, national and local cooperation. Adequate

funding will be necessary and must be used accordingly. The proposal identified programs that will be linked. The programs already in place in combination with providers involvement are key for the success of this grant proposal.

Response to Open-Ended Question 2: No changes indicted.

3. What deficits exist in the grant proposal? How can these deficits lead to program failure? What are the incentives to keep this poor population encouraged to breastfeed. They can get assistance such as WIC that supplies formula. So what can get them motivated to breastfeed. Maybe when they go to the WIC office or their provider some other voucher could be there to encourage them to breastfeed. Funding then becomes an issue.

Response to Open-Ended Question 3: Breastfeeding initiation and duration is impacted on multiple levels such as individual, interpersonal, community, organizational, and policy levels. While a full social ecological model is not included due to RFP word limitations, the grant proposal does address marketing and promotion of breast milk substitutes. The timeline identifies the intent to establish an internal policy to eliminate marketing of breast milk substitutes that directly conflicts with messaging promoting breastfeeding. Additionally, under section A (problem statement), the grant proposal states; "The café will use evidence-based strategies to tackle disparities by providing a private environment, continuity of care, health literacy, encouragement, and a safe environment for peer and professional support. Mothers who are currently breastfeeding or who have done so in the past can offer peer support in the form of an informal group, telephone call, or hospital or home visit. Evidence suggests the complexity and highly influential social network among women is important for mothers when seeking advice. The baby café will encourage peer support among baby café patrons. Peer support is vital and can include emotional support, encouragement, education, or problem solving (Shealy, Li, Benton-Davis, & Grummer-Strawn, 2005). Additionally, certified lactation specialists will lead educational seminars and conduct 1-on-1 consultations. To facilitate continuity of care, café patrons will be given talking points to discuss with their provider(s) and family. Furthermore, the café will maintain a breastfeeding library. Café representatives will attend local health fairs in an effort to engage the community."

REVIEWER 5 COMMENTS: KENISHA BARRON, MBA, CCRC

Funding Application Scoring Rubric:

Instructions: Using the scoring criteria on the following two pages as a guide, please select a rating of 1 - weak, 2 - average, or 3 - excellent for each of the 8 categories below:

| Categories/Questions | Rating | | |
|---|----------|-------------|---------------|
| | 1 – Weak | 2 – Average | 3 – Excellent |
| Community Need | | | X |
| Strategy/Feasibility | | | X |
| Impact | | | X |
| Organizational Fit | | | X |
| Partnerships and Local Collaboration | | X | |
| Budget | | | X |
| Sustainability | | | X |
| Funding Opinion | | | X |

REVIEWER 5 OPEN ENDED QUESTION RESPONSES:

Instructions: Please write 5-10 sentences in response to the below questions:

1. Goal 1, as outlined in the grant call, aims to increase implementation of evidence-based and innovative peer and professional breastfeeding support programs, practices, and services in predominantly African American communities. To what extent did the grant proposal address this goal and what would make the proposal more compelling? The current rates of breastfeeding presented, coupled with the socioeconomic status of the families residing in the chosen county, clearly identified a need for the scope and scale of this type of program in Jefferson County, MS. The proposal effectively detailed the purpose of the Baby Café program and how implementation of the program would be beneficial to Jefferson County. The inclusion of details regarding the required qualifications and expertise of the individuals to be involved in administering the program is indicative of the understood critical importance of effective leadership during the startup and implementation phases of the project. The myriad of proposed services offered from both professionals and peers alike, will undoubtedly contribute to the community acceptance, utilization and longevity of the program. The proposed inclusion of a detailed participant response-based database will also allow for continued monitoring of both positive and negative outcomes. This will enable the program staff to identify areas of weakness in real time in order to propose effective solutions. This practice will also provide support for the identification of best practices that can be utilized to build upon and expand the reach of the program in the future. To aid in the

argument for the necessity of this program, inclusion of data from a similar program implemented under similar racial and socioeconomic parameters would be effective.

Response to Open-Ended Question 1: Drawing parallels to similar programs with a similar demographic will strengthen the basis of the proposed baby café and its effectiveness. This suggestion has been incorporated into the final grant proposal.

4. Goal 2, as outlined in the grant call, aims to increase local, state and national partnerships and awareness of the processes, successes, and challenges of implementing and expanding access to local peer and professional lactation support services. How does the proposed intervention uniquely address this goal? The proposal provided details on the partnerships planned to ensure the successful implementation of the program. Of particular significance, the plan to utilize infrastructure and staffing already in place will work to ensure a fairly seamless implementation of the program. The proposal is well thought out and partnerships are proposed with firms whose mission appear to be aligned with that of Baby Café, thereby effectively creating a naturally synergistic relationship between all parties involved in the implementation and sustainability of the project.

Response to Open-Ended Question 2: No changes indicated.

5. What deficits exist in the grant proposal? How can these deficits lead to program failure? The only information that may add to the proposal is reference to outcomes and/or lessons learned from programs that have been implemented in other counties nationwide with similar racial and economic makeups as that of Jefferson County. Exclusion of this information, however, will not lead to failure of the program.

Response to Open-Ended Question 3: Illustrating how Jefferson County Health Department, or other counties, has previously and successfully implemented programs will be beneficial and strengthen the proposals sustainability. This suggestion has been incorporated into the final grant proposal. CHAPTER V- BABY CAFÉ PROGRAM PROPOSAL

OVERVIEW:

Title: A Grant Proposal for Improving Breastfeeding Initiation, Duration, and Exclusivity Among African American Women Residing in Mississippi through Continuity of Care

Amount requested (USD): \$20,000.00

Implementing organization: Jefferson County Health Department
Contact Person and Title: Regina Mosley, Grant Writing Consultant
Address/ Postal Code and City: 700 Main Street, Fayette, Mississippi 39069
Phone number: (601) 786-3061

Proposed Intervention: Baby Café

A. PROBLEM STATEMENT

Experts acknowledge breastfeeding as the best form of nutrition for babies. Despite known benefits, the CDC identifies racial and geographic gaps in breastfeeding. African Americans are considerably less likely to breastfeed than other racial or ethnic group. Additionally, geographic gaps are observed in the southern regions of the US. Mississippi is ranked last for state breastfeeding rates (CDC, 2018).

Jefferson County Health Department (JCHD) located in Jefferson County, Mississippi is already providing services to vulnerable populations in a state with the worst breastfeeding rates. Consequently, JCHD is in a unique position to implement a program aimed at African Americans and other underserved populations.

At 85.9%, Jefferson County is a largely impoverished African American community with a high percentage of formula-fed infants. Other underserved groups

include American Indian and Alaskan Native, Asian, mixed race, and Hispanic or Latino. The median household income for Jefferson County is \$20,188 compared to a national median of \$60,923. Furthermore, the employment rate is 32% in comparison to the national employment rate of 59.3%. Unsurprisingly, 49.7% of Jefferson residents live in poverty (CDC, 2018). Both poverty and unemployment have been linked to poor rates of breastfeeding (Kistin, et al., 1990).

In its annual report detailing WIC state and local agency breastfeeding performance, the United States Department of Agriculture reported out of the 40 participating Jefferson infants 90% were fully formula-fed (USDA, 2018). While further surveillance is needed, evidence suggest lower than recommended breastfeeding rates.

JCHD will combat breastfeeding disparities by establishing a baby café. The family-centered environment will provide free resources to mothers and families. The baby café will be located within the JCHD. The location selected was thoughtfully planned and will be located by the main entrance for increased visibility. The café will use evidence-based strategies to tackle disparities by providing a private environment, continuity of care, health literacy, encouragement, and a safe environment for peer and professional support. Mothers who are currently breastfeeding or who have done so in the past can offer peer support in the form of an informal group, telephone call, or hospital or home visit. Evidence suggests the complexity and highly influential social network among women is important for mothers when seeking advice. The baby café will encourage peer support among baby café patrons. Peer support is vital and can include emotional support, encouragement, education, or problem solving (Shealy, Li, Benton-Davis, & Grummer-Strawn, 2005). Additionally, certified lactation specialists will lead educational seminars and conduct 1-on-1 consultations. To facilitate continuity of care, café patrons will be given talking points to discuss with their provider(s) and family. Furthermore, the café will maintain a breastfeeding library. Café representatives will attend local health fairs in an effort to engage the community.

Community partnerships with the local WIC office, Mississippi Breastfeeding Coalition, La Leche League, Jefferson County Hospital, and Jefferson Comprehensive Health Center will ensure culturally sensitive and competent approaches to increasing breastfeeding. Community relationships will also prove beneficial in navigating social norms. A lack of culturally sensitive and competent approaches and consideration of social norms have been linked to breastfeeding barriers (Jones et al., 2015; Schafer et al., 2016).

Implementation of the café will complement existing programs such as breastfeeding health literacy and education. Current health literacy initiatives include ongoing professional education and written educational tools. Other initiatives include lactation referrals, policy, and partnership with the WIC breastfeeding support program.

Currently, Jefferson County lacks sufficient resources to adequately ensure successful initiation and sustained breastfeeding. The current landscape in Jefferson County supports immediate implementation of a breastfeeding program.

B. PROPOSAL OVERVIEW:

The establishment of a baby café will improve breastfeeding outcomes in Jefferson County and increase operational capacity of JCHD. The proposed baby café will be licensed and accredited by Baby Café USA. All licensure requirements, registration fees, and training will be completed by JCHD in conjunction with Baby Café USA (Baby Café USA, 2020). This program will expand and create new positions within JCHD. Each new or expanded position will be designated specifically for breastfeeding promotion, education, and support to patrons of the baby café, Jefferson County, and surrounding communities. The baby café will be staffed by a program director, tier I and II/III lactation specialists, a board of directors (consisting of 5 or more volunteers), an accounting/administrator, and volunteer receptionist(s). With the exception of volunteer filled positions, each staff member will be employed by JCHD. The board of directors will consist of the baby café program director, 1 member from each community partner, at least one lactation specialist, and at least one non-medical community member. Looking to the future sustainability of the café the members of the board of directors will rotate off every 3 years.

To ensure utilization of the baby café, JCHD has adopted policies to promote program awareness and support. Internal policy and system changes will be put into place to insure all JCHD providers refer 100% of their patients to the café who are new or expecting mothers. The baby cafe referral requirement will be captured as a healthcare key performance indicator (KPI) and recorded within Jefferson County's electronic medical record system. Enforcement of this new KPI will be tracked to ensure provider compliance. Each provider will receive a monthly pass/fail grade based on individual referral rates. Referral rates less than 95% will be deemed as a failure to comply with institution policy, result in disciplinary action, and will be detailed in the employee's annual performance evaluation. To ensure policy level changes regarding the new referral requirements are not disrupted or appear punitive several initiatives will be taken to ensure a seamless implementation including:

- in-person introductory and hands on workshops to teach JCHD providers how to utilize the system (these sessions will also be recorded for providers who are not able to attend due to scheduling conflicts);
- webinars designed to illustrate the importance of the JCHD Baby Café and how it will help increase breastfeeding initiation and duration; and
- invitation to celebratory milestones for JCHD such as the grand opening, anniversaries, etc.

While external referrals are welcomed and encouraged, providers outside of JCHD cannot be held to the same internal referral policy. Every effort will be made to increase awareness of the café in the Jefferson County Community and surrounding areas through social media, marketing, community outreach, etc.

Services utilized by patients will be captured and provided to providers weekly via email to ensure increased continuity of care. Additionally, the baby café will help facilitate provider/patient conversations by providing visiting mothers talking points for their follow up visit(s). The talking points will also serve as a tool to encourage open dialogue with family and friends regarding breastfeeding. The talking points will be developed by the JCHD baby café lactation specialist with input from the baby café patron. This will allow the lactation specialist to tailor talking points to the needs of the baby café patron. Additionally, talking points will be uniquely designed to be empowering and culturally sensitive. This is especially important when developing talking points to partners/spouses, family, or friends. For instance, the lactation specialist may help an expecting mother with talking to her mother who thinks she is not producing enough milk for the baby and should stop breastfeeding. The talking points are a unique feature of the baby café designed to impact the interpersonal level. By empowering the baby café patrons (in most cases this is expected to be a new or expecting mother) with knowledge gained from the baby café they can potentially influence the thoughts, believes, and behaviors of their friends and family.

As part of community outreach, representatives from the baby café will establish a presence by attending various community health fairs, seminars, events, etc. The aim of the community outreach is to educate the public about services and resources available through the baby cafe and to promote breastfeeding. Attendance at these events will occur bimonthly within Jefferson County but may occur more frequently if staff availability permits.

Efforts to increase state and local awareness of breastfeeding best practices will be established by hosting professional development trainings, webinars, workshops, and monthly newsletters. Additionally, evaluation and reporting of baby café statistics and utilization will aid local awareness of evidence-based interventions. Partnerships cultivated with local breastfeeding advocacy groups, birthing facilities, and community stakeholders will ensure continual educating about disparities among underserved populations.

Local and state partnerships will be established or strengthened with identified hospital(s) and advocacy group(s) in order to ensure utilization of the baby café. Local relationships will be facilitated with the help of the board of directors. Members of the

95

board of directors will include representatives from identified community partners. This will ensure partnering organizations remain engage. Additionally, partnering organizations will be invited to attend continual education seminars.

The national partnership established will be with Baby Café USA. As previously outlined, the JCHD Baby Café will be licensed through Baby Café USA.

C. ORGANIZATIONAL CAPACITY & EXPERIENCE:

The Jefferson County Health Department is located in the southern public health region and shares the mission statement of Mississippi State Department of Health to "protect and advance the health, well-being and safety of everyone in Mississippi." The mission of the Jefferson County Health Department directly aligns with the aims of this project by promoting increased initiation and duration of breastfeeding among African American women and other underserved groups.

The baby café will be staffed by the program director, a team of licensed lactation specialists, an accountant/administrator, and volunteer receptionist(s). The director will oversee ongoing program utilization, sustainability, and evaluation efforts monthly. The current medical director of JCHD will serve as the director of the baby café. The role of the accountant/administrator will be to oversee baby café operations and operational cost, baby café compliance, and to serve as a liaison for the director and board of directors. This position will be staffed by a certified public accountant. The role of the lactation specialists will be to oversee the day-to-day operations of the baby café, conduct peer and professional education workshops, and 1-on-1 consulting for new and expecting moms. Lactation specialists must be certified and complete Baby Café USA training.

A planning and implementation committee consisting of volunteers with expertise in program implementation, grant writing, and breastfeeding was established to oversee program design and planning phases. JCHD's experience in engaging in breastfeeding promotion includes implementation of evidence-based programs, practices, and services.

The planning and implementation committee was charged with reviewing the history and program implementation at JCHD. JCHD has not previously implemented an evidence-based program specific to breastfeeding of this magnitude. However, JCHD has a long history in implementing cancer screening programs, prenatal care initiatives, vaccination awareness programs, and obesity awareness workshops. In an effort to fully understand baby cafés and their unique roles within a community, the planning and implementation committee visited several baby cafés in Mississippi to gain an in depth understanding of the program, day to day operations, and potential community impact.

Previously, JCHD developed internal policies for promoting breastfeeding in the workplace. Additionally, members of the JCHD have developed and maintained public health partnerships for breastfeeding by serving on various boards of local foundations and organizations aimed at increasing breastfeeding outcomes. A major breastfeeding partnership has been with the USDA WIC program. Through this partnership, the JCHD has increased its breastfeeding awareness among its patients through a referral program. Key personnel are listed below in table 5.0:

| 5.0 | Kev | Personnel: |
|-----|-----|------------|
|-----|-----|------------|

| Personnel | Organization | Position |
|---------------------------|--|--|
| Christy S. Barnett, MD | Mississippi Department of Health | Regional Health Officer – Southern Region |
| Jane Culp, MD | Mississippi Department of Health – Jefferson County | Medical Director |
| Judy Ellzey | USDA WIC Program - Mississippi | Lactation Specialist |
| Ronald M. Frye, MD | Jefferson County Comprehensive Health Center | Chief Medical Officer |

The planning and implementation committee has evaluated the existing infrastructure and resources of the Jefferson County Health Department for its ability to support the proposed KPI system described in goal 1 of the proposal overview. Leadership at the health department is fully engaged and supportive of the proposed baby café. While cost analysis for the outlined baby café exceeds grant funding amount, in kind donations and additional funds have been secured to ensure successful implementation of the café. Additionally, JCHD has committed funds for the next five years towards the baby café initiative.

A crucial element of the baby café will include the development of an internal database. This database will track demographic information of café patrons such as age, race, gender, stage of pregnancy, information regarding past pregnancies and breastfeeding efforts as applicable, self-identified barriers, referring provider, etc. The information will be gathered from baby café patrons upon their first visit via an intake form. Subsequent visits will also be tracked. This information will be vital in providing statistical data of specific baby café resources utilized and inform future program evaluation. Existing infrastructure and resources from JCHD and its local WIC program partner will allow for an immediate start to implementation the program by January 31, 2020. JCHD has made increasing breastfeeding initiation and duration an organizational priority for 2020. As a result, several planning meetings have previously taken place to develop a sustainable evidence-based program. The planning meetings consisted of review of literature, community needs assessments, review of current breastfeeding resources, and surveys of mothers who utilize the health department regarding their thoughts, beliefs, attitudes surrounding breastfeeding, and the resources they desire.

JCHD has identified increased breastfeeding initiation and duration among its residents as a primary goal and has committed funds to aid in the establishment of a baby café. Additionally, JCHD has reserved funds in its budget for the next five years to ensure the sustainability of the baby café. As such, extensive planning for the implementation of the baby café has been conducted by a committee. The community consists of leaders at the local and state levels of the Mississippi Department of Health, local advocacy groups, and key community stakeholders. Additionally, the NACCHO program implementation guide was utilized as a parameter to ensure successful establishment of a peer and professional support grogram. Specifically, the Policy, System, and Environmental (PSE) change approach will be utilized as a foundation of the baby café. PSE change strategies create sustainable healthy behaviors by making healthy choices easily available and accessible in the community. The planning and implementation committee will ensure PSE changes by using the socio-ecological model. The social-ecological model is a framework designed to identify factors in an environment that influence behavior. This model demonstrates how behavior is

99
influenced by factors at the individual, interpersonal, organizational, community, and public policy levels. The factors identified in the social-ecological model will inform PSE changes within JCHD and the proposed baby café to ensure optimum breastfeeding environments. Executing these PSE changes will aid in sustainable organizational and community shifts for long-term improvements in breastfeeding outcomes (National Association of County and City Health Officials, 2018).

BREASTFEEDING SUPPORT MODEL FOR COMMUNITY HEALTH CENTERS PROJECT DELIVERABLES AND TIMELINE

| ORGANIZA | ORGANIZATION NAME: Jefferson County Health Department | | | | |
|---|--|------------------------|---------------------------------------|---------------------------------------|---------------------------|
| OBJECTIVE 1: Conduct an organizational breastfeeding support gap analysis/Staff education needs assessment* | | | | | |
| ACTIVITY TIMELINE LEAD PERSON/ RESOURCES ORGANIZATION REQUIRED | | | | | RESOURCES REQUIRED |
| By Feb. 2020, conduct an in depth review of local breastfeeding rates to identify areas of need, current resources offered, and gaps in care for Jefferson County Residents. Conduct a need assessment based on current continual education webinars/seminars/self-paced learning opportunities offered by JCHD and identify gaps in staff education. | | Feb 2020 *Completed | Planning and implementation committee | No Resources Required. | |
| - | ify evidence-based intervention ographics of Jefferson County | 1 0 | Feb 2020 *Completed | Planning and implementation committee | No Resources Required. |
| ANTICIDATED D | | | | | |

ANTICIPATED PRODUCTS OR RESULTS • List of Evidence-based interventions to address gaps in care and staff education needs

| OBJECTIVE 2: | Develop (or refine) an organizational breastfeeding support policy for employees and clients* | |
|---------------------|---|---|
| | | ī |

| ACTIVITY | TIMELINE | LEAD PERSON/ ORGANIZATION | RESOURCES REQUIRED |
|---|------------------------|---------------------------------------|---------------------------|
| By Feb. 2020, review existing breastfeeding plan for employees of Jefferson County Health Department and identify gaps in current policy. It was determined no revisions were required regarding current workplace breastfeeding policies and support. | Feb 2020 *Completed | Planning and implementation committee | No Resources Required. |
| By Feb. 2020, develop support policy for patrons of Baby Café. | Feb 2020 | Planning and implementation committee | No Resources Required. |
| ANTICIPATED PRODUCTS OR RESULTS • Robust breastfeeding support policies in line with national guidelines | | | |

| OBJECTIVE 3: Development of consistent messaging/materials within the agency, community and hospital+ | | | | |
|--|--|------------------------|--|---------------------------|
| | ACTIVITY | TIMELINE | LEAD PERSON/ ORGANIZATION | RESOURCES REQUIRED |
| | lop consistent and culturally sensitive messaging prior to f the Jefferson County Baby Café. | Feb 2020 | Board of Directors | Consulting cost |
| By Feb. 2020, conduct focus group(s) with lactation specialists, providers, community members, and partner organizations for feedback on messaging and create finalized content for messaging. | | Feb 2020 | Planning and implementation committee & Board of Directors | Staffing requirements |
| ANTICIPATED P | RODUCTS OR RESULTS • Consistent messaging/ma | aterials for the p | romotion of breastfeeding and | resources |
| OBJECTIVE 4: Develop a referral network for community lactation support or within health center support* | | | | |
| | ACTIVITY | TIMELINE | LEAD PERSON/ ORGANIZATION | RESOURCES REQUIRED |
| By Feb. 2020, work lactation support ref | with the identified local and state partners to develop a ferral network | Feb 2020 *Completed | Planning and implementation committee & Board of Directors | No Resources Required. |
| ANTICIPATED P | RODUCTS OR RESULTS • Breastfeeding support re | ferral network fe | or Jefferson County Residents | |
| OBJECTIVE 5: | Provision of Peer/Professional Led Support Groups + | | | |
| | ACTIVITY | TIMELINE | LEAD PERSON/ ORGANIZATION | RESOURCES REQUIRED |
| | | | Licensure, Training, Registration, Supplies and Staffing | |
| ANTICIPATED PRODUCTS OR RESULTS • Establish a Baby Café to provide lactation rooms, ensure continuity of care, community engagement, and health literacy. | | | | |
| OBJECTIVE 6: Establishment of Breastfeeding Clinics (walk-ins, one-on-one support)+ | | | | |

Required.

| | ACTIVITY | TIMELINE | LEAD PERSON/ ORGANIZATION | RESOURCES REQUIRED |
|---|--|--------------------------|--|---|
| By Feb. 2020, complete Baby Café training and licensure requirements by Baby Café USA | | Feb 2020 | Planning and implementation committee & Board of Directors | Licensure, Training, Registration, Supplies and Staffing |
| By March 2020, establish a Baby Café located within Jefferson County Health Department for walk in and one-on-one services with lactation specialist. | | March 2020 - Aug 2020 | Planning and implementation committee & Board of Directors | Licensure, Training, Registration, Supplies and Staffing |
| ANTICIPATED P | ANTICIPATED PRODUCTS OR RESULTS • Establishment of a licensed Baby Café, which will provide lactation rooms, ensure continuity of care, community engagement, and health literacy. | | | |
| OBJECTIVE 7: Provide evidence-based breastfeeding information and support to all pregnant and postpartum families and caregivers* | | | | |
| | ACTIVITY | TIMELINE | LEAD PERSON/ ORGANIZATION | RESOURCES REQUIRED |
| • | ablish a Baby Café located within Jefferson County for walk in and one-on-one services with lactation | March 2020- Aug 2020 | Planning and implementation committee & Board of Directors | Licensure, Training & Registration fee. Supplies and Staffing |
| ANTICIPATED P | RODUCTS OR RESULTS • Establishment of a licer of care, community eng | • • | which will provide lactation room with literacy. | ns, ensure continuity |
| OBJECTIVE 8: Work in close collaboration organization's prenatal provider and pediatric/family provider to promote and support breastfeeding + | | | | |
| ACTIVITY TIMELINE LEAD PERSON/ RESOURCES ORGANIZATION REQUIRED | | | | |
| • | elop KPI system within Jefferson County Health | Feb 2020 | Planning and implementation | No Resources |

committee & Board of

Directors

Department aimed at ensuring 100% referral to Baby Café of all new and

expecting mothers visiting health department

| Starting Feb. 2020, Café utilization. | utilize partnering organizations to increase ongoing Baby | Feb. 2020 – Aug 2020 | Planning and implementation committee & Board of Directors | No Resources Required. |
|---|--|-------------------------|--|---|
| ANTICIPATED P | RODUCTS OR RESULTS • Continuity of care for ne initiation and duration. | w and expecting | mothers to encourage and sup | port breastfeeding |
| | Partner with community healthcare providers (Pediatric/Fa partnership to support breastfeeding + | mily Provider/ j | prenatal providers) for outreach | n/referral and |
| | ACTIVITY | TIMELINE | LEAD PERSON/ ORGANIZATION | RESOURCES REQUIRED |
| By Feb. 2020, work lactation support ref | with the identified local and state partners to develop a ferral network | Feb. 2020 – Aug2020 | Planning and implementation Committee | No Resources Required. |
| | ablish a Baby Café located within Jefferson County for walk in and one-on-one services with lactation | March 2020 -Aug 2020 | Planning and implementation Committee | Licensure, Training & Registration fee. Supplies and Staffing |
| ANTICIPATED P | RODUCTS OR RESULTS • Continuity of care for Jeg breastfeeding initiation of | • • | Health Department patients in s | support of |
| OBJECTIVE 10: | Provide initial and On-going all- staff training to improv case management in a community setting* | e or enhance ski | ills of current staff in lactation | care, counseling and |
| | ACTIVITY | TIMELINE | LEAD PERSON/ ORGANIZATION | RESOURCES REQUIRED |
| By Feb. 2020, comp implementation of F | blete initial training by Baby Café USA prior to Baby Café opening | Feb. 2020 | Planning and implementation Committee | Baby Café training fee |
| By Feb. 2020, estab continual education | lish monthly "Lunch and Learn" webinars/seminars for | Feb. 2020 – Aug 2020 | Planning and implementation Committee | Educational Supplies and Staffing |
| ANTICIPATED P | RODUCTS OR RESULTS • Cultivated continual lear | ning environme | nt for Jefferson County Health | Department Staff |

| OBJECTIVE 11: | Develop or actively participate Local Breastfeeding Coalition or Advisory Board development and planning; or active participation on existing ones* | | | |
|-------------------------------------|---|-------------------------|---------------------------------------|---------------------------|
| A C'EINET A C'EINE | | | RESOURCES REQUIRED | |
| By Feb. 2020, ident | ify and form a Boards of Directors for Baby Café | Feb. 2020 *Completed | Planning and implementation Committee | No Resources Required. |
| By Feb. 2020, active advisor boards | ly engage in local and state breastfeeding coalition | Feb. 2020 – Aug 2020 | Planning and implementation Committee | No Resources Required. |

ANTICIPATED PRODUCTS OR RESULTS

• Cultivated community engagement aimed at strengthened breastfeeding support

OBJECTIVE 12: Develop or identify Social Marketing campaigns with culturally sensitive breastfeeding-friendly images throughout the health center and elimination of any marketing display of breast milk substitutes within Jefferson County Health Department*

| ACTIVITY | TIMELINE | LEAD PERSON/ ORGANIZATION | RESOURCES REQUIRED |
|--|------------------|--|---------------------------|
| By Feb. 2020, establish internal policy to eliminate marketing of breast milk substitutes that directly conflicts with messaging promoting breastfeeding. | Feb. 2020 | Planning and implementation Committee | No Resources Required. |
| By Feb. 2020, identify and replace breast milk substitute marketing with messaging promoting breastfeeding on all websites, social media, and physical environments. | Feb. 2020 | Planning and implementation Committee | No Resources Required. |
| By Feb. 2020, develop social marketing to include adoptive images from leading national organizations. | Feb. 2020 | Planning and implementation Committee | No Resources Required. |
| ANTICIPATED PRODUCTS OR RESULTS • Culturally sensitive soo | cial and removal | of marketing displays promoti | ng milk substitutes |

E. BUDGET PROPOSAL: 6 MONTHS

NOTE: Budget reflects Baby Café hours of operations of 3 days a week (8 hours per day) and as needed for Special Events

| Applicant Name: | Jefferson County Health Department |
|------------------------|--|
| Project Title: | Jefferson County Health Department Baby Café |
| Project Period: | February 1, 2020 – August 31, 2020 |

| Line Item Justification | Amount Requested |
|--|---------------------|
| A. Personnel – Where applicable, salary estimations are based on annual salaries of Jefferson County Health | • |
| Department employee effort and have be adjusted for the 6 month budget requirement | \$9,900.00 |
| Program Director | |
| | |
| * Current Medical Director of Jefferson County Health Department and salary is paid by Jefferson County | |
| Health Department. Salary estimation is based on Baby Café effort (i.e. time devoted and hours of operation). | |
| Effort is estimated at 8 hours per week. | |
| **Annual cost \$4,000 | \$2,000.00 |
| Board of Directors – minimum 5 members | |
| | |
| *Board of Directors will be comprised of volunteers from Jefferson County Health Department, partnering | |
| organizations, Baby Café staff, and Baby Café Program Director. | \$0.00 |
| Tier I Staff - International Board Certified Lactation Consultant (IBCLC) | |
| | |
| Tier II/III Staff - Certified Lactation Counselor (CLC), Certified Breastfeeding Specialist (CBS), Certified | |
| Lactation Educator (CLE), Baby Café Breastfeeding Counselor (BCBC), Trained Breastfeeding Counselor | |
| (DPH, or Hospital/Clinic-based program), WIC Breastfeeding Peer Counselor, La Leche League Leader, and/or | |
| Midwife/OB/MD/RN | |
| | |
| *Employee of Jefferson County Health Department and salaries are paid by Jefferson County Health | |
| Department. Salary calculations based on average annual salary of lactation specialist in the state of | \$5,900.00 |

| Mississippi. Salary estimation is based on Baby Café effort (i.e. time devoted) and hours of operation. Baby | |
|--|------------|
| Café lactation specialist may also be a volunteer from partnering organizations. | |
| ** Annual cost \$11,800 | |
| Reception | |
| * Volunteers of Jefferson County Health Department | \$0.00 |
| Administrator /Accountant | |
| *Employee of Jefferson County Health Department and salaries are paid by Jefferson County Health | |
| Department. Salary estimation is based on Baby Café effort (i.e. time devoted) and hours of operation. | |
| ** Annual cost \$4,000 | \$2,000.00 |
| B. Fringe Benefits | \$0.00 |
| Employee associated fringe benefits, such as health plan expenses, pension plan expenses, and workman's | |
| compensation expenses will be covered by Jefferson County Health Department or partnering organizations as | |
| applicable. | \$0.00 |
| C. Consultant Costs | \$3,000.00 |
| Development and design of Baby Café Messaging, Logo, patient informational pamphlets and resource | |
| guides. | |
| **One time fee | 3,000.00 |
| D. Supplies | \$5,740.00 |
| Written Health literacy | |
| *Verbiage developed by Certified Lactation Specialists and Physicians; In Kind donation | |
| **Graphic Design - In Kind donation from local Graphic design company | |
| ***Identified cost associated with securing printed materials. Jefferson County Health Department will receive | |
| a 50% discount from local printing company for all Baby Café related printing, estimated \$3,000.00 | \$1,500.00 |
| Cascade Health Product, Inc. Breastfeeding Education Model (for demonstrating breastfeeding | |
| positions) - Various race dolls selected for inclusivity | |
| * 10 dolls \$59/doll + shipping (<10 \$64/doll) and taxes | |
| **One time expense | \$600.00 |
| Cascade Health Product, Inc. Cloth Breast Model and Hand Puppet ("With this combination of our popular | |
| Cloth Breast Model and Breastfeeding Hand Puppet, you can provide engaging and effective demonstrations in | |
| lactation education. Made of hand-sewn, high-quality cloth, the 5" diameter Cloth Breast Model features an | \$400.00 |

| elastic strap on the back, making it easy to handle. A foam insert allows the model to look and feel like an | |
|--|----------------------|
| engorged breast, and two beads anchored within the model simulate a plugged duct and a breast lump. The | |
| model facilitates teaching the anatomy and physiology of the breast, preparation for breastfeeding, | |
| breastfeeding problems, breast self-exam, and more. Use the Cloth Breast Model with the Breastfeeding Hand | |
| Puppet to demonstrate rooting reflex and latching on, symmetrical/assymetrical latch, improper latch/nipple | |
| confusion, and ending a feeding. Set includes teaching ideas and instructions.") – <i>Beige and Brown selected for</i> | |
| inclusivity | |
| * 4 sets at \$169/set + shipping and taxes | |
| **One time expense | |
| Cascade Health Product, Inc. Baby Bellies Display ("Is my baby getting enough breastmilk?" Use this | |
| reassuring display to help new mothers visualize their babies' small stomach sizes during the first 10 days of | |
| life and how much milk it can hold. Enclosed in a plastic bag for easy viewing, the display contains a marble, | |
| pingpong ball, and plastic egg that represent a baby's stomach on the first, third, and tenth days of life. Also | |
| includes a two-sided card that provides additional information about newborn feeding. 6" x 9") | |
| * 4 sets at \$14+ shipping and taxes | * • • • • • • |
| **One time expense | \$60.00 |
| Cascade Health Product, Inc. Breast milk composition display ("for demonstrating sizes of baby's stomach | |
| - The 3 models showing colostrum, hindmilk, and foremilk provide instructive visuals and accompanying two- | |
| sided tent card explains the nutritional value of each component of breastmilk. Includes carrying case.") | |
| * 1 display at \$97+ shipping and taxes | |
| **One time expense | \$100.00 |
| Cascade Health Product, Inc. Dirty Diaper display ("The Dirty Details: Breastfed Baby Stool Story Display | |
| is perfect for teaching new parents how their breastfed newborns' dirty diapers reveal whether their babies are | |
| getting enough breastmilk. Featuring the look of dirty diapers without the mess, this unique, realistic display | |
| shows the color and texture of a healthy breastfed baby's first dark, sticky stool, green stool by Day 3 or 4, and | |
| yellow watery or mushy stool by Day 5.") | |
| * 1 display at \$69+ shipping and taxes | |
| **One time expense | \$80.00 |
| Breastfeeding Support Pillow (for Demonstrating breastfeeding positions) | |
| * \$26.99/pillow + shipping and taxes | \$1,000.00 |
| Breastfeeding Pump Library | -\$1,500.00 |

| *Clients can "check out" pumps to be utilized within one of the 2-3 lactation rooms within the Baby Café but | |
|--|-------------|
| will be required to bring their own flange and tubing | |
| **Baby Café will ask for community to donate pumps at Baby Café grand opening | |
| Marketing | |
| *When possible social media, in house marketing, and other free marketing will be utilized to decrease | |
| marketing costs | \$2,000.00 |
| E. Other | \$1,360.00 |
| Baby Café Licensure and Registration fee | |
| *per year | \$400.00 |
| Baby Café Webinar Training fee | |
| *one time fee per training – will not need to be repeated | \$350.00 |
| Furniture | |
| *In Kind donation from local second hand store | -\$2,000.00 |
| Baby Café Space (including cleaning, restocking of toiletries, maintenance, and utilities) | |
| *In Kind Donation – Paid by Jefferson County Health Department; estimated for 12 months | -\$5,000.00 |
| Light Refreshments | |
| *In Kind donations – Paid by Jefferson County Health Department; estimated for special events such as grand | |
| opening, seminars, trainings, etc. | -\$3,000.00 |
| Medical professional liability insurance | |
| *In Kind Donation – paid by Jefferson County Health Department | |
| **Biannual expense | -\$1,500.00 |
| Baby Café Grand Opening Give Away Prizes | |
| *In Kind donations from various local stores and organizations | |
| **One time expense | -\$1,000.00 |
| Baby Café Library – New and Used Books available for Baby Café patrons to check out | |
| *In Kind donation from local book stores, community members, and partnering organizations will also be | |
| excepted | \$610.00 |
| Total Costs | \$20,000.00 |

Appendix A. Request for Proposal "Reducing Disparities in Breastfeeding through Continuity of Care – Breastfeeding Support Model for Community Health Centers"

APPLICATIONS DUE BY 6:30 PM E.T. ON FRIDAY, JANUARY 6[™], 2019



REQUEST FOR APPLICATIONS

Reducing Disparities in Breastfeeding through Continuity of Care

Breastfeeding Support Model for Community Health Centers

BACKGROUND

The National Association of County and City Health Officials (NACCHO) is the voice of the approximately 3,000 local health departments (LHDs) across the country. NACCHO provides resources to help LHD leaders develop public health policies and programs to ensure that communities have access to the vital programs and services people need to keep them protected from disease and disaster. Additionally, NACCHO advocates on behalf of LHDs with federal policymakers for adequate resources, appropriate public health legislation, and sensible policies to address the myriad of challenges facing communities.

Leading health agencies in the United States recognize breastfeeding as a public health priority. Through Healthy People 2020, national objectives have been set to increase the proportion of infants who are breastfed. There have been steady upward trends in the percentage of breastfed infants. The latest National Immunization Survey data from infants born in 2015 indicates that most of the national breastfeeding goals have been met.³ Unfortunately, this achievement is not equitably shared across all subsets of the population. On average, there is a 17 percentage-point gap in breastfeeding initiation between black and white infants born between 2009 and 2014. In addition, the percentage difference in rates for 12-month breastfeeding duration rates difference gap increased from 9.7 to 13.7 percentage points.³ Likewise, babies born from low-income mothers also experience lower overall rates of breastfeeding than higher income babies. Between 2009 and 2014, the gap increased from 12.2 to 19.8 percentage points between babies born into families with over 600% and less than 100% of the poverty level. Breastfeeding is beneficial to almost all mothers and infants, but the benefits may be significantly greater for minority women, who are disproportionately affected by adverse health outcomes, which may improve with breastfeeding.⁴

Community Health Centers (CHCs) provide comprehensive primary care services to over 23 million people in the United States, regardless of a person's ability to pay. These health centers are well positioned to promote, protect and support breastfeeding in the communities, since these organizations provide a crucial safety net for underserved and low-income families, by providing interdisciplinary, culturally competent care to meet the needs of diverse communities in America.⁴ By actively supporting breastfeeding through improvement in organizational policies, systems and clinic environment, CHCs can help increase breastfeeding rates of their clients, and reduce breastfeeding disparities. CHCs can reap the significant breastfeeding benefits, such as reducing child sick visits

 ¹ Centers for Disease Control and Prevention. (2017). Breastfoeding Among U.S. Children Born 2002-2014. CDC National Immunization Survey. Atlanta, OA: US Department of Health and Human Services, CDC. Retrieved from: https://www.cdc.gov/breastfeeding/data/nls_data/ ² Arstey, E. H., Chen, J., Elam-Evans, L. D., & Pennie C. O. (2017). Racial and Geographic Differences in Breastfeeding — United States, 2011-2015. Morbidity and Mortality Weekly Report, 66:723-727. Retrieved from: https://www.cdc.gov/mrsws/to/wrsm627a3.htm 3 Jones, K. M., Power, M. L., Queenan, J. T., & Schulkin, J. (2015). Racial and Ethnic Disparities in Breastfeeding. Breastfeeding Medicine, 10(4), 186-196.

⁴ National Association of Community Health Centers. About Health Centers. http://www.nache.org/about-our-health-centers/

(ear and gastro infections, and others) and the reduced risks of chronic diseases like diabetes, obesity, maternal hypertension and cancers.

FUNDING OVERVIEW

With support from the Centers for Disease Control and Prevention (CDC), Division of Nutrition, Physical Activity and Obesity (DNPAO), NACCHO is pleased to announce a funding opportunity for Community Health Centers (CHCs). The purpose of this funding opportunity is to pilot a breastfeeding support model for CHCs and a technical assistance project to help CHCs explore and adopt policy, system and environmental solutions to increase their capacity to provide consistent and coordinated breastfeeding promotion and support services to the families they serve. NACCHO will use the lessons learned, including barriers, facilitators and other data to inform the development of a breastfeeding support model toolkit.

NACCHO will identify community health centers/FQHCs to pilot the establishment of evidence-based breastfeeding practices and policies within their organization and will provide funding and technical assistance (TA) to these organizations to implement their proposed activities. Examples of these steps may include Policies, Systems and environmental (PSE) changes, such as training of current, existing staff in basic and advanced lactation care, implementation of supportive policies for breastfeeding employees and clients; establishment of a nursing/pumping room, provision of walk-in locations for lactation expertise and support (e.g: BabyCofés); improving internal collaborations for breastfeeding continuity of care, and activities that systematically connect breastfeeding mothers to relevant resources within their communities.

The breastfeeding support model for community health centers program is part of the *Reducing Breastfeeding Disparities through Continuity of Care* project which aims to increase breastfeeding initiation, duration, and exclusivity among African American and underserved populations in the US, by improving policies, systems, and the environments where breastfeeding take place, and enhancing key partnerships to create a community support continuity of care/safety net for families. This project intends to increase availability and access to environments where breastfeeding (the healthy choice) can be the easy choice. The overarching goals of this project includes:

<u>Goal 1:</u> Increase operational capacity of local health departments and the broader local public health system to promote, protect and support breastfeeding in African American and underserved communities through policy, system and environmental change approaches that strengthen breastfeeding continuity of care.

<u>Goal 2:</u> Increase local, state and national awareness of best practices, including successes and challenges, in implementing evidence-based/informed programs and services to increase breastfeeding initiation, exclusivity and duration rates in African American and underserved communities.

<u>Goal 3:</u> Strengthen results-driven national partnerships in strategizing toward their shared aims to address and expand access to peer and professional support, enhance workplace breastfeeding practices, and support effective maternity care practices.

The project will also help communities develop and maintain public health partnerships critical to building community support for breastfeeding. The project will use a coordinated and comprehensive approach to engage local, state, and national partners, breastfeeding coalitions, and federal agencies to achieve the goals of the project and enhance community-level efforts to support breastfeeding families.

NACCHO will make at least three (3) awards available to health center for a 6-month breastfeeding project. Each grantee will receive up to \$20,000 to support project activities.

111

SCOPE OF WORK

Grantees will be funded to support implementation of evidence-based breastfeeding policies, practices and internal/external partnerships. Grantees will be expected to complete the following activities over the course of the project period:

- Attend virtual monthly grantee meetings with other selected grantees (dates to be determined).
- Develop and refine a 6-month work plan that includes the adoption of policies, systems, and environmental solutions to increase organizational capacity to provide consistent and coordinated breastfeeding promotion and support services to the families served
- Participate in project assessment to determine training and technical assistance needs of their staff
- Participate in quarterly individual calls with NACCHO staff, project-related webinars, and other capacitybuilding activities
- Convene key staff and partners for a NACCHO staff site visit (date TBD)
- Implement activities as defined in the project work plan
- Collect quantitative/qualitative data, such as barriers, facilitators, lessons learned, and staff/clients
 perceptions to facilitate understanding of program activity impact (NACCHO will provide data collection
 form)
- Report aggregate data related to services provided, such as numbers of internal/external partnerships established/enhanced, number of staff trained, etc
- Participate in project-related evaluation activities, including pre-post assessments, focus groups, and other identified evaluation activities
- · Provide up to three financial reports, detailing how funds were spent in order to accomplish activities
- Provide written recommendations to community health centers/FQHCs seeking to become more
 equipped to provide comprehensive breastfeeding promotion and support services to families and the
 community

Applications must be submitted no later than January 6, 2019 at 6:30 pm E.T | 3:30 pm P.T. Selections will be made on or about January 21, 2019 and year one of the project period will run from the date of contract execution to July 31, 2019.

NACCHO will host one (1) optional webinar on December 11, 2018 at 2:00 pm E.T. to discuss the funding opportunity and respond to questions. Registration information for the webinars is located below. The webinar will be recorded and sent out to registrants. <u>Please note that no new information will be shared during the</u> <u>webinar</u>. Applicants can submit applications and questions regarding this announcement at any time and do not have to wait for optional webinar in order to begin or submit applications and questions. The webinar will also be recorded and posted to the NACCHO website <u>https://www.naccho.org/programs/community-health/maternalchild-adolescent-health/breastfeeding-support</u>

All necessary information regarding the project and application process may be found in this Request for Application (RFA). Applicants may pose individual questions to NACCHO at any point during the application process by e-mailing <u>breastfeeding@naccho.org</u>.

ELIGIBILITY AND CONTRACT TERMS

ELIGIBLE APPLICANTS

This RFA is open to any community health center who

1) provide prenatal and postpartum services (OB/GYN, Centering, Pediatrics, etc)

2) Serves predominantly African American and/or Underserved Populations

- At least 50% of population is African American and/or Underserved
- Underserved populations may include low income (as defined by Medicaid Eligibility) or other Racial/Ethnic minority groups (e.g. Native American, etc.)

Grantees will be funded to support implementation of evidence-based breastfeeding policies, practices and internal/external partnerships. Grantees will be expected to complete the following activities over the course of the project period:

- Attend virtual monthly grantee meetings with other selected grantees (dates to be determined).
- Develop and refine a 6-month work plan that includes the adoption of policies, systems, and environmental solutions to increase organizational capacity to provide consistent and coordinated breastfeeding promotion and support services to the families served
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- Participate in quarterly individual calls with NACCHO staff, project-related webinars, and other capacitybuilding activities
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ELIGIBILITY AND CONTRACT TERMS

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The criteria listed below will be used to evaluate proposals for the purpose of ranking them in relative position based on how fully each proposal meets the requirements of this RFA:

- Completeness of the Proposal Narrative
- Evidence of need (e.g. population demographics) and ability to address needs of target population.
- Evidence of agency capacity to carry out the proposed activities
- · Evidence of a history of working with local stakeholders to effect positive change
- · Completeness, clarity, and perceived ability to implement work plan (e.g., timeline, goals, objectives)
- Realistic and appropriate budget
- Letter(s) of Support
- Demonstration of overall commitment
- Submission of all required information and documents.
- Ability to complete the implementation of intervention by July 31, 2019.

NACCHO reserves the right to select grantees based on strategy selection, geographic preference or random selection in the event that there is a high volume of applicants.

SCHEDULE OF EVENTS

Please note the following deadlines and events for this application:

| Event | Date/Time |
|---------------------------------|---|
| Informational Webinar | December 11, 2018, 2pm E.T. |
| Application Submission Deadline | January 6, 2019 6:30 pm E.T. |
| Award Notification Date | January 21, 2019 |
| Contract due to NACCHO | January 31, 2019 |
| Anticipated Contract Start Date | February 1, 2019 |
| Mid-March | Submit first deliverables to NACCHO |
| End-March | First distribution of grant money |
| Mid-May | Submit additional deliverables to NACCHO |
| End-May | Second distribution of grant money |
| Mid-July | Submit remaining deliverables, |
| End-July | Final Report Due, and last distribution of grant money |

TECHNICAL REQUIREMENTS

NACCHO staff will serve as a resource to the contractor to ensure adequate completion of the scope of work and achievement of project goals by fulfilling the following responsibilities:

- Provide background information related to the project, including access to NACCHO reports, data, and other
 resources necessary to complete the tasks above.
- Develop and support an online community of practice portal to disseminate data and information to the project sites.
- Provide direct technical assistance for completion of tasks, including periodic webinars and phone or e-mail consultations.
- Provide tools, guidance, and assistance to support organizational capacity to collect and report project data and evaluate project activities.
- Assist in the develop models of sustainability of project activities.

PROPOSAL RESPONSE FORMAT

Applications must be prepared using NACCHO application website. http://application.naccho.org

The responses are limited to the word limit to each response. In addition, applications will need to attach the following documents:

- Vendor Information Form This information will also be used in the event that the submitting agency is selected and engages in a contract with NACCHO.
- Budget justification
- Work plan using NACCHO template.

The sections on the application that requires a response include:

A. Problem Statement (500 words)

Please state an identified community need and potential partnerships, briefly describe the population your agency serve, including the community demographics and population size (at minimum, applicant should provide data at the center or zip-code level). Describe how this project will assist with improving: (1) breastfeeding rates among the African American and underserved populations; (2) the current landscape of breastfeeding policies and practices in your organization; (3) community landscape of breastfeeding support services (please reference any practices identified in <u>The CDC Guide to Strategies to Support Breastfeeding</u> <u>Mothers and Babies</u>); and (3) community needs related to:(a) implementing evidence-based breastfeeding practices and policies within the health center; and (b) developing and maintaining local public health partnerships for breastfeeding continuity of care.

B. Proposal Overview (750 words)

Describe, in detail, how you propose to meet each of the project goals and specifications outlined above in order to enhance your organization/agency and community's ability to: (a) implement evidence-based breastfeeding policies, practices within your organization; and (b) develop and maintain public health partnerships for breastfeeding.

- C. Organizational Capacity and Experience (700 words)
 - Describe your organization mission and structure, and explain how your organization's efforts align with the aims of this project.
 - Describe your organizational/agency and staff qualifications and experience engaging in breastfeeding
 promotion efforts that involve: (a) implementing evidence-based and innovative breastfeeding programs,
 practices, and services; and (b) developing and maintaining public health partnerships for breastfeeding.

- Identify key staff responsible for completing your proposed work and provide sufficient detail to
 demonstrate knowledge, skills, and abilities to perform the functions outlined in the RFA. Individuals
 identified here should also be noted in the work plan (see below).
- Describe your organization's capacity to collect or obtain data regarding services provided and women served.
- Describe your organization's readiness to start this project and complete it by July 31, 2019.
- What are your plans to sustain activities started during this project? (400 words)

D. Work Plan & Timeline (4 pages maximum)

Use the attached template to develop a 6-month project work plan to describe the objectives and timeline for achieving project requirements and expected deliverables from February 1, 2019nthrough July 31, 2019. Please select the strategies and activities that are most appropriately suited to meet the needs of your organization to serve your community. The examples below provide a range of activities that can be included in the work plan (please select at least 6 of these activities). The activities marked with an asterisk (*) are mandatory. If your organization already has established one or more of those mandatory activities, please note these steps as completed in your work plan. You may also develop your own strategies:

- a. Conduct an Organizational breastfeeding support Gap Analysis/Staff Education Needs Assessment*
- b. Develop (or refine) an organizational breastfeeding support policy for employees and clients*
- c. Development of Consistent Messaging/Materials within the agency, community and hospital
- d. Development and Distribution of Community Resource Guide in various departments within your organization
- e. Develop a Referral Network for Community Lactation Support or within health center support*
- f. Provision of Peer/Professional Led Support Groups
- g. Establishment of Breastfeeding Clinics (walk-ins, one-on-one support)
- h. Provide evidence-based breastfeeding information and support to all pregnant and postpartum families and caregivers*
- Work in close collaboration organization's prenatal provider and pediatric/family provider to promote and support breastfeeding
- Partner with community healthcare providers (Pediatric/Family Provider/ prenatal providers) for outreach/referral and partnership to support breastfeeding
- k. Provide initial and On-going all-staff training to improve or enhance skills of current staff in lactation care, counseling and case management in a community setting*
- L Develop or identity a basic breastfeeding curriculum to train all staff
- m. Develop or identity a breastreeding support to train clinic staff
- Develop or actively participate Local Breastfeeding Coalition or Advisory Board development and planning; or active participation on existing ones*
- o. Develop or identity Social Marketing campaigns with culturally sensitive breastfeeding-friendly images throughout the health center and elimination of any marketing display of breast milk substitutes*

E. Budget Proposal

Develop a 6-month line-item budget proposal, using the template provided, not to exceed \$20,000, which clearly outlines the dollar amount and a narrative cost justification for each line item. No match is required for project funds, however applicants can indicate where in-kind funds will be used to support project activities. Allowable and non-allowable expenses are listed below:

- Expenses Not Allowed include:
 - Alcoholic Beverages
 - Bad Debts
 - Contributions and Donations
 - Entertainment Costs
 - Fines and Penalties

APPLICATIONS DUE BY 6:30 PM E.T. ON JANUARY 6TH, 2019

- Goods and Services for Personal Use
- Lobbying
- Losses on Other Awards
- Exam Fees (e.g., IBCLC exam fee)

F. Attachments

Please include the following attachments with your application:

- Project Work Plan
- Budget Worksheet
- Hyperlink to (or a copy of) current A-133 Audit Report or Certification of Non-Applicability
- Vendor Information Form
- Letter(s) of Support
 - -

SUBMISSION INSTRUCTIONS

Final response to this RFA should be submitted by January 6, 2019 at 6:30 pm E.T. | 3:30 pm P.T. Responses submitted after this deadline will not be considered. Applications should be submitted in a single email to <u>breastfeeding@naccho.org</u>. Use as a Subject Line: *Breastfeeding RFA*. NACCHO will confirm receipt of all applications, however, receipt does not guarantee verification of completeness. All questions may also be directed to <u>breastfeeding@naccho.org</u>.

Please contact the NACCHO Breastfeeding Project at 202-783-5550 or <u>breastfeeding@naccho.org</u> if you do not receive a confirmation of receipt within 24 hours of submission.

ATTACHMENTS

Please find below, links to additional information, forms, and resources needed for this application submission:

Required Application Resources

- Budget Proposal and Justification <u>Spreadsheet</u>
- NACCHO Standard Contract Language (Member) <u>Contract</u>
- Vendor Information Form Form
- Work Plan Template Forsssm

HELPFUL RESOURCES

- NACCHO Breastfeeding webpage: <u>https://www.naccho.org/programs/community-health/maternal-child-adolescent-health</u>
- California Department of Public Health. 9 Steps to Breastfeeding Friendly: Guidelines for Community Health Centers and Outpatient Care Settings. 2015 http://www.calwic.org/storage/documents/bf/2016/9StepGuide.pdf

- Breastfeeding Friendly Washington Community Health Clinics
 https://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/BreastfeedingFriendlyWashington/Clinics#t
 ensteps
- Breastfeeding Friendly Health Departments http://www.health.state.mn.us/divs/oshii/bf/healthdept8FF.html
- Breastfeeding in the Community: Addressing Disparities Through Policy, Systems, and Environmental Changes Interventions: <u>http://journals.sagepub.com/doi/metrics/10.1177/0890334418759055</u>
- Notice of Intent Submission <u>http://naccho.coi.gualtrics.com/SE/TSID=SV_Ouef3wklzscWaH3</u>
- Surgeon General Call to Action to Support Breastfeeding 2011 http://www.surgeongeneral.gov/library/calls/breastfeeding/calltoactiontosupportbreastfeeding.pdf
- RFA overview webinar : December 11, 2018, 2 pm E.T. (Register Here)

APPENDIX B: EMAIL TO REVIEWERS

Email Subject Line - RE: Thesis Grant Review Process - Regina Mosley

Dear Reviewer,

I hope all is well! Attached you will find a copy of my grant proposal. I have also included the grant call for your reference.

After reviewing the grant proposal please complete the scoring rubric using the provided rubric guide. Additionally, please answer the three open-ended questions. Once your review is completed please send back to me no later than March 14, 2020. This will give me enough time to compile any and all feedback. I plan to defend my thesis on or before April 9th. If you have any questions or concerns about the process please feel free to contact me anytime.

Thank you again for serving as a reviewer for my grant proposal and I look forward to your feedback.

Best Regards,

Regina Mosley, BS, CCRP MPH Candidate, May 2020 <u>rmosley2007@gmail.com</u> (859) 433-5965

REFERENCES

Ahluwalia IB, Morrow B, Hsia J. (2005). Why do women stop breastfeeding? Findings from the Pregnancy Risk Assessment and Monitoring System. Pediatrics.16:1408–1412. Retrieved from https://pediatrics.aappublications.org/content/116/6/1408.long?sso=1&sso_redirec t count=1&nfstatus=401&nftoken=00000000-0000-0000-0000-0000000000&nfstatusdescription=ERROR%3a+No+local+token Alakaam, A., Lemacks, J., Yadrick, K., Connell, C., Choi, H. W., & Newman, R. G. (2018). Breastfeeding practices and barriers to implementing the Ten Steps to Successful Breastfeeding in Mississippi hospitals. Journal of Human Lactation, 34(2), 322-330. Retrieved from https://journals.sagepub.com/doi/abs/10.1177/0890334417737294 American Academy of Pediatrics. (2014). Where We Stand: Breastfeeding. Retrieved from https://www.healthychildren.org/English/agesstages/baby/breastfeeding/Pag es/Where-We-Stand-Breastfeeding.aspx Anstey, E. H., Chen, J., Elam-Evans, L. D., & Perrine, C. G. (2017). Racial and geographic differences in breastfeeding—United States, 2011–2015. MMWR. Morbidity and mortality weekly report. Retrieved from https://www.cdc.gov/mmwr/volumes/66/wr/mm6627a3.htm Baby Café USA. (2019). Retrieved from http://www.babycafeusa.org/your-nearest-babycafe/us-baby-cafes-2.html Baby Café USA. (2020). Baby Cafes in Your State. Retrieved from http://www.babycafeusa.org/your-nearest-baby-cafe/us-baby-cafes-2.html Baby Café USA (2020). Setting up a Baby Café. Retrieved from http://www.babycafeusa.org/set-up-a-baby-cafe.html Baby Friendly USA. (2019). About. Baby Cafes in your state. The Baby-Friendly Hospital Initiative. Retrieved from https://www.babyfriendlyusa.org/about/. Ballard, O., & Morrow, A. (2013) Human Milk Composition: nutrients and bioactive factors. Pediatric Clinics 60, no 1 (2013): 49-74. Retrieved from https://www.pediatric.theclinics.com/article/S0031-3955(12)00167-8/pdf Cadwell, K. (1999). Reaching the goals of "Healthy People 2000" regarding breastfeeding. Clinics in perinatology, 26(2), 527-537. Retreived from https://reader.elsevier.com/reader/sd/pii/S0095510818300654?token=FA1FD18D 25C294627ABBA14D9029E71F708BAAC66A1EA1935B6FE28107887D22782 663A9FA497EF5B36546F7B8CE7B3B Cascade Healthcare Products, Inc. (2020). Breastfeeding Education. Retrieved from https://www.1cascade.com/breastfeeding-education-materials Centers for Disease Control and Prevention. (2020a). Breastfeeding. Retrieved from https://www.cdc.gov/breastfeeding/index.htm Centers for Disease Control and Prevention. (2019). Breastfeeding. Maternity Practices in Infant Nutrition and Care (mPINC) Survey. Retrieved from https://www.cdc.gov/breastfeeding/data/mpinc/index.htm Centers for Disease Control and Prevention. (2016). Breastfeeding Report Card. Retrieved from https://www.cdc.gov/breastfeeding/pdf/2016breastfeeding reportcard.pdf

- Centers for Disease Control and Prevention. (2017). Health Equity. Health Disparities Subcommittee .Retrieved from https://www.cdc.gov/healthequity/hds/index.html
- Centers for Disease Control and Prevention. (2010). Simply Put. A guide for creating easy-to-understand materials. Retrieved from https://www.cdc.gov/healthliteracy /pdf/simply_put.pdf
- Centers for Disease Control and Prevention (2020b). The Social Ecological Model: A Framework for Prevention,

http://www.cdc.gov/violenceprevention/overview/social-ecologicalmodel.html

- Chapman, D. J., Damio, G., & Pérez-Escamilla, R. (2004). Differential response to breastfeeding peer counseling within a low-income, predominantly Latina population. *Journal of Human Lactation*, 20(4), 389-396. Retrieved from https://journals.sagepub.com/doi/abs/10.1177/0890334404269845
- Center for Health Equity, Education, and Research. (n.d.). Mississippi CHEER Communities. Retrieved from https://www.cheerequity.org/mississippi-champscommunities.html
- Community Tool Box. (2017). Section 1. Developing a Plan for Assessing Local Needs and Resources. Retrieved from http://ctb.ku.edu/en/table-ofcontents/assessment/assessing-community-needs-and-resources/develop-aplan/main. Retrieved from https://www.sciencedirect.com/ceience/article/cbs/pii/S0002027814000060

https://www.sciencedirect.com/science/article/abs/pii/S0002937814000969

- Conrad, C. (2006). African Americans and high-tech jobs: Trends and disparities in 25 cities. *Washington, DC: The Joint Center for Political and Economic Studies*. Retrieved from https://scholar.google.com/scholar?hl=en&as_sdt=0%2C22&q= African+Americans+and+high-tech+jobs%3A+Trends+and+disparities +in+25+cities&btnG=
- Courtois, E., & Thibault, P. (2010). Impact of hospitalization of an infant during breast-feeding: mother-child investigation. *Recherche en soins infirmiers*, (102), 50-58. https://europepmc.org/article/med/20957803
- Creanga, A. A., Bateman, B. T., Mhyre, J. M., Kuklina, E., Shilkrut, A., & Callaghan, W. M. (2014). Performance of racial and ethnic minority-serving hospitals on delivery-related indicators. *American journal of obstetrics and gynecology*,211(6), 647-e1. Retreieved from

https://www.sciencedirect.com/science/article/pii/S0002937814005675

- Dehlendorf, C., Park, S. Y., Emeremni, C. A., Comer, D., Vincett, K., & Borrero, S. (2014). Racial/ethnic disparities in contraceptive use: variation by age and women's reproductive experiences. *American journal of obstetrics and* gynecology,210(6), 526-e1.
- Dennis, C. L., Hodnett, E., Gallop, R., & Chalmers, B. (2002). The effect of peer support on breast-feeding duration among primiparous women: a randomized controlled trial. Retrieved from https://www.cmaj.ca/content/166/1/21.short
- Dietary Guidelines for Americans. (n.d.). History. Retrieved from https://www.dietaryguidelines.gov/about-dietary-guidelines/history-dietaryguidelines
- Finer, L. B., & Zolna, M. R. (2011). Unintended pregnancy in the United States: incidence and disparities, 2006. *Contraception*, 84(5), 478-485. Retrieved from https://www.sciencedirect.com/science/article/abs/pii/S0010782411004720

- First Food Friendly. (n.d). Retrieved from http://befirstfoodfriendly.org/ what-is-a-first-food-desert/
- Glanz, K., & Bishop, D. B. (2010). The role of behavioral science theory in development and implementation of public health interventions. Retrieved for https://www.annualreviews.org/doi/pdf/10.1146/annurev.publhealth.012809.1036 04
- Grummer-Strawn, Laurence. (2013). Making Breastfeeding a Public Health Priority in the United States [PowerPoint slides]. Retrieved from https://www.who.int/nutrition/topics/seminar_GrummerStrawn_presentation.pdf? ua=1
- Harvard University. (2016). Health disparities between blacks and whites run deep. Retrieved from https://www.hsph.harvard.edu/news/hsph-in-the-news/healthdisparities-between-blacks-and-whites-run-deep/
- Howell, E. A., Egorova, N., Balbierz, A., Zeitlin, J., & Hebert, P. L. (2016). Black-white differences in severe maternal morbidity and site of care. *American journal of* obstetrics and gynecology, 214(1), 122-e1. Retrieved from https://www.sciencedirect.com/science/article/pii/S0002937815008704
- Jackson, K. M., & Nazar, A. M. (2006). Breastfeeding, the immune response, and longterm health. *The Journal of the American Osteopathic Association* Retrieved from file:///Users/rmosley2007/Downloads/203.pdf
- Jarlenski, M. P., Bennett, W. L., Bleich, S. N., Barry, C. L., & Stuart, E. A. (2014). Effects of breastfeeding on postpartum weight loss among US women. *Preventive medicine*. Retrieved from
 - https://www.sciencedirect.com/science/article/pii/S0091743514003600
- Johnson, A. M., Kirk, R., & Muzik, M. (2015). Overcoming workplace barriers: A focus group study exploring African American mothers' needs for workplace breastfeeding support. *Journal of Human Lactation*, 31(3), 425-433. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4506723/
- Jones, K. M., Power, M. L., Queenan, J. T., & Schulkin, J. (2015). Racial and ethnic disparities in breastfeeding. *Breastfeeding Medicine*. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC4410446/
- Kaunonen, M., Hannula, L., & Tarkka, M. T. (2012). A systematic review of peer support interventions for breastfeeding. *Journal of clinical nursing*. Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1365-2702.2012.04071.x
- Kistin, N., Benton, D., Rao, S., & Sullivan, M. (1990). Breast-feeding rates among black urban low-income women: effect of prenatal education. Retrieved from https://pediatrics.aappublications.org/content/86/5/741.short
- Kindig, D. A., Panzer, A. M., & Nielsen-Bohlman, L. (Eds.). (2004). *Health literacy: a prescription to end confusion*. National Academies Press. Retrieved from https://books.google.com/books?hl=en&lr=&id=vWp0AAAAQBAJ&oi=fnd&pg =PT21&dq=Health+literacy:+a+prescription+to+end+confusion&ots=SIkOfU6yk I&sig=8L17PVTICYslfUHN6qoxhpKWALE#v=onepage&q=Health%20literacy %3A%20a%20prescription%20to%20end%20confusion&f=false
- La Crosse Community Foundation. (2018). 2018 General Fund Application Evaluation Scoring Rubric. Retrieved from https://www.laxcommfoundation.com/wp-

content/uploads/2018/02/2018-General-Fund-Application-Evaluation-Scoring-Rubric_FINAL.pdf

- Lerner, E. B., Jehle, D. V., Janicke, D. M., & Moscati, R. M. (2000). Medical communication: do our patients understand?. *Retrieved from* https://www.sciencedirect.com/science/article/pii/S0735675700398278
- Li RW, Hsia J, Fridinger F, Hussain A, Benton-Davis S, Grummer-Strawn L. Public beliefs about breastfeeding policies in various settings. J Am Diet Assoc. 2004; 104(7):1162–1168. Retrieved from https://www.sciencedirect.com/science/article/pii/S0002822304005735
- Lind, J. P., Cria; Li, Ruowei; Scanlon, Kelley; and Grummer-Straawn, Laurance;. (2014). Racial Disparities in Access to Maternity Care Practices That Support Breastfeeding — United States, 2011. Retrieved fromhttps://www.cdc.gov/ mmwr/preview/mmwrhtml/mm6333a2.htm?s_cid=mm6333a2_w
- Luengo, M. H., Álvarez-Bueno, C., Pozuelo-Carrascosa, D. P., Berlanga-Macías, C., Martínez-Vizcaíno, V., & Notario-Pacheco, B. (2019). Relationship between breast feeding and motor development in children: protocol for a systematic review and meta-analysis. Retrieved from https://bmjopen.bmj.com /content/9/9/e029063.abstract
- Martens, P. J., Shafer, L. A., Dean, H. J., Sellers, E. A., Yamamoto, J., Ludwig, S., ... & McGavock, J. (2016). Breastfeeding initiation associated with reduced incidence of diabetes in mothers and offspring. *Obstetrics & Gynecology*, *128*(5), 1095-1104. Retrieved from https://www.ingentaconnect.com/con tent/wk/aog/2016/00000128/00000005/art00028
- Mississippi State Department of Health. (2016). Baby Café Opens in Greenville for Pregnant and Breastfeeding Women. Retrieved from https://msdh.ms.gov/msdhsite/ static/23,17551,341,743.html
- Mississippi State Department of Health. (2018). Breastfeeding Support from WIC. Retrieved from https://msdh.ms.gov/msdhsite/_static/41,654,144,77.html
- Mississippi State Department of Health. (2011). Mississippi Breastfeeding Rates Among Lowest in Nation. Retrieved from 2011 https://msdh.ms.gov/msdhsite/_static/23,11483,341,557.html
- Mitra, A. K., Khoury, A. J., Hinton, A. W., & Carothers, C. (2004). Predictors of breastfeeding intention among low-income women. *Maternal and child health journal*, 8(2), 65-70..Retrieved from https://link.springer.com/article/ 10.1023/B:MACI.0000025728.54271.27
- McLorg, P. A., & Bryant, C. A. (1989). Influence of social network members and health care professionals on infant feeding practices of economically disadvantaged mothers.*Medical anthropology*, 10(4), 265-278. Retrieved from https://www.tandfonline.com/doi/abs/10.1080/01459740.1989.9965973?journalC ode=gmea20
- Morrison, F. P., Kukafka, R., & Johnson, S. B. (2005). Analyzing the structure and content of public health messages. In *AMIA Annual Symposium Proceedings* (Vol. 2005, p. 540). American Medical Informatics Association. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1560424/
- National Association of County and City Health Officials. (2018). Program Implementation Guide October 2018 Reducing Disparities in Breastfeeding

through Peer and Professional Support, 2014 – 2018. Retrieved from https://www.naccho.org/uploads/downloadable-resources/Breastfeeding-Implementation-Guide-Final-11-15-2018.pdf

- National Association of County And City Health Officials. (n.d.). Retrieved from https://www.naccho.org/
- Nelson, A. (2002). Unequal treatment: confronting racial and ethnic disparities in health care. *Journal of the National Medical Association*, *94*(8), 666. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2594273/pdf/jnma00325-0024.pdf
- Nutbeam, Don. (2008). The evolving concept of health literacy. *Social science & medicine*, 67(12), 2072-2078. Retrieved from https://www.sciencedirect.com/science/article/pii/S0277953608004577
- Odom, E.C., Li, R., Scanlon, k.S., Perrine, C. G., & Grummer-Strawn, L. (2013). Reasons for Earlier Than Desired Cessation of Breastfeeding. Retrieved from https://pediatrics.aappublications.org/content/131/3/e726.short
- Office of Disease Prevention and Health Promotion (2020). Frequently Asked Questions. Retrieved from https://www.healthypeople.gov/2020/About-Healthy-People/How-To-Use-HealthyPeople.gov/Frequently-Asked-Questions#who
- Office of the Surgeon, G., Centers for Disease, C., Prevention, & Office on Women's, H. (2011). Publications and Reports of the Surgeon General. *The Surgeon General's Call to Action to Support Breastfeeding*. Retrieved from https://www.surgeongeneral.gov/library/calls/breastfeeding/calltoactiontosupportb reastfeeding.pdf
- Ogbuanu, C., Glover, S., Probst, J., Liu, J., & Hussey, J. (2011). The Effect of Maternity Leave Length and Time of Return to work on Breastfeeding. Retrieved from https://pediatrics.aappublications.org/content/127/6/e1414.
- Radzyminski, S., & Callister, L. C. (2016). Mother's beliefs, attitudes, and decision making related to infant feeding choices. *The Journal of perinatal education*, 25(1), 18. Retrieved from https://www.ncbi.nlm.nih.gov/ pmc/articles/ PMC4719110/
- Rahmani, A., Ghahramanian, A., & Alahbakhshian, A. (2010). Respecting to patients' autonomy in viewpoint of nurses and patients in medical-surgical wards. Iranian journal of nursing and midwifery research. Retrieved from https://www.ncbi. nlm.nih.gov/pmc/articles/PMC3093030/
- Raj, V. K., & Plichta, S. B. (1998). The role of social support in breastfeeding promotion: a literature review. *Journal of Human Lactation*, 14(1), 41-45. Retrieved from https://journals.sagepub.com/doi/abs/10.1177/089033449801400114
- Ridgway, E., Baker, P., Woods, J., & Lawrence, M. (2019). Historical developments and paradigm shifts in Public Health Nutrition Science, guidance and policy actions: a narrative review. *Nutrients*, 11(3), 531. Retrieved from https://www.ncbi.nlm. nih.gov/pmc/articles/PMC6471843/
- Rutledge, G., Ayers, D. R., MacGowan, C., & Murphy, P. (2015). An overview of the CDC's community-based breastfeeding supplemental cooperative agreement. Retrieved from https://journals.sagepub.com/doi/full/10.1177/ 0890334415599779#_i3

- Saadeh, R., & Akré, J. (1996). Ten steps to successful breastfeeding: a summary of the rationale and scientific evidence. *Birth*, 23(3), 154-160. Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1523-536X.1996.tb00476.x
- Schafer, E. J., Williams, N. A., Digney, S., Hare, M. E., & Ashida, S. (2016). Social contexts of infant feeding and infant feeding decisions. *Journal of Human Lactation*. Retrieved from
 - https://journals.sagepub.com/doi/abs/10.1177/0890334415592850
- Seals-Allers, Kimberly. (2012). Why Transforming First Food Deserts to First Food Friendly Communities Matters. Retrieved from http://befirstfoodfriendly.org/why-transformingfirst-food-deserts-to-first-food-friendly-communities-matters/
- Sharps, P. W., El-Mohandes, A. A., El-Khorazaty, M. N., Kiely, M., & Walker, T. (2003). Health beliefs and parenting attitudes influence breastfeeding patterns among low-income African-American women. *Journal of perinatology*, 23(5), 414. Retrieved from https://www.nature.com/articles/7210948
- Shealy KR, Li R, Benton-Davis S, Grummer-Strawn LM. (2005). The CDC Guide to Breastfeeding Interventions. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Retrieved from https://www.cdc.gov/breastfeeding/pdf/breastfeeding_interventions.pdf
- Shields M. (2004). Parenting study gives birth to new media strategy: no media. Media Daily News. Retrieved from https://depts.washington.edu/nwmedia/sections/nw_center/docs_news/parenting_s tudy.shtml
- Sikorski, J., Renfrew, M. J., Pindoria, S., & Wade, A. (2003). Support for breastfeeding mothers: a systematic review. *Paediatric and perinatal epidemiology*, 17(4), 407-417. Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1046/j.1365-3016.2003.00512.x
- Spencer, B. S., & Grassley, J. S. (2013). African American women and breastfeeding: An integrative literature review. *Health care for women international*, 34(7), 607-625. Retrieved from

https://www.tandfonline.com/doi/abs/10.1080/07399332.2012.684813

- Stossel, L. M., Segar, N., Gliatto, P., Fallar, R., & Karani, R. (2012). Readability of patient education materials available at the point of care. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3514986/pdf/11606_2012_Articl e_2046.pdf
- Tucker, M. J., Berg, C. J., Callaghan, W. M., & Hsia, J. (2007). The Black–White disparity in pregnancy-related mortality from 5 conditions: differences in prevalence and case-fatality rates. *American journal of public health*, 97(2), 247-251. Retrieved from

https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2005.072975

- United States Census Bureau. (n.d.). Jefferson County, Mississippi. Retrieved from https://data.census.gov/cedsci/profile?q=Jefferson%20County,%20Mississippi&g =0500000US28063
- United States Census Bureau. (2018) Quick Facts. Retrieved from https://www.census.gov/quickfacts/fact/map/US/RHI225218
- United States Census Bureau. (2019). Historical Income Tables: Households. Median Household Income by State [Data File]. Retrieved from

https://www.census.gov/data/tables/time-series/demo/income-poverty/historicalincome-households.html

- United States Department of Agriculture. (2018). WIC Breastfeeding Data. Local Agency Report. Retrieved from https://www.fns.usda.gov/wic/wic-breastfeeding-datalocal-agency-report
- United States Department of Health and Human Services. (2019). Healthy people. About Healthy People. Retrieved from https://www.healthypeople.gov/2020/About-Healthy-People
- United States Department of Health and Human Services. (2010). Healthy people 2010. 2nd ed. Washington, DC: U.S. Government Printing Office; Nov, 2000
- World Health Organization. (2017). Early initiation of breastfeeding to promote exclusive breastfeeding. Retrieved from

http://www.who.int/elena/titles/early_breastfeeding/en/

- World Health Organization. (2011). Exclusive breastfeeding for six months best for babies everywhere. Retrieved from https://www.who.int/mediacentre/ news/statements/2011/breastfeeding 20110115/en/
- World Health Organization. (2018). Implementation guidance: protecting, promoting, and supporting breastfeeding in facilities providing maternity and newborn services: the revised Baby-friendly Hospital Initiative 2018Retrieved from https://www.who.int/publications-detail/9789241513807
- World Health Organization. (2017). The International Code of Marketing of Breast-Milk Substitutes. Retrieved from https://apps.who.int/iris/bitstream/handle/10665/ 254911/ WHO-NMH-NHD-17.1-eng.pdf?ua=1
- World Health Organization. (2020). Nutrition. The International Code of Marketing of Breast-Milk Substitutes. Retrieved from https://www.who.int/nutrition/ publications/infantfeeding/9241541601/en/
- World Health Organization. (1998). The World Health Report 1998 Life in the 21st Century: A vision for all. Retrieved from https://www.who.int/whr/1998/media_centre/executive_summary6/en/
- Wyatt, Stephanie. (2002). Challenges of the Working Breastfeeding Mother Workplace Solutions. Retrieved from

https://journals.sagepub.com/doi/pdf/10.1177/216507990205000204