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Utilizing PRAMS and Healthy People 2020 to Examine Black Women's Breastfeeding Behavior in Louisiana Prior to the Onset of the COVID-19 Pandemic

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Utilizing PRAMS and Healthy People 2020 to Examine Black Women's Breastfeeding Behavior
in Louisiana Prior to the Onset of the COVID-19 Pandemic

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A thesis submitted in partial fulfillment of the requirements for the degree of

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Almetra Granger, MPH Candidate

INTRODUCTION

Black Maternal Health Disparities

“What happened on that auction block centuries ago is still unfinished business for African American women today”

—Dr. Gail E. Wyatt

Black maternal health constitutes an important public health issue. The United States healthcare system is plagued with racial inequities that disproportionately affect Black women and their children. Compared with other racial and ethnic groups, Black women in the United States experience impermissible maternal health outcomes, such as exceptionally high rates of pregnancy-related deaths and childbearing issues (CDC, 2019). Black women are also exposed to all forms of racism and discrimination in health systems that do not support them. The Centers for Disease Control and Prevention (CDC) reports that Black women are three times more likely to experience pregnancy-related death than their white counterparts (Working, 2021). Compared to other races, Black women are more likely to die from pregnancy or childbirth than women of any other race (Working, 2021). It is particularly important to recognize and acknowledge racial disparities in efforts to obtain quality health for Black women and their children.

Racism in the United States is a pervasive and major contributor to maternal and child health disparities of Black (African American) women and their children. Defined as “one group having the power to carry out systematic discrimination through the institutional policies and practices of the society and by shaping the cultural beliefs and values that support those racist policies and practices.” Several public health organizations including the Centers for Disease

Control & Prevention (CDC), have declared racism as a public health concern (CDC, 2021). Dr. Camera Jones (2000) highlights three levels of racism: 1) institutionalized, 2) personally mediated, and 3) internalized. *Institutionalized racism* is defined as the unequal distribution of goods, services, and opportunities of society by race. *Personally mediated* racism is defined as the intersection of prejudice and discrimination such as assumptions on abilities and intentions and differing actions of a group by their race. *Internalized racism* is defined as the stigmatized races' own acceptance of negative values and worth (Jones, 2000). Historically, race has played a vital role in Black women's health. In Isabel Wilkerson's *Caste* (2020), she recounts the experimentation on Black bodies in practices that are still in use today. James Marion Sims, the founding father of gynecology, came to his defining discoveries by conducting savage surgeries, notably without the administration of anesthesia, that often led to disfigurement or death of enslaved Black women in Alabama. Wilkerson also recounts how Francis Marie Prevost, a Louisiana surgeon, contributed to obstetrics and gynecology by perfecting cesarean section by performing this procedure on Black women in the 1830s (Wilkerson, 2020). Today, the CDC (2019) reports that Black women experience higher rates of both maternal mortality and infant mortality). Compared to other racial/ethnic groups, Black women are two to three times more likely to die from pregnancy related causes and this statistic is mirrored for Black infants (CDC, 2019). Furthermore, racism operating at all three levels is a critical determinant to maternal and infant health disparities because it contributes to social inequities which shape health behaviors, access to healthcare, and interactions with medical professionals.

Past studies often overlook the historical underpinnings of racism, though recent scholarship is beginning to address that racism negatively influences health disparities experienced by Black women today. Racism produces inequities in social determinants, which

are defined as conditions in which people are born, grow, live, work and age, operating at both individual and community levels. Inequities in social determinants make Black women more vulnerable and susceptible to negative reproductive health outcomes because they are significant drivers of disease risk and susceptibility within clinic care and public health systems (Crear-Perry, 2021). Social determinants operating at the individual level include education and income. Social determinants operating at the community level include health care, neighborhood-built environments, and social and community contexts) (Crear-Perry, 2021). Still, Black women, no matter how empowered, knowledgeable, or willing they may be to change behaviors, may not be able to do so, due to the lack of control of structural determinants such as governance, policies, and cultural and societal norms and lasting dictation of the racist structure of American society from the time of slavery. Understanding the effects of racism by addressing social determinants that contribute to behavioral practices will likely move public health towards achieving health equity.

Breastfeeding

One important health practice for which disparities have been documented for Black women is breastfeeding. Breastfeeding is defined as the act of feeding one's child human breast milk. The World Health Organization (WHO) and the United Nations Children's Fund recommend that children initiate breastfeeding in the first hour of birth and be exclusively breastfed for the first six months of life (WHO, 2018). Breastfeeding provides several benefits for both the mother and the child. Maternal health benefits of breastfeeding include decreased risk of breast and ovarian cancers, cardiometabolic disease (type 2 diabetes mellitus, hypertension, and cardiovascular disease) and postpartum depression (Westerfield, 2018). Infant health benefits include decreased risk of atopic dermatitis and intestinal gastroenteritis, asthma,

obesity, type 1 diabetes, severe lower respiratory diseases, ear infections, sudden infant death syndrome (SIDS), and gastrointestinal infections (diarrhea/ vomiting) as well as higher IQ later in life (Westerfield, 2018).

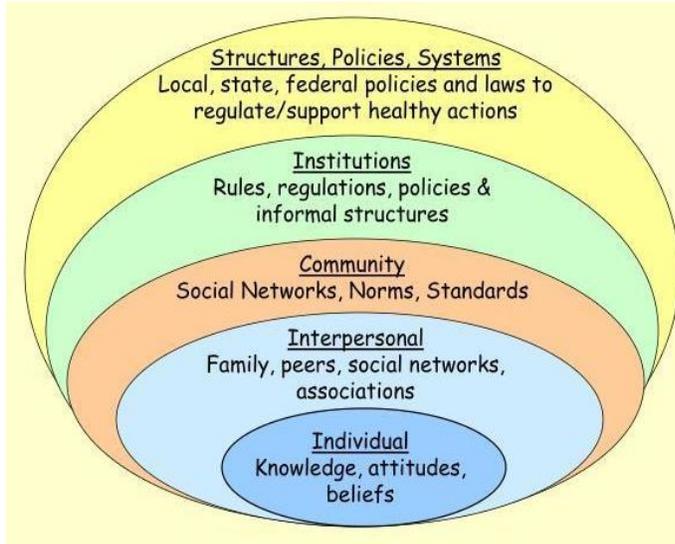
Although breastfeeding has been shown to improve women's and children's health outcomes, Black women tend to initiate and continue breastfeeding at lower rates than women from other racial groups. The United States (US) has the one of the lowest breastfeeding rates amongst all the developed countries. While in recent decades the US has seen an increase in breastfeeding rates, there is a substantial racial and ethnic gap in breastfeeding rates reflecting an area of particular concern for maternal health in our nation. Healthy People 2020, which is a science-based, 10-year national objective report for improving the health of all Americans, breastfeeding objectives aim to increase the proportion of women who breastfeed. National data (year) indicates that 69.4% of Black mothers initiated breastfeeding, compared with 85.9% of white mothers, a difference of 16.5 percentage points ($p < 0.05$) (Beauregard, 2019). Among all infants, Black infants had a significantly lower rate of any breastfeeding at age 3 months (Beauregard, 2019). The nation seems to have met the goal overall, but Black women have been shown to breastfeed less and there is little evidence if the goal has been met for this group specifically.

There is a persisting racial/ethnic gap evidenced in current breastfeeding trends. Several researchers have sought to explore this persisting racial gap by identifying breastfeeding supports and barriers. Although several researchers have sought to explore this persisting racial gap, few have considered a multilevel approach in identifying breastfeeding supports and barriers which is the key in reducing this disparity.

Theoretical Framework

One key framework that can be used to examine breastfeeding supports and barriers is the Socioecological Model. The Socioecological Model is a conceptual model developed by Urie Brofenbrenner in the 1970s in efforts to understand human development (Synder, 2021). As shown in Figure 1, the individual is surrounded by nesting circles that illustrate different systems that impact the individual's health and well-being. The systems impacting the individual included the following: microsystem, mesosystem, exosystem, macrosystem, and chronosystem. Today the systems are recognized as the following: 1) interpersonal, 2) community, 3) organizational and 4) policy. The *microsystem* (or the interpersonal level) refers to the people who are closest to the individual and who have the strongest influences on the individual. This level also refers to interactions and relationships of the immediate surroundings. The *mesosystem* or (community level) goes beyond the interpersonal level and it refers to groups encountered by the individual via work, school, church, and neighborhood. The exosystem or organizational and macrosystem level refers to influences of society, religious organizations, culture, and broader social networks. The outermost level of the model is the policy level referring to the policies that impact behaviors. The basis for the Socioecological Model is that health is affected by the interaction between the characteristics of the individual, the community, and the environment that include physical, social, and political components (Snyder, 2021).

Figure 1: Levels of Influence in the Social-Ecological Model



Using the Socioecological Model, a woman's choice to breastfeed is then influenced by several factors. At the individual level, research indicates that breastfeeding is a valued behavior, but Black women are hindered by exhaustion, isolation, and the time commitment of breastfeeding (Snyder, 2021). Studies have revealed that compared with other racial and ethnic groups, Black mothers have higher allostatic load, which is defined as the physiological impact that stress has on the body (Rankin, 2020). The higher rates of allostatic load are the result of racism and sexism which in turn influences behaviors. The interpersonal level barriers include social norms that do not favor breastfeeding, and lack of peer and familial support. At the community level, barriers include perspectives of the community and how the community provides formal and informal support. On the familial and community levels, community lactation support, cultural acceptance, and role models of breastfeeding can increase breastfeeding initiation rates. Lack of familial and community level supports disproportionately affect Black women because of the effects of racism fueling social determinants in place to harm Black women. Familial and community level supports are believed to be buffers against racism

and racial fueling social determinants. Lack thereof serves as a barrier because breastfeeding needs continuous support and reinforcement. At the organizational level, barriers include rules and regulations that may affect how services may be provided to an individual such as barriers in place that discourage pumping milk. At the policy level, barriers include local, state, national, and global policies that can influence the allocation of resources and accessibility. At the organizational and policy levels, it is key to consider insurance, policies, paid maternity leave, and breastfeeding public messaging. For example, a Black mother may want to breastfeed but may not be able to do so due to work obligations interfering with pumping time. It is vital to consider the varying levels because they all contribute to breastfeeding initiation.

Louisiana

The Southern states, including Louisiana, generally have poorer maternal health outcomes and rank lower in regards to women's health in general. Additionally, there are racial/ethnic health disparities impacting Black women. *America's Health Rankings* ranks Louisiana as 50th in women's health and 48th for infant health (1) The CDC reports that in Louisiana 66.2% of women indicate that they ever breastfed (CDC, 2019). Data from the 2018 Louisiana Pregnancy Risk Assessment Monitoring Systems (LaPRAMS) report preconception health indicators such as chronic diseases, high Medicaid coverage, the Special Supplemental Nutrition Program for Women Infants and Children (WIC) participation, and depression (Robbins, 2018). However, there is a lack of knowledge and reporting on maternal health disparities, including breastfeeding, for Black women specifically in Louisiana

Gap/Purpose

After reviewing the literature on Black breastfeeding in the United States, there is a gap in relation to Black breastfeeding rates, literature examining reasons underlying women's breastfeeding behavior, and racial effects on breastfeeding in Louisiana. This research will explore how Louisiana performs in relation to the Healthy People 2020 breastfeeding initiation goal.

Research Questions and Hypotheses

The following question will be examined in this thesis:

- 1) Did Black women in Louisiana meet the Healthy People 2020 goal to increase the proportion of infants who are breastfed?
- 2) What are barriers and supports to breastfeeding initiation for Black women in Louisiana?

Based on existing literature and National Black breastfeeding rates, it is hypothesized that based on LaPRAMS data, Black women will not have met the Healthy People 2020 goal MICH-21.5 which aims to increase the proportion of infants who are breastfed to 81.9 %. LaPRAMS quantitative and qualitative data will be used to explore the reasons motivating Black mothers' breastfeeding behaviors.

METHODS

Study Data/ Sample Size

A mixed-methods design using both quantitative and qualitative data guided by the Socioecological Model was employed. This study used secondary data derived from Black

women participating in the LaPRAMS Phase 8 collected from 2016-2018. LaPRAMS is a state-specific assessment developed by the Centers for Disease Control and LaPRAMS legislators in 1987 to be used within local health departments to collect data related to behaviors and experiences of mothers during pre-pregnancy, the prenatal period, and in the immediate postnatal period (Pregnancy, 2021). The CDC develops initial questions and each state such as Louisiana has the option to reframe and exclude questions based upon their preferences and state needs. LaPRAMS aims to promote safe motherhood as well as reduce adverse health outcomes such as low birth weight and infant mortality in Louisiana. LaPRAMS gathers information on various topics including maternal demographics, perspectives, behaviors, attitudes about pregnancy and breastfeeding, maternal health, infant health, physical abuse, stressors, social support, maternal alcohol and tobacco consumption, and contraception in Louisiana. LaPRAMS uses two methods of data collection including mailed questionnaires and surveys conducted via telephone surveys. The LaPRAMS survey is mailed to approximately 3.0% of live births in Louisiana. Mothers were randomly selected from birth certificates in Louisiana's Vital Record Registry. Once participants return completed surveys to the Office of Public Health, responses are organized to provide representative data for the entire state. If participants do not respond after receiving three survey mailings, mothers are interviewed by telephone. Each participant has the choice to participate or refuse to participate in the LaPRAMS study without any consequences such as the loss of services. LaPRAMS data is then used by researchers, health professionals and policymakers to develop new programs and interventions and modify existing programs and interventions.

To analyze quantitative data, a complete cases dataset was constructed. The original LaPRAMS Phase 8 data from the 2016-2018 sample included 2,053 Black women. For variables

necessary for addressing the research questions, cases with missing data were deleted from the dataset (see Appendix I for a detailed list). These variables include an indicator of ever initiating breastfeeding (731 observations deleted) and breastfeeding-related factors such as access to breastfeeding information and breastfeeding supports (total of 836 observations deleted). The final quantitative analysis sample included 1,217 women.

The final qualitative analysis sample size included 902 women. For open-ended questions necessary for addressing the research question, their corresponding answers were compiled in Microsoft Excel under a heading that corresponds to the question.

Study Variables and Measures

Breastfeeding Initiation Variables

Breastfeeding initiation was answered by a yes/no response to the following question: “*Did you ever breastfeed or pump breast milk to feed your new baby, even for a short period of time?*” Breastfeeding initiation was treated as a dichotomous variable and recoded so that 0 indicated participants that never breastfed and 1 indicated women who ever breastfed. To determine breastfeeding continuation, women were asked to respond yes/no to the following question: “*Are you currently breastfeeding or feeding pumped milk to your new baby?*”. Breastfeeding continuation was coded as a dichotomous variable such that 0 indicated participants do not still breastfeed and 1 indicated people that still breastfeed.

Breastfeeding Barriers

Barriers that prevented initiation of breastfeeding were assessed using the question “*What were your reasons for not breastfeeding your new baby?*” The answer choices included the following: was sick or on medicine, had other children to take care of, had too many household duties, didn’t like breastfeeding, tried but it was too hard, participant didn’t want to, participant

went back to work, participant went back to school or other. Each answer choice was coded as a dichotomous variable. Each variable was coded as 0 to indicate the reason was not a barrier and 1 to indicate it was a barrier.

WIC Influences

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) influences were examined using the following yes/ no question: “*During your most recent pregnancy, were you on WIC?*” This variable was coded as a dichotomous variable. If participants indicated that they did not receive WIC services, the variable was coded as 0 and if participants indicated that they did receive WIC services the variable was coded as 1.

Breastfeeding Information Sources

Breastfeeding information sources were analyzed using the following yes/ no question: “*Before or after your new baby was born, did you receive breastfeeding from any of the following sources?*” The corresponding answers included the following: my doctor, a nurse, a midwife, a doula; a breastfeeding or lactation specialist; my baby’s doctor or health care provider; a breastfeeding support group, a breastfeeding hotline or toll-free number; family or friends, and other. WIC related information sources were assessed using the following yes/no question: “*When you went for WIC visits during your most recent pregnancy, did you receive information on breastfeeding?*” For each of the breastfeeding information variables, the corresponding answer choices were coded as dichotomous variables. The answer indicating that a participant responded no was coded as 0 and the answer indicating that a participant did receive breastfeeding information was coded as 1.

Demographic Characteristics

Demographic information for age, education, and health insurance were compiled by the LaPRAMS team using birth certificate data. Age was measured as a continuous variable in years. Education was assessed using a question with the following categories: 0-8 years, 9-11 years, 12 years, 13-15 years, and more than or equal to 12 years. Health insurance was coded as a categorical variable into the categories Medicaid, private insurance self-pay, Champus/TRICARE, and other.

Qualitative

To collect qualitative data, responses to LaPRAMS open-ended questions pertaining to breastfeeding behavior were examined. The following breastfeeding questions were examined: “Before or after your new baby was born, did you receive other breastfeeding information?” and “What were other reasons for not breastfeeding your new baby?” and “After your new baby was born, did you receive other kinds of help with breastfeeding?” These open-ended questions supplemented the quantitative breastfeeding questions and allowed participants to provide other information not captured by the close-ended responses.

To explore institutional barriers and support relating to employment, responses to the open-ended question about employment was examined. It stated: “Please tell us about your MAIN job during your most recent pregnancy. What was your job title and what were your usual activities or duties?” Additionally, responses to the last page of the questionnaire were also included. It stated: “Please use this space for any additional comments you would like to make about your experiences around the time of your pregnancy or the health of mothers and babies in Louisiana”. These comments are referred to by PRAMS as ‘back page comments.’ Each

qualitative question's recurring answers led to themes that can be used to understand breastfeeding barriers and supports.

The sample size for each of these open-ended questions varied due to questionnaire skip patterns: 48 for breastfeeding help question, 87 for the breastfeeding information question, 114 for back page comments, 156 for the breastfeeding sources question, and 897 for employment.

Data Analysis

Quantitative

Means and proportions of study variables were calculated for the total sample and stratified by breastfeeding groups (i.e., ever breastfed and never breastfed). Ever breastfed are participants responding yes to initiating breastfeeding and never breastfed are participants responding no to initiating breastfeeding. The adjusted Wald's test was used to compare proportions for dichotomous variables across the two groups. The Chi-Square Test of Independence was conducted to determine significant differences between the two breastfeeding groups for the following categorical variables: education, breastfeeding variables, breastfeeding information variables, WIC participation, and health insurance. Age was used as a continuous variable, and means were compared using the t-test. Statistical significance was determined at $p < 0.05$. All analyses were conducted using Stata 17 (StataCorp, 2021).

Qualitative

Thematic analysis techniques were used to identify patterns in the qualitative data using Microsoft Excel. (Braun & Clarke (2006). The steps of thematic analysis are familiarizing one's self with the data, compiling themes based upon recurring answers, reviewing, defining

and naming themes. Two coders analyzed the qualitative data together in efforts to correctly identify themes, reduce error, and increase validity.

RESULTS

Quantitative Findings

Means and proportions for each study variable for the total sample and stratified by breastfeeding group are presented in Table 1. The sample size for the ever breastfeeding group is 708. The sample size for the never breastfed groups is 508. Approximately 44.63% of the total sample had 13 or more years of education. However, 56.84% of the breastfeeding population has 13 or more years of education compared to 27.75% of the never breastfeeding population. A high percentage of participants (86.03) indicated that they were Medicaid recipients. In the total population 86.03% of Black women indicated that they were Medicaid recipients. Compared to the breastfeeding sample, never breastfeeders that didn't breastfeed indicated that they were Medicaid recipients (93.32 vs. 80.79%).

Table 1: Descriptive Statistics for Black Women, Louisiana PRAMS Phase 8 2016-2018 (N=1,217).

	Total Sample (n = 1217)	Breast Feeders (n=708)	Never Breast Feeders (n=509)
Sociodemographic Characteristics			
Maternal Age* {range 13-53}	26.7(5.8)	26.4(.25)	28.3(.38)
Education*			
Up to 8 years	1.65%	10.54%	2.76%
9-11 years	15.95%	31.77%	23.46%
12 years	37.77%	37.75%	46.06%
13-15 years	32.07%	32.07%	24.21%
16 years or more	12.56%	19.09%	3.54%
Breastfeeding			
Ever Breastfeed	58.18%	100%	100%
Planned to Breastfeed	95.07%	95.48%	94.50%
Breastfeeding Information			
Doctors	88.25%	88.84%	87.43%
Nurse, Midwife, or Doula	78.47%	80.51%	75.64%
Hotline	15.69%	17.80%	12.77%
Specialist	68.69%	83.93%	47.31%
Family and Friends	53.59%	58.64%	46.55%
Breastfeeding Information from WIC	96.40%	97%	95.79%
WIC Participation			
WIC Services	77.81%	71.89%	86.05%
Health Insurance*			
Medicaid	86.03%	80.79%	93.32%
Private Insurance	12.98%	18.08%	5.89%
Self-Pay	0.01%	0.14%	0.20%
Champus/TRICARE	0.58%	0.85%	0.59%
Other	0.33%	0.85%	0.59%

Abbreviations: PRAMS, Pregnancy Risk Assessments Monitoring System

Note: Values reported as (percentages).

*indicates significant differences between breastfeeding groups when $p < 0.05$

Table 2 identifies the hospital supports that breastfeeding Black women received. Black women who initiated breastfeeding reported high percentages of receiving position help (88.56%), milk production (88.70%), managing nipple pain (73.73%), information on where to get a pump (83.90%), and breastfeeding information via hospital pain (97.32%). However, the results indicated that very few Black women (32.20%) continued breastfeeding.

Table 2: Breastfeeding Initiation Influences for Black Women who Breastfeed, Louisiana PRAMS Phase 8 2016—2018_(N=708).

Breastfeeding Initiation Influences	
Received position help	88.56%
Received help on milk production	88.70%
Received help managing nipple pain	73.73%
Received info on where to get pump	83.90%
Received info on how to use pump	69.21%
Received breastfeeding help through a support group	68.79%
Still breastfeeds	32.20%
Hospital staff educated on breastfeeding info	97.32%

Abbreviations: PRAMS, Pregnancy Risk Assessments Monitoring System

Table 3 identified breastfeeding barriers for women who did not breastfeed. Approximately 7.66% of Black women reported that being sick was a barrier to breastfeeding. Black women identified breastfeeding as being too hard and work as a barrier at 15.72% for each. Additionally, 50.88% of Black women identified school and didn't want too as a barrier to breastfeeding.

Table 3: Breastfeeding Barriers for Black Women Who Never Breastfed, Louisiana PRAMS Phase 8 (N=509).

Breastfeeding Barriers	
Mother was sick	7.66%
Breastfeeding was too hard	15.72%
Didn't want to breastfeed	50.88%
Work interfered with breastfeeding	15.72%
School interfered with breastfeeding	50.88%

Abbreviations: PRAMS, Pregnancy Risk Assessments Monitoring System

Qualitative Findings

Two themes emerged from qualitative analyses of open-ended breastfeeding questions: 1) Breastfeeding Barriers, and 2) Breastfeeding Supports. Themes are supported with participant quotes from LaPRAMS responses.

Breastfeeding Barriers

The first theme, Breastfeeding Barriers, focused on factors that prevented or hindered breastfeeding initiation and continuation. One of the backpage comments read “*Breastfeeding was overly stressed.*” For non-breastfeeding Black women, other reasons for not breastfeeding included the following issues with breastfeeding initiation, “*painful*” or “*uncomfortable*”, “*baby did not latch*”, and “*didn't produce a lot of milk*”. Comments about pain (15 of 87) and latching (29 of 87) were the top reasons across the 87 responses. These are individual level breastfeeding issues that could have been alleviated with better institutional support within hospitals after birth.

Other backpage comments for this theme related to institutional level barriers with employment and lack of paid maternity leave.

“The lack of maternity leave options for women in the United States is in my opinion a huge problem. Too often women have to return to work much earlier than they should because our country doesn't place any value in the role of being a mother.”

When looking at participants' work titles and work duties there were a variety of positions across the 897 responses. The majority worked in retail, hospitality, and other lower wage earning positions. Cashier and sales associate specifically was the most commonly reported work title. Navigating this line of work while breastfeeding would require pumping breast milk while at work.

Breastfeeding Supports

The second theme, Breastfeeding Supports, relates to factors that help participants overcome breastfeeding barriers. Several backpage comments mentioned the importance of supports, such as *“Get all the support you can get and you will be fine”* and *“Get as much help as possible; Doctors pay attention to patients.”* Receiving breastfeeding information is one type of support. One backpage comment gave an interesting perspective on the importance of breastfeeding information and also social support.

“Almost all of the breastfeeding materials I was given was a result of my asking for it. Information on (and unsolicited sample of) baby formula was much more prevalent & readily available. Thankfully, I have family support and have sought out breastfeeding advocacy groups, but I did not feel very supported in my choice to exclusively breastfeed by hospitals or medical professionals.”

For all Black women regardless of breastfeeding status, other sources of breastfeeding information mentioned were sources such as: *“WIC office”, “internet”, “hospital class”* and

“Healthy Start.” Healthy Start is a federal home visiting program to reduce infant mortality in the Black community. WIC emerged as the most common source for breastfeeding information, with 77 out of 156 participants mentioning it. Internet support also included online forums, Facebook, parenting websites and Google searches.

Social support seemed critical after birth, especially from outside of healthcare providers. One backpage comment described the following.

“My doctor only cared about getting paid from my visits. He wasn't generally concerned about my pregnancy nor my unborn baby. Also there needs to be more information given about breastfeeding groups advocates for breastfeeding moms. Louisiana needs more outreach avenues for moms.”

For breastfeeding participants, other types of breastfeeding supports ranged from “family members”, “WIC office”, “insurance provided me a pump” and “lactation consultant.” Out of 156 responses, the most recurrent were WIC, internet, lactation specialists and family members. Thus, WIC and the internet were important supports both before and after birth. Outside of lactation specialists other healthcare providers, such as doctors and nurses were not commonly mentioned.

Triangulation of Quantitative and Qualitative Findings

There were several instances of agreement between quantitative and qualitative results. Of the total participants, 50.88% did not want to breastfeed and 15.12% reported that breastfeeding was too hard. The qualitative data explain that breastfeeding participants had the support to overcome the most commonly reported barriers by those who did not breastfeed.

At the institutional level, within hospitals, 73.73% of Black women who initiated breastfeeding received help with nipple pain. Qualitative data indicated that pain was a common reason reported by Black women who did not breastfeed. Similarly, a high percentage of participants who initiated breastfeeding received milk production help (88.70%), whereas the qualitative data revealed milk production was a barrier to breastfeeding for those who did not breastfeed. Black women who breastfed identified receiving breastfeeding information from hospital staff whereas in qualitative data. Conversely, those women who did not breastfeed indicated a lack of support from hospitals with the latching issues being the main breastfeeding challenge.

At the community level, WIC participation rates were interestingly high in both breastfeeding and non-breastfeeding participants (71.89% vs 86.05%), but about 14 percentage points higher in non-breastfeeders. For both groups, WIC was reported as a source of breastfeeding information before and after childbirth. WIC does provide free infant formula to low-income families, but it also offers the breastfeeding peer counselor program to support participants to initiate and continue breastfeeding. For breastfeeding women, WIC was also reported as a source of breastfeeding support after childbirth.

Also at the institutional level, with employers, breastfeeding participants more often reported that their job provided health insurance. Although Medicaid was the most common type of health insurance for both groups, Medicaid coverage was 13 percentage points higher in non-breastfeeding participants. The type of job a woman has or does not have will impact the type of insurance she has, the resources available to her, and whether she may have workplace support to breastfeed. Qualitative data highlighted the various types of work duties yet many were hourly,

retail and hospitality positions that would require pumping breast milk. Qualitative data also mentioned lack of paid leave and early return to work as a barrier to breastfeeding.

Discussion

This research examined whether Black women in Louisiana met the Healthy People 2020 goal MICH-21.1 which sought to increase the proportion of infants who are ever breastfed to 81.9%. The research hypothesis was that Black women in Louisiana would not meet the Healthy People 2020 goal. Based on the LaPRAMS findings, which indicated that 58.18% of Black women ever breastfed, we have evidence to support this hypothesis.

Based on both quantitative and qualitative analyses, macrolevel influences such as occupation, paid and unpaid leave, and insurance are barriers that may contribute to the lower Black breastfeeding rates in Louisiana. Findings from the qualitative analysis suggest multilevel influences impacted breastfeeding initiation such as limited sources for breastfeeding information, lack of professional help with milk production, as well as pain tolerance. Both quantitative and qualitative findings also suggest that access to WIC services influenced breastfeeding initiation. Conceptually, the findings are consistent with existing literature using the Socioecological Model as a conceptual framework, such that the choice to breastfeed is not solely the choice of a Black woman and her intention but there are multilevel influences impacting this choice (Synder, 2021). Findings from the present study supports a need to shift focus from microlevel influences to macrolevel influences. Even if a Black woman wants to initiate breastfeeding, she is faced with several barriers on the macrolevel, such as lack of information and hospital support to navigate breastfeeding-related pain, and milk supply concerns, and lack of paid leave and early return to work. These barriers hinder her choice to breastfeed.

This study has several strengths. This study utilizes data collected by the LaPRAMS surveillance system. Using LaPRAMS data allowed the use of a standardized data collection methodology and approach used across multiple states, thus increasing validity of the results. Moreover, this study used a sample restricted to Black women participating in the LaPRAMS. Existing studies typically use a comparison group (i.e., Black women compared to white women) to identify disparities in breastfeeding. Using a within-group design focused solely on Black women will lead to improving Black women's breastfeeding rates due to Black women generally being under accounted for and left behind evidenced by current breastfeeding rates. Employing a mixed-methods design added new information to understanding the breastfeeding disparity in Louisiana between Black women and other racial and ethnic groups. However, this research has limitations. One limitation of the study included the use of secondary data. Although using secondary data was time and cost-efficient, researchers have no control over the quality of data such as missingness and question format. The data consisted of unexplainable missingness such as paid leave questions and a decrease in sample size as the questionnaire progresses, which wasn't explained by skip patterns. Future research can involve the reformatting of the PRAMS questionnaire to account for the missingness due to limited qualitative responses and incomplete survey responses due to survey length.

Future Research

This research provides several areas for future efforts. Future research should aim to focus on Black women in order to further identify barriers and supports experienced by Black women that may contribute to initiation and sustainability of breastfeeding. In addition, future efforts should analyze and advocate for the use of Baby-friendly hospital practices to decrease knowledge gaps on pain tolerance and milk production issues experienced by Black women.

Lastly, there is evidence for policies that promote breastfeeding practices such as paid maternity leave.

Conclusion

Overall findings indicate that Black women in Louisiana did not meet the Healthy People 2020 breastfeeding goal. This is extremely important to note because this goal is not included in the Healthy People 2030 goals. Goals are removed once they appear to have been met. This goal was met nationally for all women but the goal did not capture the needs of Black women. This is one example of how the effects of racism via the lack of equity-focused public health practices and policies play a vital role in terms of health. Black women are being left behind and under accounted for in national objectives and measurements. There is an essential need to continuously explore the needs of Black women in efforts to achieve breastfeeding equity so that they (Black women and infants) can thrive.

Work Cited

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APPENDIX

Variables of Interest

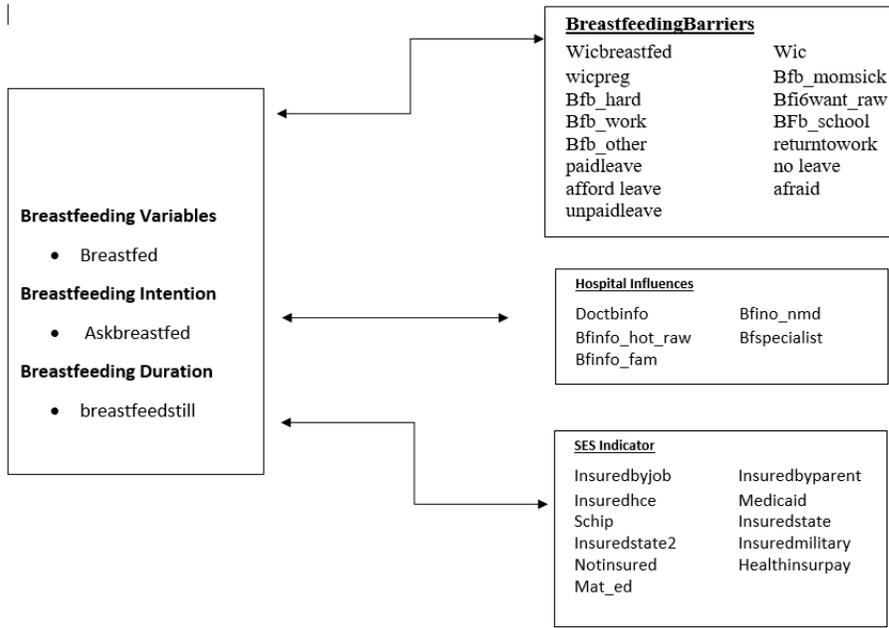


Table A: Understanding Macro Level Influences on Breastfeeding Initiation from Louisiana PRAMS Phase 8 Survey

Survey		
Variable	Definition	Item Number
Breastfeeding Initiation	Reported the initiation of breastfeeding and barriers if participant did not breastfeed	47, 48, 49, 50
Employment	Reported employment status, occupation, and/or salary cuts before, during, or after their most recent pregnancy; also includes questions pertaining to returning to work	38 e, f, g, 70, 71, 72, 73, 74
Healthcare	Reported health care visit or interactions with a health care provider pertaining to breastfeeding	6, 19i, 46, 52,
Insurance	Reported having insurance	9, 10, 11, 66j
WIC	Reported receiving services from the Supplemental Nutrition Program for Women, Infants and Children (WIC) during most recent pregnancy	24, 25, 69b