

4-28-2026

Prenatal Care Access and Pregnancy Outcomes Among Black Women Ages 15–44 in Cook County, Illinois

Deandrea Heggins
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Public Health Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Health Sciences and Public Policy

This is to certify that the doctoral study by

Deandrea Heggins

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Heba Athar, Committee Chairperson, Public Health Faculty
Dr. Gwendolyn Francavillo, Committee Member, Public Health Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2026

Abstract

Prenatal Care Access and Pregnancy Outcomes Among Black Women Ages 15–44

in Cook County, Illinois

by

Deandrea Heggins

MPH, Purdue University, 2018

BS, Texas Southern University, 2010

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Public Health

Walden University

May 2026

Abstract

Maternal health disparities affecting Black women in the United States remain a persistent public health concern due to inequities in prenatal care access and adverse birth outcomes. Prior research has shown that socioeconomic conditions, insurance coverage, and systemic barriers influence prenatal care utilization and maternal outcomes; however, limited research has examined how Medicaid coverage, household income, preterm birth, and birth weight are collectively associated with prenatal care access among Black women in Cook County, Illinois. The purpose of this quantitative correlational study was to examine the relationships among these factors and access to prenatal care among Black women ages 15–44 in Cook County, Illinois. Bronfenbrenner’s (1979) socioecological model guided the examination of individual, community, and systemic influences on prenatal care utilization. Using a quantitative correlational design, secondary data were obtained from a sample of 90 Black women ages 15–44 in Cook County, Illinois, drawn from the National Center for Health Statistics' maternal and child health dataset, and analyzed using multiple logistic regression in SPSS Version 28. Results indicated statistically significant relationships between Medicaid coverage, household income, and access to prenatal care, suggesting that socioeconomic and structural determinants contribute to disparities in prenatal care utilization. These findings may support positive social change by informing public health policy, strengthening maternal health programs, and guiding targeted interventions to improve prenatal care access and reduce disparities.

Prenatal Care Access and Pregnancy Outcomes Among Black Women Ages 15–44
in Cook County, Illinois

by

Deandrea Heggins

MPH, Purdue University, 2018

BS, Texas Southern University, 2010

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Public Health

Walden University

May 2026

Dedication

This dissertation is dedicated to my grandmother, my mother, my husband, my daughters, Taylor and Kylee, my siblings, and the many family members whose love and encouragement have shaped my life and sustained me throughout this journey. In loving memory of my grandmother, Evon Branham, whose enduring love, quiet strength, and unwavering belief in me continue to guide my path. The values she instilled in me live on in all that I do, and this achievement stands as a reflection of the legacy she so beautifully created. With deepest gratitude to my mother, Sharon Anderson, whose sacrifices, unconditional love, and steadfast strength laid the foundation for every opportunity I have been given. Her constant encouragement and belief in me carried me through this journey and remains a source of strength in all that I pursue. To my husband, Christopher Heggins, thank you for your unwavering support, patience, and love. You stood beside me through every challenge and every triumph, providing strength when I needed it most. This accomplishment is as much yours as it is mine. To my daughters, Taylor, and Kylee, you are my greatest inspiration. Your curiosity, resilience, and joy remind me daily of the beauty of growth and possibility. This work reflects my deep love for you and the hopes I hold for your future. May you always believe in yourselves, pursue your dreams with confidence, and never forget that greatness already lives within you. I am deeply grateful to my sisters and brother for their constant love and encouragement. As the youngest, I have always looked to each of you with admiration, and I carry your support with me in all that I do. This dedication also extends to my extended family—the Anthony, Barnes, Boston, Eldridge, English, Hamilton, Heggins Harris, Jarvis, Jennings, Lankford, O’Neil,

Reagler, Smith, Woods, and Wright families—whose love, guidance, and presence have shaped my journey in meaningful ways. Your support has been a quiet but powerful force behind this achievement. Your support has been a quiet but powerful force behind this achievement. This milestone is not mine alone. It reflects the collective love, sacrifice, encouragement, and belief of all who have supported me along the way. I carry each of you with me in this accomplishment, and I am forever grateful.

Acknowledgments

This work reflects the guidance, mentorship, and support of individuals who have shaped both my academic journey and professional growth in meaningful ways. I am deeply grateful for the early influence of my fifth-grade teacher, Ms. Harriet Willis, whose encouragement, and passion for learning helped build my academic foundation. Her belief in me sparked a lasting appreciation for education and continues to inspire my commitment to lifelong learning. I extend sincere appreciation to my former Department of State Health Services Director, Sydney Minnerly, whose leadership, mentorship, and confidence in my abilities played an instrumental role in my professional development. Her encouragement and insight strengthened my resolve to pursue this research with clarity and purpose, and her impact remains both meaningful and enduring. I am also truly thankful for the collaboration and support of colleagues from the Operations and Research Team. Their openness in sharing knowledge, willingness to offer guidance, and commitment to a supportive environment strengthened both my growth and confidence as a researcher. I further extend heartfelt gratitude to the former Informatics Advanced Analytics team for their professionalism, kindness, and encouragement. Their support and positive presence created an environment where growth was not only possible but genuinely encouraged, and it is sincerely appreciated.

Table of Contents

| | |
|---|-----|
| List of Tables | iii |
| List of Figures..... | iv |
| Section 1: Foundation of the Study and Literature Review..... | 1 |
| Introduction..... | 1 |
| Background..... | 2 |
| Problem Statement..... | 5 |
| Purpose of the Study..... | 6 |
| Research Questions and Hypotheses | 7 |
| Theoretical Framework..... | 8 |
| Nature of Study..... | 10 |
| Literature Search Strategy | 11 |
| Review of Literature..... | 13 |
| Medicaid Coverage and Access to Prenatal Care | 13 |
| Household Income and Access to Prenatal Care | 22 |
| Preterm Birth Weight and Access to Prenatal Care | 27 |
| Racial Disparities and Access to Prenatal Care | 30 |
| Controlling Variables | 35 |
| Definitions | 37 |
| Assumptions | 38 |
| Scope and Delimitations..... | 38 |
| Limitations..... | 39 |

| | |
|--|----|
| Significance | 39 |
| Summary and Conclusion..... | 40 |
| Section 2: Research Design and Data Collection | 42 |
| Method and Design..... | 43 |
| Sampling..... | 44 |
| Data Analysis | 47 |
| Ethical Considerations | 51 |
| Summary..... | 51 |
| Section 3: Presentation of the Results and Findings..... | 54 |
| Descriptive Statistics of Sample | 55 |
| Results of Binary Logistic Regression | 59 |
| Summary..... | 69 |
| Section 4: Application to Professional Practice and Implications for Social Change | 71 |
| Interpretation of Findings | 72 |
| Limitations of the Study | 77 |
| Recommendations..... | 78 |
| Public Health Practice and Field-Based Products | 79 |
| Positive Social Change | 80 |
| Conclusion | 83 |
| References..... | 84 |

List of Tables

| | |
|--|----|
| Table 1. Race of Females | 56 |
| Table 2. Prenatal Care Access | 57 |
| Table 3. Medicaid..... | 57 |
| Table 4. Income Level..... | 57 |
| Table 5. Premature Birth..... | 58 |
| Table 6. Birth Weight Status | 58 |
| Table 7. Education Level | 58 |
| Table 8. Marital Status | 59 |
| Table 9. Results of Binary Regression of Model Predicting Access to Prenatal Care From Medicaid Coverage, Household Income, Preterm Birth, Birth Weight, Age, Education | 61 |
| Table 10. Results of Binary Logistic Regression for Marital Status and Education Level Moderating the Relationship Between Medicaid Coverage, Household Income, Preterm Birth, Birth Weight, Age, and Access to Prenatal Care* | 63 |

List of Figures

| | |
|---|----|
| Figure 1. Socioecological Model | 9 |
| Figure 2. *Power Output for Minimum Sample Size Required for Multiple Regression Analysis..... | 46 |
| Figure 3. Sample Size as a Function of Statistical Power | 47 |

Section 1: Foundation of the Study and Literature Review

Introduction

Documented differences in birth outcomes highlight persistent disparities affecting African American mothers and infants and provide insight into a social problem that must be addressed in the United States, particularly disparities in access to healthcare services and socioeconomic status. Despite many improvements in the health status of Black women and other demographic improvements, they have a higher likelihood of experiencing adverse birth outcomes, such as preterm births, including preterm babies with low weight (Crockett et al., 2022). While examining prenatal care, Medicaid and household income emerged as the two most significant factors affecting women's access to services (Brown et al., 2019). As the primary insurance program in the United States, Medicaid provides essential prenatal healthcare services to low-income pregnant women.

Several empirical findings have provided evidence to underpin insurance status and household income propositions on the timing, rate, and quality of prenatal services for pregnant women (Bellerose et al., 2022; Kaur et al., 2023). Altogether, these variables can negatively affect birth outcomes with the effects being worse among Black women who have higher likelihood of engaging in lower-paying occupations and also use Medicaid at much higher rates than others. Concerning these more nuanced aspects of the socio-economic determinants, the interactions with healthcare access and demand reveal where disparity reduction efforts should be focused (Taylor et al., 2021).

Overall, analysis of Medicaid coverage, household income, and prenatal care access among Black women is important for policymakers, health care providers, planners, and researchers to design and develop more appropriate prenatal care policies

and systems in the plan of narrowing documented race disparity (Peterson et al., 2022). Such relationships are apparent and necessary for explaining how to improve accessibility to prenatal care and enhance outcomes of the birth rate for these minority groups.

This section presents the background to the study, the research problem, and the study's purpose. The other subsections included in this section are the research questions and hypotheses, theoretical framework, nature of the study, and the literature search strategy. I use this section to present a detailed literature synthesis related to the study variables, definitions, assumptions, scope and delimitations, limitations, significance, summary, and conclusions.

Background

Healthcare disparities in the United States significantly affect access to and affordability of medical services. Between 1999 and 2018, Mahajan et al. (2021) identified significant ethnic and racial differences in healthcare status, access, and affordability. Low-income African American individuals experienced notably reduced access to healthcare compared to their White peers. Shrank et al. (2021) highlighted the critical need to enhance insurance coverage and improve advanced home-based care as essential measures to address these inequalities and rising healthcare costs. Additionally, a report by Deloitte indicated that while the United States cannot sustain healthcare disparities, these inequities restrict access to affordable, high-quality care for underserved populations (American Medical Association and Association of American Medical Colleges, 2021).

Numerous studies have highlighted racial and ethnic disparities in access to affordable and quality healthcare (Buchmueller & Levy, 2020; Coombs et al., 2021; McMaughan et al., 2020). Buchmueller and Levy (2020) link these disparities to inadequate insurance coverage and limited access to healthcare, primarily due to rising costs. Furthermore, barriers such as unequal insurance coverage, unaffordable healthcare, shortage of healthcare services, and insufficient financial resources significantly impede access to high-quality healthcare (Coombs et al., 2021). In their investigation of the connection between social and economic status and healthcare access in the United States, McMaughan et al. (2020) found that among the elderly, poorer health outcomes were associated with lower economic and social status, as well as limited access to healthcare. Therefore, given the overwhelming evidence of healthcare inequality in the United States, I sought to investigate the impacts of racial disparities on Medicaid coverage, birth weight, household income, access (frequency and timing) of prenatal care, and preterm birth in pregnancy among Black women ages 15–44 in Cook County, Illinois.

Several researchers have attempted to investigate pregnancy-related health results among Black women in the United States. In one such study, Braveman et al. (2021) explored the disparities in Black-White preterm births asserting that racism, chronic stress, socioeconomic conditions, and genetic influences contributed to the disparities in Black-White preterm births. Assessing the impacts of stress and racism on preterm births among Black women, Giurgescu et al. (2022) found chronic stressors associated with lower socio-economic status and elevated levels of racial discrimination resulted in Black women experiencing higher rates of preterm births. Similarly, Jahn et al. (2022)

demonstrated that exposure to neighborhood policing and structural racism increased preterm births among Black women.

Access to prenatal care for Black women in the United States is profoundly affected by systemic racism, affordability, and socioeconomic factors. A systematic review and meta-analysis by Silva et al. (2022) demonstrated that Black women have the lowest first-trimester prenatal care access rates among various ethnic groups.

Additionally, Taylor (2020) found that disparities in Medicaid access contribute to lower utilization of preventive care and worse birth outcomes for pregnant women. Ognogho and Saque (2020) further observed that, despite the expansion of Medicaid facilitating early prenatal care access, Black mothers without Medicaid extensions faced significant barriers in obtaining adequate prenatal services. Supporting this, Palmer (2020) reported that increased Medicaid eligibility positively influenced access to prenatal care for both Black and White pregnant women. Together, these studies highlight the essential role of financial resources and systemic inequities in determining access to prenatal care for Black women.

Despite this, there remains a significant gap in the current research regarding pregnancy outcomes for Black women ages 15–44 in Cook County, Illinois. Whereas researchers have investigated the varied aspects impacting prenatal care among Black women, they have yet to examine how cultural competency programs may be used to improve Black women's access to prenatal care with Medicaid coverage (Upadhyay et al., 2022). Therefore, addressing this research gap increases Black women's access to prenatal care while addressing the impacts of socioeconomic status on preterm birth and access to prenatal care. The findings of this study inform policy and development, as well

as implementation that will expand Medicaid coverage and improve Black women's use of prenatal care in the United States.

Problem Statement

The problem addressed is the lack of understanding regarding how Medicaid coverage, household income, birth weight, and preterm birth influence access to prenatal care among Black women ages 15–44 in Cook County, Illinois. While several researchers have investigated the factors affecting early birth among Black women in this demographic, the interaction between socioeconomic factors—such as Medicaid coverage and household income—and birth outcomes, including birth weight and preterm birth, remains inadequately explored. Consequently, the relationship between these variables and access to prenatal care for Black women of reproductive age in Cook County is not well understood. For instance, researchers such as Alexander and Schnell (2024) and Alhalel et al. (2022) have reported that excessive bureaucracy, limited provider capacity, and transport challenges hindered patient access to quality care. Similarly, structural bias and acts of racism added to the complexities of accessing and using healthcare (Conteh et al., 2022). Concerning pregnancy-health outcomes, low-income Black women continue to experience more hardships regarding nutrition, environmental risks, and job demands (Curtis et al., 2022; Jackson et al., 2021).

While researchers have examined the varied factors affecting the pregnancy health outcomes of Black women, they have yet to examine how household income, birth weight, Medicaid coverage, preterm birth, and access to prenatal care affect the pregnancy health outcomes of Black women. Attempting to address this problem, Taylor (2020), and Ognogho and Saque (2020) reported that compared to commercial insurance,

states with Medicaid extensions reported higher rates of prenatal care. Similarly, Palmer (2020) found Medicaid eligibility based on income increased prenatal access for Black women. However, income manipulation decreased Medicaid-paid births among Black women in the United States. In contrast, Braveman et al. (2021) associated disparity in preterm births among African American and White women with chronic stress, racism, and low socioeconomic status. Therefore, this study addressed this gap by investigating whether household income, Medicaid coverage, preterm birth, and birth weight impact Black women's access to prenatal care in Cook County, Illinois.

Purpose of the Study

The aim of this quantitative correlational research was to investigate the link between Medicaid coverage, household income, preterm birth weight, and access to prenatal care among Black women ages 15–44 in Cook County, Illinois. The dependent variable was access to prenatal care while the independent variables were preterm birth weight, Medicaid coverage, and household income. Age was one of the controlling variables given that younger or older women may have different health risks and access to care. The second controlling variable was geographical location given that urban vs. rural areas may impact healthcare access and income disparities. Establishing the relationship among the study variables may inform efforts to improve Black women's access to prenatal care in Cook County when age and geographical location are the controlling variables. This study's findings may also inform the development of policies aimed at increasing Medicaid coverage for Black women with low household income positively influencing birth weight and reducing the rates of preterm births in this population.

Research Questions and Hypotheses

The following research questions (RQs) guided this study:

RQ1: What is the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 living in Cook County, Illinois, while controlling for age?

H_01 : There is no significant relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 living in Cook County, Illinois, while controlling for age.

H_11 : There is a significant relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to the prenatal care of Black women ages 15–44 living in Cook County, Illinois, while controlling for age.

RQ2: Do marital status and education level moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 living in Cook County, Illinois?

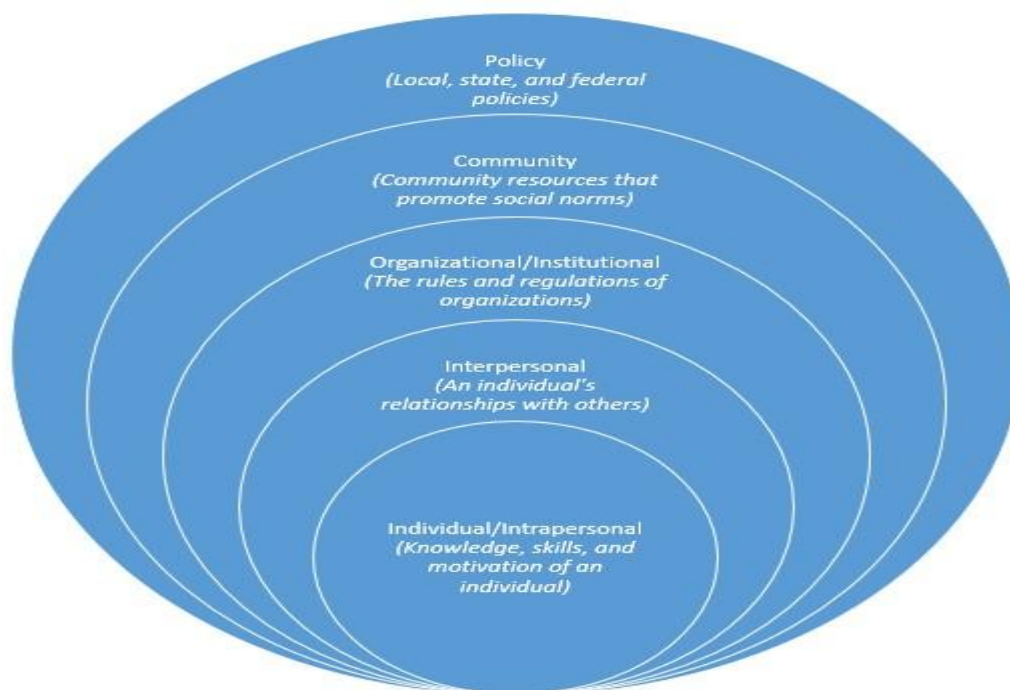
H_02 : Marital status and education level do not moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 living in Cook County, Illinois.

H_12 : Marital status and education level moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and the access to the prenatal care of Black women ages 15–44 living in Cook County, Illinois.

Theoretical Framework

Bronfenbrenner's (1977) socioecological model (SEM) provided the theoretical foundation for this research. Originating from Bronfenbrenner's work in the 1970s, SEM has been adapted in public health to analyze health behaviors and outcomes through interconnected individual, community, and systemic factors (Kilanowski, 2017).

SEM is based on the assumption that healthcare practices are impacted by several levels of factors and that effective interventions target these levels simultaneously. In this study, Medicaid coverage (systemic level), household income (community level), and preterm birth weight (individual level) were examined alongside controlling variables such as age and geographic location. Literature has supported the use of SEM, with studies on healthcare access and racial disparities showing its utility in analyzing maternal and child health outcomes (Kilanowski, 2017). Figure 1 below presents a summary of how individual traits, social interactions, and community context shape healthcare decision-making behavior.

Figure 1*Socioecological Model*

Note. Adapted from Bronfenbrenner (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.

The model's strength lies in its ability to provide a multilevel perspective, emphasize equity, and guide the design of comprehensive interventions. However, it also introduces challenges such as complexity in data collection and analysis, high resource requirements for multilevel interventions, and difficulty in establishing causal relationships due to interconnected factors (Bronfenbrenner, 1977). SEM aligned with the RQs by offering a structured approach to understanding how individual, community, and systemic factors influence prenatal care access. Despite its limitations, SEM is well-suited for addressing health disparities, making it an effective framework for this

study to identify actionable strategies for improving prenatal care access in marginalized communities.

Nature of Study

A quantitative research design was used in this study. Quantitative methods are widely used to analyze patterns, relationships, and correlations among measurable variables (Alharahsheh & Pius, 2020). According to Fisher (2014), this approach relies on the collection and analysis of numerical data, enabling researchers to objectively examine trends within populations. Additionally, quantitative research supports hypothesis testing and data-driven conclusions, which are essential for addressing RQs related to variable relationships (Gutterman, 2020). Given these strengths, a quantitative methodology is well suited for this study, as it allows for a rigorous evaluation of how socioeconomic and health-related factors influence prenatal care access for study participants.

Correlational research design was adopted in this study. Correlational research design is a nonexperimental research design used by researchers to examine whether there is a statistically significant relationship between the research variables (Seeram, 2019). In correlational design, the researcher does not manipulate or control the study variables (Curtis et al., 2016). The goal of correlational research is to explain and predict associations between study variables (Mohajan, 2020). The Correlational research design served to examine whether there was a statistically significant relationship between Medicaid coverage, household income, preterm birth, birth weight, and Black women ages 15–44 access to prenatal care in Cook County, Illinois.

Secondary data was collected and analyzed to examine this. The secondary data was retrieved from the National Center for Health Statistics (NCHS) for Maternal and

Child Health Data (NCHS, 2021). The data set included data on Medicaid coverage, household income, preterm birth, birth weight, and use of prenatal care among Black women ages 15–44 in Cook County, Illinois. The SPSS Statistics Version 28.0 software was used for data analysis. I used multiple regression analysis to examine the existence of a statistically significant relationship.

Literature Search Strategy

The literature search strategy aimed at determining access to prenatal care, birth weight, and preterm birth among Black women ages 15–44 in Cook County, Illinois and its relationship with Medicaid status and household income. First, the search was based on the primary databases most applicable to the healthcare sector and wider social sciences. These databases included PubMed, Embase, Scopus, Google Scholar, and Web of Science. The selected databases published peer-reviewed articles on medical studies, public health, and social sciences. In addition, keyword searches were determined. Specific search terms were grouped around insurance and income status, population and birth outcomes, and prenatal care access, to make sure the subject of this research was thoroughly covered.

The first category of keywords was related to insurance and income status and contained “Medicaid,” “public insurance,” “health insurance,” “medical assistance,” “household income,” “family income,” “socioeconomic status,” and other close phrases. The second cluster concerned the population and birth outcomes, such as African American and birth results terms like “birth weight,” “low birth weight,” “preterm birth,” and “pregnancy outcomes.” The third group focused on prenatal care access and included such words as “prenatal care,” “antenatal care,” “healthcare utilization,” birth weight OR

preterm birth,” birth weight AND preterm birth, and “access to health services.” The terms were then joined together using relevant Boolean operators to make comprehensive search terms to suit the widespread characteristics of each database.

Considering the time sensitivity of the research topic, the search was limited to articles and other publications from 2020 to 2024. The inclusion criteria prioritized works published in English authored by U.S. researchers, with the samples consisting entirely of or including a significant African American population. The study had to include the main outcomes of Medicaid status and income markers, and either birth weight or preterm birth.

Although the analytic sample included 90 Black women, this sample size was appropriate for a population-specific, county-level secondary data analysis. The study was designed to examine associations rather than to produce population-level causal inference. A post hoc power assessment indicates that, with an alpha level of .05 and a medium effect size, the sample size provides sufficient statistical power to detect meaningful relationships among study variables. Although an a priori power analysis indicated a larger ideal sample size, the final analytic sample included 90 Black women due to the population-specific and secondary nature of the dataset. Accordingly, the analyses were interpreted as exploratory and context-specific, and limitations related to statistical power were acknowledged.

This systematic approach intended to yield a comprehensive body of literature relevant to the direction, strength, and nature of the relationships among Medicaid coverage, household income, prenatal care utilization, and birth outcomes for Black women. The approach enables a textbook and almost bias-free classification of evidence

data, thus grounding the subsequent analysis of this significant public health problem on methodological soundness.

Review of Literature

Although researchers have examined factors related to the topic of this research, it remains unclear whether these factors influence prenatal care utilization among the target group. In this subsection, a detailed literature synthesis was conducted to establish whether there was a statistically significant relationship between the study variables.

Medicaid Coverage and Access to Prenatal Care

Medicaid's Role in Accessing Prenatal Care

The status of Medicaid coverage and accessibility to prenatal care constitutes a core concern of public health in the United States, especially for the Black women who experience a higher risk of maternal mortality. While Medicaid is a fundamental insurance coverage source, there are large gaps in the use of prenatal care (Fox et al., 2023). Black women have high chances of dying from complications related to pregnancy and childbirth as opposed to any other race, and pregnant Black women are more likely to be readmitted to the hospital or die from any cause than White pregnant women (Brown et al., 2021). However, this federal-state program has helped to increase access to basic prenatal care services even though various barriers exist in the low-income group in accessing healthcare services. Knowledge of such dynamics is crucial for designing appropriate prevention and treatment strategies for the enhancement of maternal health status.

As a form of financial access, Medicaid plays a key role in enabling pregnant women to access required prenatal care since out-of-pocket expenses may function as

barriers because their costs are reduced or even eliminated. Services include antenatal clinic appointments, expert referrals, biochemical tests, and fetal anatomy ultrasounds during pregnancy (Farringer, 2021). Similarly, medication that is essential for pregnant women like prenatal vitamins, folic acid supplements, and any pregnancy-related medicine required to treat diseases like gestational diabetes or pregnancy-induced high blood pressure is covered under Medicaid (Frayne et al., 2021). Without such funding, there are chances that most economically disadvantaged women could not afford basic antenatal care essential for the child's and mother's health due to excessive costs (Scott & Qamar, 2024). Thus, the expansion of the Medicaid program guarantees that these services are affordable and accessible to all expectant women so that they can start receiving prenatal care in early pregnancy and attend their antenatal appointments regularly to recognize and proactively manage any pregnancy complications.

Prenatal care access through Medicaid during the first trimester is crucial in ensuring the good health of pregnant women and their fetuses. Early access is especially important because it helps obtain initial health parameters, detect diseases before pregnancy, and participate in preventive measures that can help minimize pregnancy complications (Harvey et al., 2021). Medicaid also helps cover the number and frequency of prenatal visits (Eliason et al., 2021). The frequent checkups assist healthcare providers in observing fetal development and changes in maternal health and observe any newly arising complications. In addition, Medicaid provides help with the immediate referral to specific maternal-fetal medicine specialists and other concerned subspecialties in cases when behaviors are to be identified as high-risk conditions like gestational diabetes, preeclampsia, or multiple pregnancies (Morgan et al., 2022). Therefore, routine prenatal

care, and entering prenatal care early, cover all necessary services for checking complications with high risk and appropriate care to the mother and baby. In turn, this leads to improved birth outcomes and low maternal morbidity levels.

Medicaid includes a broad range of services that show a more complex view of prenatal care that is not restrained to medical procedures, since the health of women during pregnancy has several aspects. Prenatal mental health care is essential because the mother can develop depression, anxiety, or postpartum mood disorders that affect her and the fetus (Margerison et al., 2021). The coverage entails counseling sessions when such conditions require psychiatric attention or prescription of medications. Likewise, substance use treatment coverage aims at fulfilling an important aspect of public health by offering both outpatient and inpatient treatment, medication-assisted treatment, and counseling services to pregnant women with substance use disorders (Horan et al., 2023). Nutrition counseling services are used for proper diet during pregnancy, treatment of complications that are linked to pregnancy, including gestational diabetes, and appropriate weight gain during pregnancy (Lacci-Reilly et al., 2023). So far, this detailed strategy reduces risks and provides the best results for both the mother and the newborn.

The way Medicaid contributes to the reduction of disparities is a positive move towards the attainment of health equity, especially as it pertains to the elimination of disparities in healthcare access experienced by Black women ages 15–44 in Cook County, Illinois. By offering primary care to a population with a high level of poverty, Medicaid has the potential to mitigate the root causes of persistent maternal health inequalities (Dihwa et al., 2022). Medicaid does not only encompass health services but

also includes many social needs like medical transportation, nutritional support, and community resources (Monroe et al., 2023).

Similarly, Medicaid assists in addressing disparities in the past regarding being able to access preventive services, specialty care, and perinatal care that may be too expensive. Also, the Medicaid coverage model has a significant role in reducing the impacts of intergenerational poverty on health, since pregnant individuals are not exposed to catastrophic health expenditures (East et al., 2023). The approach of a comprehensive model for healthcare access is steadily addressing the maternal health inequalities present in the American healthcare system for Black women who have a disproportionately high risk of mortality during childbirth.

Support Systems and Cultural Competency Efforts

Medicaid cultural competency programs are examples of culturally specific efforts to improve healthcare disparities through better coordination and accessibility of prenatal care services. Specialized outreach programs employed in states involve partnerships with community-based organizations to create culturally appropriate health promotion information, use different languages to promote information, and build confidence in the targeted population (Upadhyay et al., 2022). Community-based doula services have been successful, especially with the provision of culturally sensitive emotional support, counseling, and encouragement before, during, and after childbirth by doulas from similar cultural backgrounds (Thomas et al., 2023).

Doulas sometimes know the specific cultural practices and values concerning pregnancy and birth within certain cultures. The integration with existing community health workers (CHWs) further enhances these programs because CHWs are critical

liaisons between healthcare and the community as they facilitate the interpretation of culture and language and provide culturally appropriate health literacy (Heisler et al., 2022). Combined, these cultural competency efforts support the development of a better and more culturally sensitive prenatal care system for Black communities.

Support systems are important enablers in enhancing prenatal care provision and access and utilization among Black women with Medicaid. Community health worker programs use locals who are conversant with the community's culture and can gain the trust of the women as they assist in the complexities of the health system (Ignoffo et al., 2022). The workers are usually from the same background as the women they help, so they act as a link between communities and medical personnel.

Likewise, doula services, which are now being reimbursed by Medicaid in many states, offer critical emotional and physical support at the time of pregnancy, during birth, and the immediate weeks following, which improves the birth outcomes of Black women (Ogunwole et al., 2022). Patient navigation support assists women in overcoming numerous healthcare system-related challenges, making appointments, comprehending medical directions, and accessing information and resources (Ruderman et al., 2023). Altogether, these support systems form a system that aids Black women get past historical, systematic, and practicable barriers that deny them prenatal care through Medicaid.

Educational interventions can be considered essential connectors in enhancing prenatal care use of among Black women with Medicaid insurance. Prenatal education programs developed with Black communities in mind, focus on concerns particular to Black women and include culturally relevant beliefs, presenting information that is

congruent with the participants' experiences (Garfield & Watson-Singleton, 2021). The approach transcends the provision of simple medical knowledge and the knowledge that women have in the system, and it also enables them to circumnavigate the health system, read medical jargon, and make decisions on their health with some understanding of the history of medical abuse.

In addition, cultural humility education for the healthcare team is mandatory, which encompasses knowledge about Black Americans' attitudes toward health and medicine, as well as biased thinking, and culturally sensitive interaction approaches (Berger & Miller, 2021). Community mobilization initiatives, sometimes by known community-based organizations and faith-based organizations, link women to available Medicaid services, educate them on eligibility and contractual entitlements, and follow up with them during pregnancy (Blebu et al., 2023). The programs often comprise peer support groups, mobile health units, and community-based workshops that help to increase the use of prenatal services and culturally appropriate prenatal education, hence improving maternal health.

At the system level, some enablers help Medicaid pregnant Black women gain access to health care services. Presumptive eligibility programs are especially effective as women can get temporary Medicaid coverage based on estimated income, while a more comprehensive application is completed to ensure they can get prenatal care (Knowlton et al., 2024). Early access is essential in the management of first trimester complications which are important to the mother's and the fetus's health. Continuous eligibility policies prevent women from being at risk of losing their insurance coverage during their pregnancy, a situation that may be occasioned by changes in income or other

administrative procedures (Miller & Hudak, 2023). The increase in postpartum coverage from the initial 60 days to one year in several states has been revolutionary as it has provided women with continued healthcare access during the vulnerable months when maternal morbidity and mortality occur (Interrante et al., 2022). Self-enrollment procedures such as online applications, fewer documents, and support from CHWs have enabled Black women to sign up and retain Medicaid easily compared to the past, thereby eliminating barriers to prenatal and postpartum care.

Provider incentive programs are one of the most critical strategies for increasing and enhancing prenatal care service options for Black women on Medicaid. Higher reimbursement rates lead to increased healthcare provider participation in accepting Medicaid patients as well as expanding on investing in comprehensive care services, especially in the areas where the Black American population dominate and may have less access to these services (Donohue et al., 2022).

Quality improvement programs reward providers for achieving certain targets concerning maternal health which include early initiation of prenatal care, and frequent screening for complications that are prevalent in the Black community. These programs contain incentives for decreasing racial differences in treatment outcomes (Maclean et al., 2023). Integrated care models have received support in the past and have revolutionized the provision of care through the integration of obstetric care with mental health, social work, nutrition counseling, and community health worker services (Outland et al., 2022). The comprehensive care models are especially helpful to Black women since they focus on the medical and social aspects of women's health.

Barriers and Challenges in Medicaid Access

However, there are several barriers related to Medicaid coverage and access to prenatal care. Structural barriers to prenatal care access in Black communities are significantly impacted by provider availability issues, creating a complex web of challenges that disproportionately affect maternal health outcomes. The limited number of healthcare providers accepting Medicaid presents a particular challenge, as many practitioners restrict Medicaid patients because of lower reimbursement rates, creating long waiting lists and delayed care initiation (Alexander & Schnell, 2024; Alhalel et al., 2022). The scarcity is especially pronounced in predominantly Black American neighborhoods, where there is often a disparity in the geographic distribution of qualified obstetric providers.

The geographic misdistribution of providers frequently forces pregnant individuals to travel long distances for care, a burden that becomes particularly acute in both urban and rural areas where Black American communities are concentrated (Ploplis, 2021). The spatial disconnect between provider locations and patient populations often requires multiple bus transfers or lengthy car rides, leading to missed appointments and delayed care. The situation is further complicated when considering high-risk pregnancies, which require specialized care often concentrated in urban medical centers, potentially hours away from patients' homes (Ho et al., 2024). The geographic barrier significantly impacts the consistency and age prenatal care that is accessed by Black women.

Access to prenatal care among Black women enrolled in Medicaid is a challenge, because they are forced to wait a long time to see doctors, and they also have trouble

getting transportation to their appointments, which can significantly affect the timing and quality of prenatal care they receive. Initial appointments can take several weeks to months, especially when timely prenatal care is critical during early pregnancy to rule out complications (Reid et al., 2021). The delays are worse in districts where few professionals are available, thereby making patients have to either wait for nearby appointments or travel long distances for earlier ones.

Transportation issues exacerbate these issues since most women depend on poorly developed or inefficient transport networks or have to make several transfers to access facilities such as hospitals (Sebens & Williams, 2022). However, even when Medicaid offers transportation help, issues with scheduling, prior appointments, and restricted geographical access add to the challenges (Klare et al., 2024). For women with high-risk pregnancies, prenatal visits may be more frequent, and these problems of transportation can affect their access to adequate prenatal care, with possible adverse effects such as delays in management and an increased risk higher risk of adverse outcomes.

The complex Medicaid application process can be intimidating, especially when previous healthcare interactions have been traumatic (McCloskey et al., 2021). These combined factors mean that having Medicaid coverage does not automatically translate to receiving timely, quality prenatal care. Some women report feeling they have to advocate more strongly for basic services or bring family members to appointments to ensure they receive appropriate care, creating additional burdens in accessing covered services.

Structural factors, especially communication barriers, limit the participation of Black women in prenatal care services even with Medicaid coverage. Providers use medical jargon in their explanations to patients, which is challenging when they do not

take their time to explain diseases, operations, or treatments in simple and comprehensible language for all patients (Peahl et al., 2022). This is further exacerbated by the limited supply of tailored health literacy materials that are relevant to the Black American population. Most of the prenatal education materials do not feature different families and do not consider cultural practices in pregnancy and childbirth (Soucy et al., 2023). Further, even though most Black American patients speak English, there always remain important disparities in the ways of communication, cultural gestures and perceptions, and the ways that health-related information is understood and interpreted, which providers often do not take into consideration or overcome (Adebayo et al., 2024). This can result in misconceptions regarding treatments, decreased confidence in doctors' advice, and, consequently, inferior prenatal care.

Household Income and Access to Prenatal Care

Household income plays an important role in defining the extent of adequate maternal care that Black women can receive despite being on Medicaid. Despite Medicaid offering fundamental health insurance, many women continue to incur excessive costs that are not reimbursable as they need additional care during high-risk pregnancies (Jackson et al., 2021).

Financial decisions frequently result in challenging choices between obtaining preventive care and other essential needs. The cost of early pregnancy testing and the time when prenatal care is taken may be a drawback since early intervention could be missed (Grand-Guillaume-Perrenoud et al., 2022). Further, even if prescriptions are reimbursable by Medicaid, out-of-pocket expenses that patients bear for medications and supplements are burdensome for them (Gordon et al., 2022). These barriers are even

profound amongst households that need to pay bills as soon as they are due since unexpected expenses such as medical bills can lead to further hardship. Altogether, these financial factors mean that Black women receive care that is disjointed, late, and which places them at a higher risk for pregnancy complications.

Lack of financial resources limits Black women's access to prenatal care services, making it difficult for them to seek appropriate healthcare services. Employment loss pressures women into deferring prenatal care since most low-income jobs lack paid leave for such appointments (Gamberini et al., 2022). The situation becomes even more complicated for women who must balance prenatal check-ins and their jobs, when there is the chance of losing their jobs if they take time off from work (Mehra et al., 2023). Similarly, transportation issues exacerbate these difficulties as most women in such households do not have cars and have to rely on public transport which is poor or irregular. The transport costs ranging from fares for public transport to ride-hailing and owning personal cars increase the financial burden (Ruderman et al., 2021). These barriers often lead to either failure or delay of appointments, unstable care schedules, and inadequate prenatal check-ups. As a result of these missed opportunities in care, pregnancy complications and timely interventions are missed; can eventually lead to poor maternal health in Black American communities.

Lack of financial capabilities hinders Black women's ability to establish continuity with healthcare providers and receive adequate prenatal care. This limitation brings about discontinuity in prenatal care among low-income Black women who frequently switch providers because of there being few available Medicaid-accepting practices (Wishart et al., 2021). Discontinuity may delay certain prenatal tests since every

new doctor may not have the patient's full medical history or may overlook previous cases of concern. Further, the comprehensive model of prenatal care is threatened when Black women cannot afford other necessary and additional services that are not entirely reimbursable by Medicaid (Newton-Levinson et al., 2024). Affordable or free prenatal classes, which offer information on childbirth and parenting, have hidden expenses that put pressure on already stretched finances. For example, professional lactation support, which is crucial in initiating and sustaining breastfeeding, may be unavailable, or costly (Dailey et al., 2024). Lack of support services can lead to disparity in the health of the mother and the infant as long-term effects are observed in maternal and child health care beyond the prenatal period.

The role of household income on birth weight among Black women is highly associated with nutrition and financial pressure. Food insecurity affects maternal nutrition since the available financial resources might lead to challenges in the quality and quantity of foods women consume (Curtis et al., 2022). Economically challenged communities often experience insufficient access to proper supermarkets or farmers' markets, which results in poor-quality food. However, these areas are filled with convenience stores and fast food making it difficult to balance meals when pregnant (Zinga et al., 2022). The stress arising from financial difficulties results in elevated cortisol levels that affect fetal growth. Stress along with poor nutrition also contributes to the body's consistently changed biological state which can result in low birth weight and other pregnancy complications (Epstein et al., 2021). The unending stress and the reality of not frequently getting nutritious food leads to a cycle that increases negative pregnancy outcomes that are unique to Black women, including giving birth to low-birth-weight babies.

The cross-sectional nature of birth weight and environmental effects becomes a barrier for Black mothers in low-income neighborhoods to access prenatal services. The absence of proper dietary consultation and basic supplements becomes a significant barrier to mothers as they cannot obtain necessary information regarding their nutritional needs during pregnancy, resulting in non-nutrition which has a direct influence on fetal growth (King et al., 2021). Another challenge that makes the task difficult is that the majority of the areas that contain affordable housing units contain elevated levels of risky substances such as lead, asbestos, mold, and industrial emissions. These neighborhoods are located close to roads, industrial facilities, or other sources of pollution, including polluted areas that reduce fetal oxygen and nutrient supply (Johnson et al., 2021). Similarly, inadequate stocks of commodities to treat and monitor complications related to pregnancy including gestational diabetes, hypertension, or anemia result in poor management and follow-up (Ghazi et al., 2021). When a mother cannot get usual health checkups, proper nutrition, or safe environment, then the overall impact leads to increased low-birth weight risk and current and future health problems in the baby.

The influence of household income on health outcomes of Black women's maternity is revealed through the cycle of financial insecurity and stress. The ongoing pressure to cope with scarce financial resources brings long-lasting psychological and physiological pressure that influences cortisol and blood pressure, threatening both the mother and fetus's well-being (Somerville et al., 2021). The challenge is compounded by a lack of health insurance, and preventive checkups for diseases that are more common in Black women, remaining lifelong illnesses that need strict clinical follow-up and management during pregnancy, including hypertension, diabetes, and heart disease.

Most of these women are employed in low-paying occupations and they are at substantial risk of developing work-related health complications such as standing for long hours, lifting heavy objects, coming into contact with chemicals, and insecure working hours (Terlap, 2023). The physically demanding conditions, coupled with poor access to adequate medical care or the inability to take time off for appointments exacerbate the situation where existing chronic health conditions may only deteriorate during pregnancy (Chantararat et al., 2022). Financial pressure, poor health care access, and dangerous working conditions that the vulnerable group is exposed to further augment the risks of pregnancy complications and poor birth outcomes.

The cumulative impacts of shift work on maternal health among Black women establish a vicious cycle of health decline during pregnancy. Most of these women are employed or have multiple jobs and are therefore likely to have little time to rest as they should during pregnancy (Hailu et al., 2022). Physical tiredness is compounded by the fact that most low-wage workers have little leeway to change how their work environment is set up for pregnant employees as there is little employers can do for pregnant workers in most low-wage jobs.

Lack of job security or reduced pay discourages them from making requests such as reduced standing time, lighter task assignments, or frequent breaks, leading to physical stress and complications during pregnancy (Canty, 2022). While long hours at work are often associated with strict working conditions, this situation tends to lead to missed or postponed medical appointments, which in turn increases the level of unaddressed infections and other preventable consequences (Horner-Johnson et al., 2021). Therefore,

the interconnected web of workplace demands, and healthcare barriers pose a much higher risk of pregnancy as it may lead to complications and adverse birth outcomes.

Preterm Birth Weight and Access to Prenatal Care

Early education on pregnancy management may prevent preterm birth outcomes among pregnant women. Research has indicated that educating pregnant women on the proper management of pregnancy may lead to insignificant risk of preterm birth (Peahl et al., 2020). Physicians can detect health issues that can result in either premature birth or giving birth to an overweight or underweight infant, which results in health complications for the child, and can educate these women on how to manage their pregnancy for positive birth outcomes (Altman et al., 2020). Along this line of thought, some studies have shown that women who experience preterm birth have limited knowledge of pregnancy management including lifestyle habits such as nutrition (Alio et al., 2022; Wang et al., 2021). The results suggest that regular visits for check-ups may allow maternal health practitioners to educate pregnant women on how to manage their pregnancy conditions to avoid future complications during birth such as preterm birth or overweight/underweight infants. Thus, early prenatal care activities such as educating pregnant women on how to manage their pregnancy including suitable nutrition for a healthy infant may contribute to positive birth outcomes.

Receiving sufficient education on prenatal care can promote early clinical visits for check-ups resulting in positive birth outcomes among pregnant women. The agreement across diverse research demonstrates the strength of the empirical evidence that links sufficient education on prenatal care to a higher possibility of preterm birth (Adebayo et al., 2024). Preterm birth is the most prevalent birth outcome among pregnant

women who did not have prior education about pregnancy management practices provided by prenatal care practitioners (Hemphill et al., 2023). Still, on the concept of antenatal care education for pregnant mothers, there is adequate empirical evidence regarding increased cases of preterm birth among minority women, especially those living in remote areas with limited prenatal care services (Chambers et al., 2022).

Such limited education on prenatal care education among these women may have prevented early detection and prevention of adverse birth outcomes. On the other hand, a lack of antenatal care education among mothers can contribute to inadequate ANC attendance leading to adverse birth outcomes such as low birth weight or even neonatal deaths (Oribhabor et al., 2020). Ensuring adequate education on prenatal care for pregnant women can contribute to a significant reduction in adverse or fatal birth outcomes including a decreased rate of low weight after birth and preterm birth.

Providing mental health counseling to pregnant women during antenatal care can promote positive birth outcomes and prevent preterm birth. Studies conducted to determine the influence of prenatal care on birth outcomes among Black women showed that accessing early and regular antenatal care can improve the chances of healthy pregnancy and reduce severe birth outcomes such as preterm and low or high birth weight of infants (Janevic et al., 2020; Mehra et al., 2020). In one study exploring the effect of mental health counseling on birth outcomes among Black women ages 15–44 in the state of Illinois, pregnant women who received emotional support through counseling experienced positive birth outcomes due to reduced levels of stress and depression that may affect pregnancy (Logan et al., 2021).

Similarly, other studies conducted to investigate the impact of stress and depression on birth outcomes among pregnant Black women in the United States revealed that high levels of stress and depression may harm pregnant women as the majority of such women experience miscarriage and preterm birth (Langley-Evans et al., 2022; Lee et al., 2020). As a result, prenatal care services such as mental health support can help these women cope with stressful and depressing situations without affecting their birth outcomes. Therefore, accessing mental health professionals in the antenatal care unit to address stress levels can help pregnant women have positive birth outcomes.

Engaging in prenatal care by pregnant women can lead to enhanced fetal monitoring to promote improved fetal growth and development. Present research indicates that prenatal care promotes regular fetal monitoring and healthcare interventions for fetal development during pregnancy, thus contributing to positive birth outcomes among pregnant Black women (Attanasio & Paterno, 2021). Visiting clinics for prenatal care services can offer physicians the opportunity to monitor and track the growth and development of the infant in the womb (Ruiz et al., 2022). This fetal monitoring helps practitioners identify and address any obstacles to the safe and positive development and growth of the infant for positive future birth outcomes.

The role of prenatal care is thus to ensure fetal monitoring that would help in detecting health issues related to the development and growth of the infant as a way of effective and better preparedness for future positive birth outcomes (Harris et al., 2020). According to Guglielminotti et al. (2021), monitoring the growth of the child in the womb helps prenatal care practitioners identify any abnormalities that may lead to adverse future birth outcomes among pregnant Black women. This finding underscores

the significance of prenatal care for regular monitoring and health interventions by healthcare practitioners during pregnancy to achieve positive birth outcomes. Such regular prenatal care for enhanced fetal monitoring can thus contribute to reduced adverse birth outcomes among expectant Black American mothers.

Counseling on nutrition by prenatal care practitioners can promote positive birth outcomes among women who are pregnant. Taylor (2020), in a cohort study, demonstrated that the dietary patterns of pregnant Black American mothers can affect the risk of anomalies in the growth and development of infants and can affect birth outcomes. This result suggests that women with limited dietary patterns or practices are more likely to have preterm birth and low birth weight. However, in one study assessing the influence of nutrition on birth outcomes, the results showed no relationship between nutrition and birth outcomes among pregnant women (Interrante et al., 2022). Other studies resonate with these findings by suggesting the need for support services such as dietary management training to help pregnant women understand suitable nutrition required for effective growth and development of the infant before birth for reduced fatal birth outcomes including preterm birth (Saadat et al., 2022; Wang et al., 2021). Nutritional practices provided in prenatal care clinics can be important in reducing fatal maternal outcomes.

Racial Disparities and Access to Prenatal Care

Black women experience disparities in maternal health in achieving positive health outcomes for the mother and the child. Although maternal healthcare is important for all women to enhance effective and positive birth outcomes, Black women have faced various challenges. This section provides a discussion of the literature on the specific

challenges faced by Black women in achieving positive health outcomes for the mother and the child, including the role of systemic inequities, healthcare access, and the quality of prenatal care received.

Black women face different challenges related to systemic inequities such as racial discrimination, which leads to the development of chronic stress when seeking prenatal care in maternal health. Racial discrimination experienced while accessing essential health services may result in chronic stress that can contribute to high blood pressure and preeclampsia, which may lead to adverse health outcomes of infants and their mothers among pregnant Black women in the United States (Saluja & Bryant, 2021). The existence of racism within the U.S. cultural context has contributed to discrimination of Black women accessing healthcare for prenatal care services and this leads to an increased rate of chronic stress and high blood pressure that may affect mothers' health and the health of infants before birth (Davidson et al., 2022).

These health conditions are hazardous to both the infant and the mothers, contributing to severe maternal health outcomes among Black women. The denial of vital services such as access to healthcare due to the skin color of pregnant mothers suggests that systemic racism is a pervasive problem faced by Black women in prenatal care (Jean-Francois et al., 2021). In this regard, systemic inequities such as racism may lead to anxiety and stress, contributing to health issues that may affect infants and their Black American mothers' maternal health outcomes.

Racial discrimination in the healthcare system thus prevents Black American mothers from accessing prenatal care services. The lack of prenatal care services access by Black women due to racial treatment by healthcare professionals contributes to

increased maternal mortality and morbidity (Michel & Fontenot, 2023). A study investigating pregnant Black women's mental health showed a fervent desire to access healthcare practitioners with knowledge of white supremacy, consciousness about racism, and comprehension of racial issues regarding equality of healthcare to develop trust in the health system (Kemet et al., 2022). Black women give birth to their infants in healthcare facilities with higher mortality rates for infants and their mothers and a lower quality of prenatal care as opposed to White women who have access to hospitals with quality care (Dagher & Linares, 2022). The Centers for Disease Control and Prevention (CDC) (2020) suggested that unlike other races, Black women are more likely than White and Latina counterparts to die during pregnancy or when giving birth due to lack of access to quality healthcare.

The rate of chronic conditions can be a great concern for pregnant Black women. Previous research indicates that the high rate of chronic conditions among Black women can contribute to a higher risk for health outcomes among infants and mothers (Craft-Blacksheare & Kahn, 2023). According to research conducted by the CDC (2020), Black women are prone to a variety of chronic health conditions such as hypertension due to racist treatments, diabetes due to lack of adequate diet or poor nutrition, and limited resources to access quality healthcare services. Such health complications are dangerous for these women during pregnancy as they can affect both the mother's and infant's health and may contribute to adverse maternal health outcomes such as preterm and low birth weight (Brase et al., 2021; CDC, 2020).

Discrepancies in healthcare access have been attributed to increased chronic conditions among Black women compared to White women, contributing to limited

healthcare access and high maternal mortality (Berkowitz et al., 2022). Also, research has indicated that in addition to ineffective communication with healthcare practitioners, Black women have problems achieving appropriate prenatal care, limiting their access to healthcare services and leading to adverse maternal health outcomes (Howell et al., 2020). Chronic conditions among Black women can have a significant impact on maternal and infant health outcomes.

Black women face several administrative barriers when attempting to access prenatal care through Medicaid in the United States, including program complexity and inadequate coverage. The registration process typically entails multiple documents, various identification procedures, and complex documentation standards that are tiresome and burdensome (Bellerose et al., 2022). A lot of women struggle to collect the necessary documents like proof of income or residency, and a pregnancy certificate, which is difficult for women with multiple jobs or unstable housing. For this reason, during the eligibility determination period, which may last for weeks or even months, women may face gaps in insurance coverage that make it impossible to receive critical initial prenatal care (Yates et al., 2022). Administrative barriers are likely to further disadvantage Black women who may face other forms of workplace discrimination and resource scarcity, which may delay their entry into prenatal care and pregnancy-related complications.

Documentation requirements and language barriers when applying for Medicaid significantly hinder the chances of Black women getting prenatal care. The documentation process requires identification in multiple forms, proof of income, pregnancy tests, and proof of residency, which can be very difficult for women in informal employment, those who have no bank accounts, or no access to such documents

(Barnett et al., 2022; Fryer et al., 2021). Documentation and language issues lead to incomplete applications, delays in processing or rejection of applications for coverage, and, thus, delays in critical prenatal care at the beginning of pregnancy. Additionally, the comorbidity of race, language, and poverty can lead to a multiplication of challenges regarding administrative staff who may not have received cultural sensitivity training (Joudeh et al., 2021).

Even when Medicaid coverage is available, historical trauma and ongoing systemic racism create significant barricades that prevent Black women from fully accessing prenatal services. Many women reported avoiding or delaying Medicaid enrollment and prenatal visits because of previous negative healthcare experiences or stories from family members about discriminatory treatment (Conteh et al., 2022). This reluctance can result in missed early prenatal care opportunities, even when financially covered by Medicaid. Additionally, systemic racism manifests in practical access barriers – some Medicaid-enrolled providers demonstrated bias in scheduling, offering fewer or delayed appointment slots to Black American patients, or providing rushed, lower-quality care during visits (Tyler, 2022).

The quality of healthcare received can have a significant impact on maternal and infant health outcomes. As Black women, they often receive prenatal care that is of low quality due to limited healthcare resources, including caregivers of low quality and qualifications assigned to minority women in prenatal care (Welch et al., 2022). By exploring discrepancies in prenatal care quality for Black women seeking prenatal care services, Clay (2022) revealed that there was implicit bias leading to low quality caregivers being assigned to Black women compared to White women, who have access

to qualified and quality caregivers in prenatal care clinics. This view was also echoed in empirical research indicating that Black women who seek expert prenatal care practices end up with unaddressed complications such as preterm birth and miscarriage because of the low quality of care received in prenatal care facilities or clinics (Salahuddin et al., 2022). These disparities in healthcare contribute to adverse maternal and infant health outcomes among Black women.

Controlling Variables

Age can be a significant control variable that may impact access to prenatal care due to its ability to affect results more independently of the major variables in this study. Control of age can ensure that it does not impact the association between other variables including pregnancy results and prenatal care access. Age factors can have a significant impact on prenatal care access (Adedokun & Yaya, 2020). Many younger women have demonstrated delaying enrollment in Medicaid and prenatal visits due to a lack of awareness about prenatal care services and stories from family members concerning the discriminatory treatment they experienced when visiting clinics (Conteh et al., 2022).

Teenage women may fail to visit healthcare facilities due to limited financial resources and social stigma. According to Wallace et al. (2021), younger women in their 20s are less likely to access prenatal care services compared to those in their late 30s. As a result, the reluctance among younger Black women can result in missed early prenatal care opportunities due to unawareness of such services even when Medicaid financially covers them. This can affect their use of prenatal care services. Thus, whereas age as a controlling variable can have an important impact on prenatal care access among Black women, this variable was controlled using statistical models that will account for age

differences among the participants to prevent its impact on the research outcomes.

Older Black women may have different healthcare needs for prenatal care access or may have different risks that need prenatal care services. Research shows that age may affect their healthcare needs and the need for special care based on their risks (Thompson et al., 2022). The healthcare quality received among older Black women may have a significant impact on their maternal and infant health outcomes compared to younger

Black women with fewer risks and complications (Riggan et al., 2021). Therefore, older Black women often have access to high-quality prenatal care services due to complications and care need risks.

Younger Black mothers may experience preterm-related complications, while older Black women may experience risks including diabetes and heart issues that may affect their pregnancy outcomes, necessitating special healthcare services such as prenatal care services (Chinn et al., 2021). Therefore, the control variable of age is more likely to affect the relationship between variables and this calls for the need to control such variables by dividing participants into age groups and analyzing their access to prenatal care in groups of Black women of the same age (Pilav et al., 2022). If age is controlled, it ensures that the relationship between independent and dependent variables is not affected by age as a controlling variable. Thus, matching and distributing participants across age groups, including those with high and low access to prenatal care, can be effective in making age a control variable.

The geographical location served as a controlling variable in this study by focusing on Cook County, Illinois, a region with specific socioeconomic and healthcare characteristics that may influence the relationship between Medicaid coverage, household

income, preterm birth weight, and access to prenatal care among Black women ages 15–44. By restricting analysis to this particular area, the study minimized variability arising from regional differences in healthcare policies, Medicaid coverage rates, and access to healthcare facilities, which can significantly affect prenatal care availability and outcomes (see Okoro et al., 2020). This localized approach ensures that the findings are contextualized within the unique demographic, economic, and healthcare landscape of Cook County Illinois allowing for more precise identification of correlations between the variables under investigation (see Bellerose et al., 2022).

Definitions

Birth weight: Cutland et al. (2017) defined birth weight as the first weight of an infant recorded immediately after birth.

Health outcomes: Health outcomes refer to the health consequences as a result of the treatment of a condition or after interacting with healthcare providers (Lamberski, 2022).

Household income: Household income is defined as the total income of a family within 12 months before taxes (Krueger et al., 2024).

Medicaid coverage: Medicaid is a state and federal program that ensures every American has medical cover, especially those families from low-income households to help them cover medical costs (Palmer, 2020).

Preterm birth: Preterm birth is also known as premature birth and is defined as giving birth to a child before the designated time or before 37 weeks of pregnancy (Lemon et al., 2021).

Assumptions

In research, assumptions are things the researcher or readers accept as at least plausible or true (Nkwake, 2013). MacLehose et al. (2021) stated that assumptions are important in research because they help the researcher focus the research on theories and paradigms and encourage critical thinking. In this quantitative research, I assumed that the NCHS would contain the data needed to address the research problem and purpose. I also assumed that the quantitative research approach and research design helped in establishing whether there was a significant association between the study variables.

Scope and Delimitations

Scope and delimitations refer to the boundaries and essential elements of a research study. Researchers define the scope to detail which aspects are included, while the delimitations specify what is excluded from the investigation (Akanle et al., 2020). This study encompassed a comprehensive literature review and an analysis of the relationship between independent and dependent variables. Specifically, I aimed to determine whether a statistically significant relationship exists among Medicaid coverage, household income, birth weight, preterm birth, and the utilization of prenatal care by Black women.

To determine connection between the study variables, this study was delimited to Cook County, Illinois. Delimiting this study to Cook County allowed for an exhaustive and extensive analysis of the data to examine and report how factors such as Medicaid coverage, household income, preterm birth, and birth weight impact Black women's utilization of prenatal care. I also delimited this study using secondary data retrieved from the NCHS. Because the focus was to examine the relationship between the study

variables, I delimited this study to a quantitative research method with a nonexperimental research design. I used quantitative research because it allows for the generalization of the research findings to the larger population (see Fischer et al., 2014).

Limitations

The practical or theoretical setbacks in research are those that may affect the rationality of the study findings and are outside the researcher's control (Akanle et al., 2020). Researchers, whether in qualitative or quantitative studies, anticipate different limitations that range from methodological to theoretical. In this study, I anticipated that the selected quantitative research method and correlational research design would limit this study's applications. Although quantitative research is appropriate for numerical data and the generalizability of the study's findings, it would not allow me to describe the nature of the established relationship using the participant's opinions and experiences.

The second anticipated limitation of this study pertained to the type of data utilized. Due to the study's objectives and the variables involved, I relied on secondary data obtained from the NCHS. While secondary data facilitates a comprehensive analysis, its geographical scope is restricted. Specifically, this research focused on Cook County, Illinois, and the data from the NCHS may lack crucial information necessary to effectively address the RQs and problems. Furthermore, the secondary data may provide limited insights into Black women's utilization of prenatal care, particularly concerning the influences of Medicaid coverage, preterm birth, birth weight, and household income.

Significance

The findings of this study may have several important implications for healthcare and future research. Examining the relationship between Medicaid coverage, household

income, birth weight, preterm birth, and use of prenatal care among Black women ages 15–44 in Cook County, Illinois allowed me to establish the factors hindering Black women from using prenatal care (see McGaughey & Howland, 2025). The findings obtained from this study uncovered the variables affecting the use of prenatal care while encouraging the development of programs that may encourage Black women to engage in prenatal care in Cook County, Illinois. Although researchers have conducted studies addressing this research problem, such studies are yet to be conducted in Cook County, Illinois (see Saygili & Bayindir, 2024). This study’s findings can form the basis for researchers seeking to examine the underutilization of prenatal care by Black women ages 15–44 in Cook County, Illinois, and the United States.

Summary and Conclusion

The literature showed that Medicaid plays a fundamental role in prenatal care access for Black women ages 15–44 in Cook County, Illinois; however, access remains highly restricted even with Medicaid insurance available. The studies conducted so far have also pointed to the structural enabler gaps that remain in place, such as limited provider capacity, transportation challenges, and excessive bureaucracy, which continue to prevent patients from accessing care (Alexander & Schnell, 2024; Alhalel et al., 2022). In addition, social-cultural factors, such as historical and current acts of racism also add to the complexities of healthcare access and use (Conteh et al., 2022). The studies showed that health status has become an important determinant of maternal health status because of socioeconomic factors. Principal of all, employment status, household income, and educational attainment are influential. Low-income Black women were found to

experience more hardships regarding nutrition, environmental risks, and job demands that affect pregnancy outcomes (Curtis et al., 2022; Jackson et al., 2021).

Several critical gaps emerge from the current research landscape. There is limited investigation into the effectiveness of cultural competency programs in improving prenatal care utilization among Black women with Medicaid coverage, despite some evidence that specialized outreach programs with community partnerships can improve care coordination (Upadhyay et al., 2022). Additionally, insufficient attention has been paid to studying how employment status and workplace conditions intersect with prenatal care access for this population, particularly regarding rigid scheduling in service-sector jobs and limited pregnancy accommodation (Johnson, 2021; Sterling & Allan, 2022).

Section 2: Research Design and Data Collection

The aim of this quantitative correlational research was to investigate the link between Medicaid coverage, household income, preterm birth, birth weight, level of education, marital status, and the prenatal care access among Black women ages 15–44 in Cook County, Illinois, while controlling for age. Secondary data from the NCHS for Maternal and Child Health were utilized in the study to address the following RQs and hypotheses:

RQ1: What is the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age?

H₀₁: There is no significant relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age.

H₁₁: There is a significant relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age.

RQ2: Do marital status and education level moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois?

H₀₂: Marital status and education level do not moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois.

H₁₂: Marital status and education level moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois.

What now follows is a discussion of the methods and design utilized in this study. Following the methods and design section was a discussion of the sampling method and data collection procedures. A detailed description of the data analysis required to address the RQs, and hypotheses will then be provided.

Method and Design

The most suitable method for this study was a nonexperimental quantitative methodology with a correlational design because it involved the use of numerical data to test the hypothesis (see McCusker & Gunaydin, 2015). Another reason is that correlational design ensures there is objectivity of the study because the researchers are not part of the study and are separate the participants/respondents (McCusker & Gunaydin, 2015). The lack of manipulation of independent variables is also another reason for using a non-experimental quantitative method with a correlational design (McCusker & Gunaydin, 2015). In addition, a nonexperimental quantitative method with a correlational design was suitable for the objective of the study as it was to examine relationship between the dependent variable access to prenatal care, and the independent variables (Medicaid coverage, household income, preterm birth, birth weight, age, education level, and marital status).

Using a quantitative research methodology, I could utilize numerical data and conduct statistical analyses. This may help minimizing bias, as it focuses on objectivity (Bowers, 2017). Statistical, mathematical, or numerical analyses are the quantitative measures of the collected data via questionnaires and surveys. A qualitative approach was not selected, as the study does not focus on exploring a phenomenon or establishing a theory, model, or definition (Allwood, 2012). Multiple logistic regression was employed as it is appropriate for modeling a dichotomous dependent variable, in this case, access to prenatal care. This permits the examination of the relationship between the dependent variable and multiple independent variables, Medicaid coverage, household income, preterm birth, birth weight, age, education level, and marital status (Field, 2018). In addition, multiple logistic regression analysis enables assessment of the overall relative contribution of each predictor while controlling for influence over other variables (Field, 2018). In multiple logistic regressions, covariates may be added (such as age) to the model to adjust for potential confounding effects.

Sampling

A convenience sample of Black women ages 15–44 in Cook County, Illinois was obtained by utilizing secondary data from the NCHS for Maternal and Child Health. Specifically, data from 2022 and 2023 were utilized. A convenience sample is suitable when the target population meets certain criteria including how willing they are and ready to participate, accessibility, proximity, and availability (Emerson, 2015). According to Roof (2015), an accessible sample comprises of participants who are available to reach. In this case, a convenience sample of Black women ages 15–44 in Cook County, Illinois was included in this study.

I requested access to the NCHS for Maternal and Child Health Data to gather secondary localized health data specific to Cook County. The data set included Medicaid coverage, household income, preterm birth, birth weight, and utilization of prenatal care of Black women ages 15–44, and their Medicaid enrollment. This secondary data source may show insight into the prevalence of pre-term birth, pregnancy outcomes, timing and frequency, prenatal care, Medicaid, and the utilization of prenatal care within the city for this specific age group.

G*Power was used for conducting priori power analysis to determine the minimum sample size required for the study. G*Power is dedicated software for conducting power analysis and computing sample size. G*Power enables use of the priori choice to approximate the suitable sample size for numerous statistical tests.

Furthermore, the researcher can assess the attained power through post hoc analysis (Faul et al., 2007). There are four factors that were considered in the power analysis, including significance level, effect size, the power of the test, and statistical technique. The significance level is the chance where a null hypothesis can be rejected given that it is true (Haas, 2012). In most quantitative studies, a 95% confidence level can be suitable because it sufficiently offers adequate statistical evidence of a test (Creswell & Poth, 2017). The effect size denotes to the projected measurement of the association between the variables being deliberated (Cohen, 1988). Cohen (1988) classified the effect size into small, medium, and large sample sizes. Berger et al. (2013) supposed that an average effect size is better as it attacks a balance between being too strict (small) and too lenient (large). The power of the test denotes to the likelihood of suitably snubbing a null hypothesis (Sullivan & Feinn, 2012). In most quantitative studies, 80% power is

frequently utilized (Sullivan, & Feinn, 2012). The statistical test used in this study was multiple logistic regression. In order to conduct multiple logistic regression to detect a medium effect size, at the 5% level of significance, with 80% power, at least 721 participants are required (see Figures 2 and 3).

Figure 2

**Power Output for Minimum Sample Size Required for Multiple Regression Analysis*

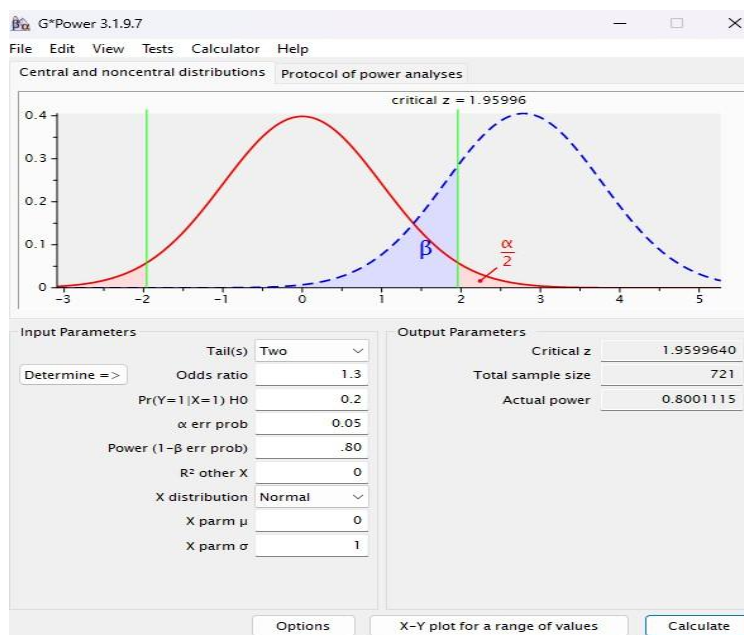
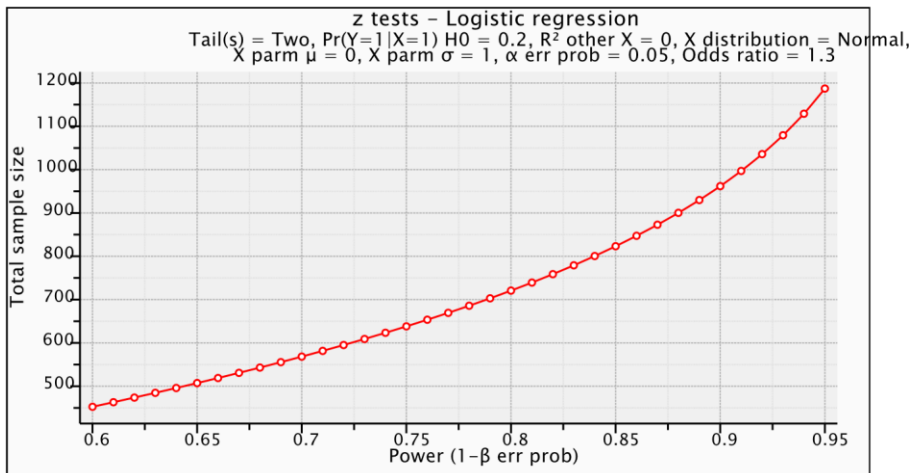


Figure 3

Sample Size as a Function of Statistical Power



Where minimum sample size was not obtained, bootstrapping was engaged.

Bootstrapping offers a chance to use statistics to approximate a population from a small sample (Mooney & Duval, 1993). Bootstrapping is a technique resampling which has been validated for nonparametric studies (Chernick & LaBudde, 2014). Bootstrapping is used for nonparametric research which is validated by arithmetical research projects numbering in the thousands (Chernick & LaBudde, 2014).

Data Analysis

To synthesize the findings, descriptive statistics were adopted to analyze the data. The applied descriptive statistics technique included measures of central tendency, percentages, and frequencies. To test hypotheses and investigate potential links, inferential statistics were used, particularly, multiple logistic regression analysis, was used in this study to examine the relationship between Medicaid coverage, household

income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care.

Data cleaning was conducted by assessing the dataset for missing data (see Field, 2018). The entire data case was eliminated from the analysis if there was a missing value, (listwise deletion). Here, I left the data case from analysis due to a missing value in the dataset in at least one of the specified study variables. Frequency and percentage summaries were used to measure categorical variables, while continuous variables were measured using central tendencies of means, standard deviations, and minimum and maximum values.

Multiple logistic regression analysis was conducted with SPSS software to address this first RQ and hypotheses: the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age.

H₀1: There is no significant relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age.

H₁1: There is a significant relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age.

Before conducting multiple logistic regression analysis, there are conventions that need to be verified. These assumptions include the absence of significant outliers, the lack of multicollinearity, and assessing the dependent variable's logit transformation and the continuous independent variables' linear relationship (see Field, 2018). The linearity of the process was tested using the Box-Tidwell method. All continuous independent variables must first be converted into their natural logs to complete the first step of the Box-Tidwell process. For each of the continuous independent variables and their corresponding natural log transformed variables, interaction terms must be created in the second step of the process. Whether there is linearity between the dependent variable's logit transformation and the continuous independent variables will depend on the significance of the interaction terms. Multicollinearity was examined using variance inflation factors (VIF). A VIF of greater than 10 is considered proof of multicollinearity. I calculated standardized residuals to determine outliers. Field (2018) stated that a residual of more than 2.0 is regarded as an outlier.

The following model was evaluated:

Access to prenatal care = $b_0 + b_1 \text{ Age} + b_2 \text{ Medicaid coverage} + b_3 \text{ Household income} + b_4 \text{ Preterm birth} + b_5 \text{ Birth weight} + b_6 \text{ Education level} + b_7 \text{ Marital status}$ Age and birth weight was measured as continuous variables. The variables Medicaid coverage (yes/no), household income, preterm birth (yes/no), education level, and marital status (yes/no) was measured at the nominal level. The significance of each of the coefficients (b_1 , b_2 , b_3 , b_4 , b_5 , b_6 , and b_7) was assessed at the 5% level of significance. If $p < .05$, it indicates that the predictor is significant in predicting the likelihood of utilization of prenatal care.

If $p > .05$, it indicates that the predictor is not significant in predicting the likelihood of utilization of prenatal care.

Multiple logistic regression analysis was conducted using SPSS software to address the second RQ:

RQ2: Do marital status and education level moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois?

H_{02} : Marital status and education level do not moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois.

H_{12} : Marital status and education level moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois.

The following model was evaluated:

$$\text{Access to prenatal care} = b_0 + b_1 \text{ Medicaid coverage} + b_2 \text{ Household income} + b_3 \text{ Preterm birth} + b_4 \text{ Birth weight} + b_5 \text{ Age} + b_6 \text{ Marital status} + b_7 \text{ Education level} + b_8 \text{ Marital status} * \text{ Medicaid coverage} + b_9 \text{ Marital status} * \text{ Household income} + b_{10}$$

$$\text{Marital status} * \text{ Preterm birth} + b_{11} \text{ Marital status} * \text{ Birth weight} + b_{12} \text{ Marital status} * \text{ Age} + b_{13} \text{ Education level} * \text{ Medicaid coverage} + b_{14} \text{ Education level} * \text{ Household income} + b_{15} \text{ Education level} * \text{ Preterm birth} + b_{16} \text{ Education level} * \text{ Birth weight} + b_{17} \text{ Education level} * \text{ Age}$$

The significance of the F-statistics, specifically, was assessed to determine if the inclusion of the interaction terms (Marital status * Medicaid coverage, Marital status*

Household income, etc.) resulted in a significant change (Field, 2018). If the change in the F -statistics is significant (i.e., $p < .05$), moderation has occurred. On the other hand, if the change in the F -statistics is not significant (i.e., $p > .05$), moderation has not occurred.

Ethical Considerations

Potential ethical issues in conducting research using secondary data include potential harm to individuals, privacy concerns, informed consent, and confidentiality. Specifically, using data that could re-identify individuals without proper anonymization, failing to obtain appropriate consent for future use, and breaching confidentiality are key concerns. Research using secondary data might unintentionally harm individuals if the data, or the results derived from it, could be used to re-identify participants or could cause them distress, embarrassment, or other negative consequences. However, due to non-identity of participants in the data, special precautions were not needed to safeguard participants' anonymity.

Additionally, the informed consent forms were collected from participants by the NCHS survey personnel, and no names appeared during the data collection process. As a result, there was need to have an informed consent process. Data were recovered from the overtly obtainable NCHS for Maternal and Child Health website.

Summary

The purpose of this quantitative correlational study was to investigate the association between Medicaid coverage, household income, preterm birth, birth weight, education level, marital status, and the utilization of the prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age. Secondary data from the

NCHS for Maternal and Child Health was utilized in the study to address the following hypotheses and RQs:

RQ1: What is the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 living in Cook County, Illinois, while controlling for age?

H_01 : There is no significant relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 living in Cook County, Illinois, while controlling for age.

H_11 : There is a significant relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 living in Cook County, Illinois, while controlling for age.

RQ2: Do marital status and education level moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 living in Cook County, Illinois?

H_02 : Marital status and education level do not moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 living in Cook County, Illinois.

H_12 : Marital status and education level moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 living in Cook County, Illinois.

Multiple regression analysis was conducted with SPSS software to address RQs and hypotheses. Significance was assessed at the 5% level of significance. These findings are reported in the next section (Presentation of the Findings).

Section 3: Presentation of the Results and Findings

The aim of this quantitative correlational study was to assess the correlation between Medicaid coverage, household income, preterm birth, birth weight, education level, marital status, and the access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age. Secondary data from the NCHS for Maternal and Child Health was utilized in the study to address the following RQs and hypotheses:

RQ1: What is the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age?

H_01 : There is no significant relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age.

H_11 : There is a significant relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age.

RQ2: Do marital status and education level moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois?

H_02 : Marital status and education level do not moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois.

*H*₁₂: Marital status and education level moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois.

The following section provides a description of the sample, including the measures of variables using minimum, maximum, mean, and standard deviations at the interval level of measurement. For the nominal level of measurement, frequencies and percentages were offered for the measured variables. Next, binary logistic regression was used to conduct analysis to address the RQs and hypotheses.

Descriptive Statistics of Sample

A convenience sample of Black women ages 15–44 in Cook County, Illinois was obtained by utilizing secondary data from the NCHS for Maternal and Child Health. Specifically, data from 2022 and 2023 were utilized. The sample consisted of $N = 1,437$ women with ages ranging from 18 to 44 years ($M = 37.11$, $SD = 4.91$). There were 90 (6.3%) women that were Black American. Most women were White, 1,141 (79.4%).

Because the target population was Black women, the data set was partitioned into Black American women and other races to maintain an adequate sample size for analysis. Table 1 below provides a detailed breakdown of participants' race.

Table 1*Race of Females*

| Race | Frequency | Percent |
|--|-----------|---------|
| White | 1141 | 79.4 |
| Black or African American alone | 90 | 6.3 |
| American Indian or Alaska Native alone | 10 | .7 |
| Asian alone | 95 | 6.6 |
| Native Hawaiian and other Pacific Islander alone | 6 | .4 |
| Two or more races | 95 | 6.6 |

Regarding prenatal care access, 1,360 (94.6%) had access and 75 (5.2%) did not. There were 321 (22.3) females who had Medicaid and 1,114 (77.5%) who did not have Medicaid. Regarding income level, most females were 400% or more above the poverty level, 652 (45.3%). There were 144 (10.0%) females who had a premature birth and 1291 (89.8%) who did not have a premature birth. Regarding birth weight status, most females stated as having or not having low birth weight, 1399 (97.4%). This was followed by low birth weight, 99 (6.9%), and extremely low birth weight, 13 (0.9%). Most females had a college degree or higher, 1008 (70.1%). Lastly, regarding marital status, most females were married, 1121 (78.0%). Tables 2 through 8 below provide this information.

Table 2*Prenatal Care Access*

| Prenatal care | Frequency | Percent |
|---------------|-----------|---------|
| No | 75 | 5.2 |
| Yes | 1360 | 94.6 |
| Missing | 2 | .1 |

Table 3*Medicaid*

| Medicaid | Frequency | Percent |
|----------|-----------|---------|
| No | 1114 | 77.5 |
| Yes | 321 | 22.3 |
| Missing | 2 | .1 |

Table 4*Income Level*

| Income | Frequency | Percent |
|-------------------------------|-----------|---------|
| 0-99% poverty level | 164 | 11.4 |
| 100-199% of poverty level | 189 | 13.2 |
| 200-399% poverty level | 432 | 30.1 |
| 400% or more of poverty level | 652 | 45.4 |

Table 5*Premature Birth*

| Premature birth | Frequency | Percent |
|-----------------|-----------|---------|
| No | 1291 | 89.8 |
| Yes | 144 | 10.0 |
| Missing | 2 | .1 |

Table 6*Birth Weight Status*

| Birth weight | Frequency | Percent |
|--|-----------|---------|
| Very low birth weight (less than 1,500g) | 13 | .9 |
| Low birth weight (less than 2,500g) | 99 | 6.9 |
| Not low birth weight | 1287 | 89.6 |
| No response | 38 | 2.6 |

Table 7*Education Level*

| Education | Frequency | Percent |
|----------------------------------|-----------|---------|
| Less than high school | 29 | 2.0 |
| High school or GED | 137 | 9.5 |
| Some college or technical school | 263 | 18.3 |
| College degree or higher | 1008 | 70.1 |

Table 8*Marital Status*

| Marital status | Frequency | Percent |
|--|-----------|---------|
| Married | 1121 | 78.0 |
| Not married, but living with a partner | 107 | 7.4 |
| Never married | 90 | 6.3 |
| Divorced | 75 | 5.2 |
| Separated | 22 | 1.5 |
| Widowed | 5 | .3 |
| Missing | 17 | 1.2 |

Results of Binary Logistic Regression

Binary logistic regression was conducted with SPSS software to address the first RQ and hypotheses:

RQ1: What is the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age?

H_{01} : There is no significant relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age.

H_{11} : There is a significant relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age.

The independent variables of Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and Black American (coded as 0 for no and 1 for yes) were entered into the Binary logistic regression procedure of SPSS, as well as the dependent variable access to prenatal care. Out of all of the predictors, the only significant predictor was Black/African American ($B = -0.865$, $OR = 0.421$, $p = .042$). Black/African American women had a decreased likelihood of access to pre-natal care by 0.421 compared to other races. Thus, this first null hypothesis is rejected, and it is concluded that there is a significant relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age. Table 9 below provides this information.

Table 9

Results of Binary Regression of Model Predicting Access to Prenatal Care From Medicaid Coverage, Household Income, Preterm Birth, Birth Weight, Age, Education Level, Marital Status, and Black/African American

| Predictor | <i>B</i> | <i>S.E.</i> | <i>dfp</i> | <i>OR</i> |
|-------------------------------------|----------|-------------|------------|------------------|
| Medicaid | .329 | .397 | 1 .407 | 1.390 |
| 400% or more of poverty (Reference) | | | 3 .559 | |
| 0-99% of poverty | -.113 | .468 | 1 .808 | .893 |
| 100-199% of poverty | -.122 | .432 | 1 .777 | .885 |
| 200-399% of poverty | .366 | .318 | 1 .250 | 1.442 |
| Premature | -.387 | .413 | 1 .350 | .679 |
| Not low birth weight (Reference) | | | 2 .894 | |
| Extremely low birth weight | .251 | 1.137 | 1 .826 | 1.285 |
| Low birth weight | -.171 | .467 | 1 .715 | .843 |
| Age | .021 | .026 | 1 .410 | 1.021 |
| College (Reference) | | | 3 .855 | |
| Less than high school | .749 | 1.117 | 1 .503 | 2.115 |
| HS or GED | .000 | .464 | 1 1.000 | 1.000 |
| Some college or technical school | .208 | .360 | 1 .564 | 1.231 |
| Widowed (Reference) | | | 5 .284 | |
| Married | -17.942 | 17898.036 | 1 .999 | .000 |
| Not married | -18.715 | 17898.036 | 1 .999 | .000 |
| Never married | -17.753 | 17898.036 | 1 .999 | .000 |
| Divorced | -18.674 | 17898.036 | 1 .999 | .000 |
| Separated | -18.620 | 17898.036 | 1 .999 | .000 |
| Black | -.865 | .425 | 1 .042 | .421 |
| Constant | 20.083 | 17898.036 | 1 .999 | 527070 035.07 |

Binary logistic regression was conducted with SPSS software to address this second RQ and hypotheses:

RQ2: Do marital status and education level moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois?

H_02 : Marital status and education level do not moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois.

H_12 : Marital status and education level moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois.

The independent variables of Medicaid coverage, household income, preterm birth, birth weight, age, and the interaction terms for Medicaid coverage and household income with the predictor variables were entered into the Binary logistic procedure of SPSS. The dependent variable of access to prenatal care was also entered. The results of the analysis revealed that none of the interaction terms were significant ($p > .05$); therefore, there were no moderation effects of marital status and education level on the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women. As a consequence, the second null hypothesis was not rejected, and it is concluded that marital status and education level do not moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois. Table 10 below provides these results.

Table 10

*Results of Binary Logistic Regression for Marital Status and Education Level Moderating the Relationship Between Medicaid Coverage, Household Income, Preterm Birth, Birth Weight, Age, and Access to Prenatal Care**

| Predictor | <i>B</i> | <i>S.E.</i> | <i>df</i> | <i>p</i> | <i>OR</i> |
|--------------------|----------|-------------|-----------|----------|--|
| Marital Status | | | 5 | .367 | |
| Marital Status (1) | -48.208 | 40193.943 | 1 | .999 | .000 |
| Marital Status (2) | -52.915 | 40193.943 | 1 | .999 | .000 |
| Marital Status (3) | -27.182 | 41985.196 | 1 | .999 | .000 |
| Marital Status (4) | -56.064 | 40193.943 | 1 | .999 | .000 |
| Marital Status (5) | -19.389 | 40193.937 | 1 | 1.000 | .000 |
| | | | 3 | .692 | |
| Education | | | | | |
| Education (1) | 18.158 | 28475.383 | 1 | .999 | 76861182 .350 |
| Education (2) | 19.819 | 14273.609 | 1 | .999 | 40474582 6.879 |
| Education (3) | 3.843 | 3.184 | 1 | .227 | 46.648 |
| Medicaid recode | -4.565 | 56839.390 | 1 | 1.000 | .010 |
| | | | 3 | 1.000 | |
| Income | | | | | |
| Income (1) | 21.905 | 92838.548 | 1 | 1.000 | 32602276 00.848 |
| Income (2) | 4.565 | 80383.348 | 1 | 1.000 | 96.045 |
| Income (3) | 1.658 | 56840.992 | 1 | 1.000 | 5.247 |
| Premature recode | -16.767 | 46449.267 | 1 | 1.000 | .000 |
| | | | 2 | 1.000 | |
| Birth Weight | | | | | |
| Birth Weight (1) | 59.462 | 59509.429 | 1 | .999 | 66669570 03243315 00000000 00.000 |

| Predictor | <i>B</i> | <i>S.E.</i> | <i>df</i> | <i>p</i> | <i>OR</i> |
|---|----------|-------------|-----------|----------|----------------------------|
| Birth Weight (2) | 30.497 | 54006.386 | 1 | 1.000 | 17572549 604626.7 90 |
| A1_AGE | -.727 | .536 | 1 | .175 | .483 |
| Marital Status * | | | 5 | .956 | |
| Medicaid recode Marital Status (1) by Medicaid recode | 5.489 | 56839.390 | 1 | 1.000 | 241.929 |
| Marital Status (2) by Medicaid recode | 5.759 | 56839.390 | 1 | 1.000 | 317.137 |
| Marital Status (3) by Medicaid recode | 6.094 | 56839.390 | 1 | 1.000 | 443.028 |
| Marital Status (4) by Medicaid recode | 6.982 | 56839.390 | 1 | 1.000 | 1076.597 |
| Marital Status (5) by Medicaid recode | 9.664 | 135156.033 | 1 | 1.000 | 15735.21 7 |
| Income * Marital Status | | | 15 | 1.000 | |
| Income (1) by Marital Status (1) | -22.897 | 92838.548 | 1 | 1.000 | .000 |
| Income (1) by Marital Status (2) | -22.421 | 92838.548 | 1 | 1.000 | .000 |
| Income (1) by Marital Status (3) | -41.885 | 93627.979 | 1 | 1.000 | .000 |
| Income (1) by Marital Status (4) | -21.540 | 92838.548 | 1 | 1.000 | .000 |
| Income (1) by Marital Status (5) | -7.534 | 153799.407 | 1 | 1.000 | .001 |

| Predictor | <i>B</i> | <i>S.E.</i> | | <i>df</i> | <i>p</i> |
|---|----------|-------------|---|-----------|------------------|
| Income (2) by Marital Status (1) | -4.663 | 80383.348 | 1 | 1.000 | .009 |
| Income (2) by Marital Status (2) | -5.697 | 80383.348 | 1 | 1.000 | .003 |
| Income (2) by Marital Status (3) | -5.047 | 81693.405 | 1 | 1.000 | .006 |
| Income (2) by Marital Status (4) | -4.427 | 80383.348 | 1 | 1.000 | .012 |
| Income (2) by Marital Status (5) | -12.428 | 146621.692 | 1 | 1.000 | .000 |
| Income (3) by Marital Status (1) | -.875 | 56840.992 | 1 | 1.000 | .417 |
| Income (3) by Marital Status (2) | -1.046 | 56840.992 | 1 | 1.000 | .351 |
| Income (3) by Marital Status (3) | -20.888 | 58121.439 | 1 | 1.000 | .000 |
| Income (3) by Marital Status (4) | -1.366 | 56840.992 | 1 | 1.000 | .255 |
| Income (3) by Marital Status (5) | 16.903 | 60851.706 | 1 | 1.000 | 21922175 .856 |
| Marital Status * | | | 4 | .889 | |
| Premature_recode Marital Status (1) by Premature_recode | 16.910 | 46449.267 | 1 | 1.000 | 22068536 .465 |
| Marital Status (2) by Premature_recode | 15.363 | 46449.267 | 1 | 1.000 | 4700421. 191 |
| Marital Status (3) by Premature_recode | 16.395 | 46449.267 | 1 | 1.000 | 13191356 .544 |
| Marital Status (4) by Premature_recode | -8.568 | 61424.817 | 1 | 1.000 | .000 |

| Predictor | <i>B</i> | <i>S.E.</i> | <i>df</i> | <i>p</i> | <i>OR</i> |
|--|----------|-------------|-----------|----------|----------------|
| Birth Weight * | | | 6 | 1.000 | |
| Marital Status | | | | | |
| Birth Weight (1) by Marital Status (1) | -25.867 | 58375.583 | 1 | 1.000 | .000 |
| Birth Weight (1) by Marital Status (2) | -41.881 | 56841.396 | 1 | .999 | .000 |
| Birth Weight (2) by Marital Status (1) | -31.352 | 54006.386 | 1 | 1.000 | .000 |
| Birth Weight (2) by Marital Status (2) | -31.689 | 54006.386 | 1 | 1.000 | .000 |
| Birth Weight (2) by Marital Status (3) | -13.131 | 54868.325 | 1 | 1.000 | .000 |
| Birth Weight (2) by Marital Status (4) | 13.099 | 72648.699 | 1 | 1.000 | 488637.4 12 |
| A1_AGE * | | | 4 | .131 | |
| Marital Status | | | | | |
| A1_AGE by Marital Status (1) | .747 | .536 | 1 | .163 | 2.111 |
| A1_AGE by Marital Status (2) | .876 | .539 | 1 | .104 | 2.400 |
| A1_AGE by Marital Status (3) | .660 | .539 | 1 | .221 | 1.934 |
| A1_AGE by Marital Status (4) | .917 | .550 | 1 | .095 | 2.502 |
| Education * | | | 3 | .246 | |
| Medicaid_recode | | | | | |

| Predictor | <i>B</i> | <i>S.E.</i> | <i>df</i> | <i>p</i> | <i>OR</i> |
|--------------------------------------|----------|-------------|-----------|----------|-------------------|
| Education (1) by Medicaid_recode | .905 | 55589.757 | 1 | 1.000 | 2.471 |
| Education (2) by Medicaid_recode | -2.862 | 1.502 | 1 | .057 | .057 |
| Education (3) by Medicaid_recode | -1.465 | 1.060 | 1 | .167 | .231 |
| Education * | | | 9 | .806 | |
| Income | | | | | |
| Education (1) by Income (1) | -19.221 | 55489.924 | 1 | 1.000 | .000 |
| Education (1) by Income (2) | 1.963 | 55589.759 | 1 | 1.000 | 7.122 |
| Education (1) by Income (3) | -.185 | 49257.712 | 1 | 1.000 | .831 |
| Education (2) by Income (1) | -18.219 | 14273.609 | 1 | .999 | .000 |
| Education (2) by Income (2) | -18.356 | 14273.609 | 1 | .999 | .000 |
| Education (2) by Income (3) | -19.980 | 14273.609 | 1 | .999 | .000 |
| Education (3) by Income (1) | .854 | 1.851 | 1 | .644 | 2.350 |
| Education (3) by Income (2) | -1.032 | 1.618 | 1 | .524 | .356 |
| Education (3) by Income (3) | -1.688 | 1.446 | 1 | .243 | .185 |
| Education * | | | 3 | .833 | |
| Premature_recode | | | | | |
| Education (1) by Premature_recode | 19.810 | 19657.716 | 1 | .999 | 40116910 8.714 |
| Education (2) by Premature_recode | -1.431 | 1.756 | 1 | .415 | .239 |

| Predictor | <i>B</i> | <i>S.E.</i> | <i>df</i> | <i>p</i> | <i>OR</i> |
|--------------------------------------|----------|-------------|-----------|----------|------------------------------------|
| Education (3) by Premature_recode | -.777 | 1.223 | 1 | .525 | .460 |
| Birth Weight * | | | 5 | 1.000 | |
| Education | | | | | |
| Birth Weight (1) by Education (2) | 2.802 | 27042.431 | 1 | 1.000 | 16.479 |
| Birth Weight (1) by Education (3) | -16.666 | 17618.972 | 1 | .999 | .000 |
| Birth Weight (2) by Education (1) | -21.236 | 52417.271 | 1 | 1.000 | .000 |
| Birth Weight (2) by Education (2) | 22.191 | 8253.009 | 1 | .998 | 43400206 10.369 |
| Birth Weight (2) by Education (3) | .218 | 1.246 | 1 | .861 | 1.244 |
| A1_AGE * | | | 3 | .843 | |
| Education | | | | | |
| A1_AGE by Education (1) | -.011 | .197 | 1 | .955 | .989 |
| A1_AGE by Education (2) | .024 | .086 | 1 | .779 | 1.024 |
| A1_AGE by Education (3) | -.056 | .075 | 1 | .455 | .945 |
| Constant | 50.275 | 40193.943 | 1 | .999 | 68259471 94939710 000000.000 |

Note. For the categorical variables in this model, the reference category is the final group listed in the coding scheme. For Marital Status, “Widowed” serves as the reference category; thus, Marital Status (1) represents Single, Marital Status (2) represents Married/Partnered, and Marital Status (3) represents Divorced. For Gender, “Male” is the reference category, and Gender (1) represents Female. For Ethnicity, “White” is the reference category, and Ethnicity (1) represents Minority. For Education, “Post-graduate degree” is the reference category; Education (1) represents Less than high school, Education (2) represents High school graduate, Education (3) represents Some college, and Education (4) represents College degree.

Summary

The purpose of this quantitative correlational study was to examine the relationship between Medicaid coverage, household income, preterm birth, birth weight, education level, marital status, and the access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age. Secondary data from the NCHS for Maternal and Child Health were utilized in the study to address the following RQs and hypotheses:

RQ1: What is the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 living in Cook County, Illinois, while controlling for age?

H_01 : There is no significant relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 living in Cook County, Illinois, while controlling for age.

H_11 : There is a significant relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 living in Cook County, Illinois, while controlling for age.

RQ2: Do marital status and education level moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 living in Cook County, Illinois?

*H*₀₂: Marital status and education level do not moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 living in Cook County, Illinois.

*H*₁₂: Marital status and education level moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 living in Cook County, Illinois.

Results of binary logistic regression conducted with SPSS software revealed that, out of all of the predictors, the only significant predictor was Black/African American ($B = -0.865$, $OR = 0.421$, $p = .042$). Black/African American women had a decreased likelihood of access to prenatal care by 0.421 compared to other races. Thus, this first null hypothesis is rejected, and it is concluded that there is a significant relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age.

Results of binary logistic regression conducted with SPSS software revealed that none of the interaction terms were significant ($p > .05$); therefore, there were no moderation effects of marital status and education level on the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women. As a consequence, the second null hypothesis was not rejected, and it is concluded that marital status and education level do not moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois.

Section 4: Application to Professional Practice and Implications for Social Change

The issue under investigation was that it was not known if Medicaid coverage, household income, after birth weight, and preterm birth impact the access to prenatal care among Black women ages 15–44 in Cook County, Illinois. This quantitative correlational research was intended to investigate the correlation between these variables for the target group using a quantitative research method.

Secondary data were collected and analyzed to examine the relationship between the variables and Black women's access to prenatal care in Cook County, Illinois. The secondary data was retrieved from the NCHS for Maternal and Child Health Data (NCHS, 2021). The data set included data on Medicaid coverage, household income, preterm birth, birth weight, and use of prenatal care among Black women ages 15–44 in Cook County, Illinois. Multiple logistic regression analysis was adopted for data analysis. The importance of conducting this study is to inform the development of policies aimed at increasing Medicaid coverage for Black women ages 15–44 in Cook County, Illinois with low household income, positively influencing birth weight, and reducing the rates of preterm births in this population.

The data analysis revealed that, among all the predictors, only Black/African American was a significant predictor ($B = -0.865$, $OR = 0.421$, $p = .042$). Black/African women had a decreased likelihood of access to prenatal care by 0.421 compared to other races. Thus, it was concluded that there was a significant relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age. The data also revealed that none of the interaction terms were

significant ($p > .05$); therefore, there were no moderation effects of marital status and education level on the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women. Section 4 presents the interpretation of findings, limitations of the study, recommendations, and implications for public health practice, positive social change, and conclusion.

Interpretation of Findings

This section involves the interpretation of findings as reported in Section 3 of this Dissertation. In this section, the findings are discussed in relation to how they confirm, disconfirm, or extend previous literature. Further, the findings are interpreted from perspective of the theoretical framework guiding this study. The discussion and interpretation of findings are based on RQs.

RQ1: What is the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois, while controlling for age?

The data showed that Black/African American women had limited access to prenatal care compared to other races. The results indicated that only Black/African American women ($B = -0.865$, $OR = 0.421$, $p = .042$) was a significant predictor of access to prenatal care of Black women ages 15–44 in Cook County, Illinois. This result implies that there is a significant correlation between Medicaid coverage, household income, preterm birth, birth weight, age, education level, marital status, and access to prenatal care of Black women ages 15–44 in Cook County. This result confirms disparities in accessing prenatal care services among Black women.

These findings extend and confirm existing empirical research in public health and prenatal care service literature. Previous literature has consistently revealed that prenatal care access disparities among minority communities, such as Black women who have often experienced delayed care, a limited number of prenatal visits, and systemic barriers associated with coverage of insurance and economic status (Silva et al., 2022). Consistent with the findings of this research, Buchmueller and Levy (2020) linked poor insurance coverage and limited access to healthcare to racial and ethnic disparities in healthcare, primarily due to rising costs. Furthermore, Black women face significant barriers to accessing high-quality healthcare, which are exacerbated by inadequate insurance coverage, unaffordable healthcare, a shortage of healthcare services, and insufficient financial resources (Coombs et al., 2021).

Confirming this study's results, empirical research revealed that among Black women, access to prenatal care may be hampered by systemic biases and the unaffordability of care (Silva et al., 2022). Silva et al. (2022) noted that compared to other ethnic groups in the United States, Black women recorded the lowest first-trimester prenatal care access, aligning with the current study's findings that Black/African American women had limited access to prenatal care compared to other races.

Taylor (2020) explained that lower preventative care use and adverse birth outcomes among pregnant women were associated with differences in Medicaid access. Ognogho and Saque (2020) asserted that while Medicaid expansion increased access to early pre-prenatal care, Black mothers without Medicaid expansion reported poor prenatal care and access.

Similar to the current study's findings, Palmer (2020) reported that increasing Medicaid eligibility increased access to prenatal care in both White and Black pregnant women and vice versa, suggesting that access to prenatal care among Black women in the United States is influenced by affordability, racism, and socioeconomic status. The present research confirms the disparities highlighted in the previous literature, revealing that Black/African American women was a significant predictor of access to prenatal care. This suggests that Black women are less likely to access prenatal care services even when accounting for multifaceted demographic and economic variables.

These findings are consistent with existing literature that structural barriers to prenatal care access in African American communities are significantly impacted by provider availability issues, creating a complex web of challenges that disproportionately affect maternal health outcomes. As a result, the limited number of healthcare providers accepting Medicaid presents a particular challenge, as many practitioners restrict the number of Medicaid patients they accept because of lower reimbursement rates, creating long waiting lists and delayed care initiation for Black women seeking prenatal care services (Alexander & Schnell, 2024; Alhalel et al., 2022). This shows that the scarcity is especially noticeable in primarily Black American neighborhoods, where there is often a disproportion in the geographic distribution of competent Obstetric providers.

RQ2: Do marital status and education level moderate the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women ages 15–44 in Cook County, Illinois?

The data revealed that there were no moderation effects of marital status and education level on the relationship between Medicaid coverage, household income,

preterm birth, birth weight, age, and access to prenatal care of Black women. Such a lack of significance in the effects of marital status and education level on the relationship between Medicaid coverage, household income, preterm birth, birth weight, age, and access to prenatal care of Black women suggests that Black women are not dependent on singular determinants to access prenatal care services but may rely on cumulative systemic factors and conditions.

Whereas it is traditionally known that Medicaid coverage and household income are vital factors influencing access to prenatal care or healthcare services for Black American women, the insignificance of its effects suggests that individual aspects of socioeconomic status, such as insurance coverage, income level, and economic resources, are more likely to be inadequate for overcoming challenges and barriers in the healthcare structure. In this regard, different factors, including insufficient providers who are culturally competent to offer services to Black women in prenatal care, unequal distribution of care services in maternal care, challenges related to mobility to healthcare facilities, highly fragmented care delivery, and racial discrimination, may hinder prenatal care access among Black women.

The findings are consistent with empirical literature stressing the role of inequalities in access to healthcare as barriers to prenatal care services among Black women. These structural barriers, including racial discrimination, function through policies and practices that historically disadvantage minority communities such as Black women, influencing where healthcare facilities are located for access, the mode of delivering services, and the treatment of patients in maternal care clinics (American

Medical Association and Association of American Medical Colleges, 2021; Monroe et al., 2023). This study's findings confirm those of Shrank et al. (2021), who noted the need to expand insurance coverage, advanced home-based care, and affordability as informed by inequalities and high healthcare costs among Black women.

The findings of this research also support previous research, which established that while the United States cannot afford healthcare inequalities, disparities in care limit underserved individuals' access to affordable and high-quality care (American Medical Association and Association of American Medical Colleges, 2021). As a result, Medicaid has the potential to mitigate the root causes of persistent maternal health inequalities; it not only encompasses health services but also includes many social needs such as medical transportation, nutritional support, and community resources (Dihwa et al., 2022). Additionally, Medicaid assists in addressing disparities in the past regarding being able to access preventive services, specialty care, and perinatal care that may be too expensive for Black women seeking prenatal care services in the United States. The approach of a comprehensive model for healthcare access is steadily addressing the maternal health inequalities present in the American healthcare system for Black women, who have a disproportionately high risk of mortality during childbirth due to limited prenatal care visits. As a result, this study's findings support the suggestion that enhancing the access and use of prenatal care services needs effective approaches and interventions that would help in addressing inequities among Black women, compared to focusing on singular related socioeconomic factors.

This study's findings reinforce Bronfenbrenner's (1977) SEM, which posits that health behaviors are shaped by various levels of influencing factors. Effective

interventions, therefore, should address these levels concurrently. In this study, Medicaid coverage (systemic level), household income (community level), and preterm birth weight (individual level) were examined, demonstrating how racial inequities impact access to prenatal care services among Black women. Healthcare access and racial disparities show their utility in analyzing maternal and child health outcomes

(Kilanowski, 2017). The lack of significant effect of the moderation variables of marital status and education levels indicates that individual-level factors are less sufficient in addressing systemic barriers linked to prenatal care services access among Black women in the presence of persistent organizational and community policy-level barriers, but they are based on cumulative factors and interventions.

Limitations of the Study

The practical or theoretical weaknesses in research that may affect the legitimacy of the research findings and are known as limitations (Akanle et al., 2020). Researchers, whether in qualitative or quantitative studies, anticipate different limitations that range from methodological to theoretical. In this study, the selected quantitative research method and correlational research design may limit this study's applications. Although quantitative research was appropriate for numerical data and the generalizability of the study's findings, it does not allow the researcher to define the nature of the established relationship using participants' opinions and experiences.

Another limitation was the type of data used for this study. Given the study's purpose and the study variables, the researcher used secondary data retrieved from the NCHS. Although secondary data allows for an extensive analysis of the data, it was limited in its geographical location. The generalization of this study was limited to Cook

County and the data collected from the NCHS may not contain the information needed to address the research problem and questions. In this regard, the results of this research may not apply to other populations and racial groups in different settings.

Also, the secondary data may be limited in information about Black women's utilization of prenatal care, given the impacts of Medicaid coverage, preterm birth, birth weight, and household income. In addition, the confounding variables that were not measured, including the availability of providers of prenatal care, transportation to access health facilities, and racial discrimination when receiving prenatal care services among Black women, may also impact the analysis and applicability of the findings. The secondary dataset may also contain previous errors that were not resolved, and this may affect the validity and reliability of the study's findings and their applicability.

Recommendations

Future research should employ mixed-methods research that would integrate both quantitative and qualitative approaches to help understand the Black women's perceptions about their access to prenatal care services. Using qualitative data would help in illuminating perceptions of participants about the barriers, including racial discrimination, lack of trust in healthcare systems, transportation barriers, and cultural barriers. Further, the qualitative data would help in understanding perceived facilitators of prenatal care access among Black women, including the impact of social support networks, community support, emotional support, and provider interactions. Therefore, qualitative insights would enhance the interpretation of findings and foster the development of culturally responsive approaches to promote access to prenatal care among Black women.

Although secondary data allow for an extensive analysis of the data, they were limited in their geographical location. Thus, generalization of the findings may be limited to Cook County, Illinois, and the data collected from the NCHS may not contain information on the data needed to address the research problem and questions. Therefore, further research should also be conducted using primary data through surveys and interviews in a mixed-methods approach to data collection. The use of primary data sources would enhance the validity of the findings, which in turn fosters generalizability to diverse contexts and geographical settings.

Future research should also be conducted using longitudinal study designs. Longitudinal research designs would help assess the causal link between prenatal care access and socioeconomic factors over time. Longitudinal research designs allow researchers to explore changes in income level and insurance, and how the changes in these factors may influence access to prenatal care over time, not only among Black women but also among all minority populations across the United States. This may also help in addressing cross-sectional analysis limitations.

Public Health Practice and Field-Based Products

Specialized outreach programs should be employed in states involving partnerships with community-based organizations to create culturally appropriate health promotion information, use different languages to promote the information, and build confidence in the targeted population (Upadhyay et al., 2022). In addition, community-based doula services have been successful, especially with the provision of culturally sensitive emotional support, counseling, and encouragement before, during, and after childbirth by doulas from similar cultural backgrounds (Thomas et al., 2023). There

should be public health practice policy reforms to enhance prenatal care access and overall access to healthcare services for supporting Black women through pregnancy. The integration with existing CHWs enhances these programs even more because CHWs are critical liaisons between healthcare and the community as they facilitate the interpretation of culture and language, and provide culturally appropriate health literacy (Heisler et al., 2022). Combined, these cultural competency efforts support the development of a better and more culturally sensitive prenatal care system for Black American communities.

Field-based products were developed to support the translation of this study's findings into practice and have been included as appendices. The first field product is a policy brief memo. This is meant for policymakers and leaders in public health who would be interested in the study findings regarding disparities in accessing prenatal care for Black women ages 15–44 in Cook County Illinois. The second field product is a community health intervention plan, which is focused on addressing barriers to accessing prenatal care services. The third field product is a visual representation of the intervention, which illustrates elements of the proposed interventions that are community-based and delivery modes are developed. The fourth field product is the community fact sheet, providing information for Black women ages 15–44 in Cook County, Illinois accessing prenatal care.

Positive Social Change

This study's findings have several important implications for positive social change, healthcare practice, and future research. Examining the relationship between Medicaid coverage, household income, birth weight, preterm birth, and utilization of prenatal care among Black women ages 15–44 in Cook County allowed me to establish

the factors hindering Black women from using prenatal care (see McGaughey et al., 2025). Thus, at the individual level, the findings suggest improvement in the use of prenatal care while fostering the development of programs that may encourage Black women to engage in prenatal care in Cook County, Illinois. Improvement in accessing prenatal care can promote maternal birth outcomes. This can be achieved through promoting awareness of maternal health to decrease the complications related to pregnancy among Black women with limited access to prenatal care services.

At the level of organization, the findings can help healthcare systems to adopt cultural competency practices to reduce barriers associated with accessing prenatal care or overall healthcare services for Black women. In this regard, the status of Medicaid coverage as well as the availability of prenatal care make up a core public health concern in the United States, especially for Black women who experience a higher risk of maternal mortality (Fox et al., 2023). While Medicaid serves as a crucial source of insurance coverage, significant disparities exist in the utilization of prenatal care (Fox et al., 2023). Black women face higher rates of mortality from pregnancy and childbirth complications compared to women of other races. Additionally, pregnant Black women are more likely to experience hospital readmissions or die from various causes than their white counterparts (Brown et al., 2021). However, this federal-state program has helped to increase access to some basic prenatal care services, even though various barriers exist in the low-income group in accessing healthcare services. Knowledge of such dynamics is crucial for designing appropriate prevention and treatment strategies for the enhancement of maternal health status, through culturally responsive practices.

At the policy and societal levels, the current study suggests equity in policies related to healthcare access, prenatal care services through investing in prenatal care programs for the community. This can also be enhanced through mandatory cultural humility education for the healthcare team, encompassing knowledge about Black Americans' attitudes toward health and medicine, as well as biased thinking, and culturally sensitive interaction approaches (Berger & Miller, 2021). Community mobilization initiatives, sometimes by known community-based organizations and faithbased organizations, link women to available Medicaid services, educate them on eligibility and contractual entitlements, and follow up with them during pregnancy (Blebu et al., 2023). These programs often comprise peer support groups, mobile health units, and community-based workshops that help to increase the use of prenatal services and culturally appropriate prenatal education, hence improving maternal health.

Community-based policymakers can develop support systems that are important enablers in enhancing prenatal care provision access and utilization among Black women with Medicaid. Programs such as community health worker programs that use locals who are conversant with the community's culture can gain the trust of the women as they assist in the complexities of the health system. The workers are usually from the same background as the women they help, so they act as a link between communities and the medical personnel. These community-based policymakers may prioritize a Medicaid coverage model that plays a role in reducing the impacts of intergenerational poverty on health since pregnant individuals are not exposed to catastrophic health expenditures (East et al., 2023). Thus, expansion of the Medicaid program guarantees that these services are affordable and accessible to all expectant women so that they can start

receiving prenatal care in early pregnancy and attend their antenatal appointments regularly to recognize and proactively manage any pregnancy complications.

Conclusion

This study's findings underscore the need for effective approaches and interventions that can address structural barriers to prenatal care access among minority groups such as Black women in the United States. In this regard, public health practice may need to establish effective culturally responsive care models to enhance access to prenatal care among Black women. This research contributes to an extensive understanding of prenatal care access and the available disparities for Black women ages 15–44 in Cook County, Illinois. This study has demonstrated racial disparities in accessing prenatal care among Black women ages 15–44 in Cook County, Illinois and stresses the need to address systemic barriers to healthcare access. This study offers an important basis for policy development and adoption of policies and interventions towards improving maternal care services for not only Black women but also for other minority women across the United States.

References

- Adebayo, C. T., Parcell, E. S., Mkandawire-Valhmu, L., & Olukotun, O. (2024). Black women's maternal healthcare experiences: A critical race theory perspective. In S. S. Ball-Rokeach & M. L. Wilkin (Eds.), *Emergent health communication scholarship from and about African American, Latino/a/x, and American Indian/Alaskan Native peoples* (pp. 79-90). Routledge.
- Adedokun, S. T., & Yaya, S. (2020). Correlates of antenatal care utilization among women of reproductive age in sub-Saharan Africa: evidence from multinomial analysis of demographic and health surveys (2010–2018) from 31 countries. *Archives of Public Health, 78*, 1-10. <https://doi.org/10.1186/s13690-020-00516-w>
- Akanle, O., Ademuson, A. O., & Shittu, O. S. (2020). Scope and limitation of study in social research In O. Akanle, A. O. Ademuson, & O. S. Shittu (Eds.), *Contemporary issues in social research* (pp. 105–114). Ibadan University Press.
- Alexander, D., & Schnell, M. (2024). The impacts of physician payments on patient access, use, and health. *American Economic Journal: Applied Economics, 16*(3), 142-177. <https://doi.org/10.1257/app.20210227>
- Alhalel, J., Patterson, L., Francone, N. O., Danner, S., Osei, C., O'Brian, C. A., Simmons, A., & Simon, M. A. (2022). Addressing racial disparities in perinatal care for African American/Black individuals in the Chicago community health setting: A qualitative study. *BMC Pregnancy and Childbirth, 22*(1), 771. <https://doi.org/10.1186/s12884-022-05100-4>

- Alharahsheh, H. H., & Pius, A. (2020). A review of key paradigms: Positivism vs interpretivism. *Global Academic Journal of Humanities and Social Sciences*, 2(3), 39–43. <https://doi.org/10.36348/gajhss.2020.v02i03.001>
- Alio, A. P., Dillion, T., Hartman, S., Johnson, T., Turner, S., Bullock, S., & Dozier, A. (2022). A community collaborative for the exploration of local factors affecting Black mothers' experiences with perinatal care. *Maternal and Child Health Journal*, 26(4), 751-760. <https://doi.org/10.1007/s10995-022-03422-5>
- Allwood, C. M. (2012). The distinction between qualitative and quantitative research methods is problematic. *Quality & Quantity*, 46, 1417-1429. <https://doi.org/10.1007/s11135-011-9455-8>
- Altman, M. R., McLemore, M. R., Oseguera, T., Lyndon, A., & Franck, L. S. (2020). Listening to women: Recommendations from women of color to improve experiences in pregnancy and birth care. *Journal of Midwifery & Women's Health*, 65(4), 466-473. <https://doi.org/10.1111/jmwh.13102>
- American Medical Association and Association of American Medical Colleges. (2021). *Advancing health equity: Guide on language, narrative and concepts*. <https://ama-assn.org/equity-guide>
- Attanasio, L. B., & Paterno, M. T. (2021). Racial/Ethnic differences in socioeconomic status and medical correlates of trial of labor after Cesarean and vaginal birth after Cesarean. *Journal of Women's Health*, 30(12), 1788-1794. <https://doi.org/10.1089/jwh.2020.8801>
- Barnett, K. S., Banks, A. R., Morton, T., Sander, C., Stapleton, M., & Chisolm, D. J. (2022). "I just want us to be heard": A qualitative study of perinatal experiences

among women of color. *Women's Health*, 18, 17455057221123439.

<https://doi.org/10.1177/17455057221123439>

Bellerose, M., Rodriguez, M., & Vivier, P. M. (2022). A systematic review of the qualitative literature on barriers to high-quality prenatal and postpartum care among low-income women. *Health Services Research*, 57(4), 775-785.

<https://doi.org/10.1111/1475-6773.14008>

Berger, J., Bayarri, M. J., & Pericchi, L. R. (2013). The effective sample size. *Economic Reviews*, 33(1-4), 197-217. <https://doi.org/10.1080/07474938.2013.807157>

Berger, J. T., & Miller, D. R. (2021). Health disparities, systemic racism, and failures of cultural competence. *The American Journal of Bioethics*, 21(9), 4-10.

<https://doi.org/10.1080/15265161.2021.1915411>

Berkowitz, R., Mujahid, M., Pearl, M., Poon, V., Reid, C. K., & Allen, A. M. (2022). Protective places: The relationship between neighborhood quality and preterm births to Black women in Oakland, California (2007–2011). *Journal of Urban Health*, 99, 492-505. <https://doi.org/10.1007/s11524-022-00624-8>

Blebu, B. E., Kuppermann, M., Coleman-Phox, K., Karasek, D., Lessard, L., & Chambers, B. D. (2023). A qualitative exploration of experiences accessing community and social services among pregnant low-income women of color during the COVID-19 pandemic. *Women's Health*, 19, 1-10.

<https://doi.org/10.1177/17455057231156792>

Bowers, A. J. (2017). Quantitative research methods training in education leadership and administration preparation programs as disciplined inquiry for building school

improvement capacity. *Journal of Research on Leadership Education*, 12(1), 72-96. <https://doi.org/10.1177/1942775116659462>

- Brase, P., MacCallum-Bridges, C., & Margerison, C. E. (2021). Racial inequity in preterm delivery among college-educated women: the role of racism. *Pediatric and Perinatal Epidemiology*, 35(4), 482-490. <https://doi.org/10.1111/ppe.12772>
- Braveman, P., Dominguez, T. P., Burke, W., Dolan, S. M., Stevenson, D. K., Jackson, F. M., Collins, J. W., Driscoll, D. A., Haley, T., Acker, J., Shaw, G. M., McCabe, E. R. B., Hay, W. W., Thornburg, K., Acevedo-Garcia, D., Cordero, J. F., Wise, P. H., Legaz, G., Rashied-Henry, K., & Waddell, L. (2021). Explaining the Blackwhite disparity in preterm birth: A consensus statement from a multi-disciplinary scientific work group convened by the march of dimes. *Frontiers in Reproductive Health* (3) 49. <https://doi.org/10.3389/frph.2021.684207>
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32, 513-531.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Brown, C. C., Adams, C. E., & Moore, J. E. (2021). Race, Medicaid coverage, and equity in maternal morbidity. *Women's Health Issues*, 31(3), 245-253. <https://doi.org/10.1016/j.whi.2020.12.005>
- Brown, C. C., Moore, J. E., Felix, H. C., Stewart, M. K., Mac Bird, T., Lowery, C. L., & Tilford, J. M. (2019). Association of state Medicaid expansion status with low birth weight and preterm birth. *JAMA Network Open*, 4(3), e213427. <https://doi.org/10.1001/jama.2019.3678>

- Buchmueller, T. C., & Levy, H. G. (2020). The ACA's impact on racial and ethnic disparities in health insurance coverage and access to care: an examination of how the insurance coverage expansions of the Affordable Care Act have affected disparities related to race and ethnicity. *Health Affairs*, 39(3), 395-402.
<https://doi.org/10.1377/hlthaff.2019.01394>
- Canty, L. (2022). The lived experience of severe maternal morbidity among Black women. *Nursing Inquiry*, 29(1), 1-15. <https://doi.org/10.1111/nin.12466>
- Centers for Disease Control and Prevention. (2020). *Prevalence of selected maternal and child health indicators for all PRAMS sites, Pregnancy Risk Assessment Monitoring System (PRAMS) 2016-2017*.
https://www.cdc.gov/prams/pramsdata/mch-indicators/states/pdf/2018/All-PRAMS-Sites-2016-2017_508.pdf
- Chambers, B. D., Taylor, B., Nelson, T., Harrison, J., Bell, A., O'Leary, A., Young, S., & McLemore, M. R. (2022). Clinicians' perspectives on racism and Black women's maternal health. *Women's Health Reports*, 3(1), 476-482.
<https://doi.org/10.1089/whr.2021.0148>
- Chantarat, T., Mentzer, K. M., Van Riper, D. C., & Hardeman, R. R. (2022). Where are the labor markets? Examining the association between structural racism in labor markets and infant birth weight. *Health & Place*, 74, 1-8.
<https://doi.org/10.1016/j.healthplace.2022.102742>
- Chernick, M. R., & LaBudde, R. A. (2014). *An introduction to bootstrap methods with applications to R*. John Wiley & Sons.

- Chinn, J. J., Martin, I. K., & Redmond, N. (2021). Health equity among Black women in the United States. *Journal of Women's Health, 30*(2), 212-219.
<https://doi.org/10.1089/jwh.2020.8868>
- Clay, S. L. (2022). U.S. infant mortality rates: An exploration of Black/White disparities, current trends, and social inequalities. *Race and Social Problems (14)*, 14-21.
<https://doi.org/10.1007/s12552-021-09328-1>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.
- Conteh, N., Gagliardi, J., McGahee, S., Molina, R., Clark, C. T., & Clare, C. A. (2022). Medical mistrust in perinatal mental health. *Harvard Review of Psychiatry, 30*(4), 238-247. <https://doi.org/10.1097/HRP.0000000000000345>
- Coombs, N. C., Meriwether, W. E., Caringi, J., & Newcomer, S. R. (2021). Barriers to healthcare access among US adults with mental health challenges: A populationbased study. *SSM-Population Health, 15*, 1-10.
<https://doi.org/10.1016/j.ssmph.2021.100847>
- Craft-Blacksheare, M., & Kahn, J. R. (2023). Midwives' and other perinatal health workers' perceptions of the black maternal mortality crisis in the United States. *Journal of Midwifery & Women's Health, 68*(1), 62–70.
<https://doi.org/10.1111/jmwh.13433>
- Creswell, J. W., & Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five traditions* (4th ed.). Sage Publications.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.

- Crockett, A. H., Chen, L., Heberlein, E. C., Britt, J. L., Covington-Kolb, S., Witrick, B., Doherty, E., Zhang, L., Borders, A., Keenan-Devlin, L., Smart, B., & Heo, M. (2022). Group vs traditional prenatal care for improving racial equity in preterm birth and low birthweight: The Centering and Racial Disparities randomized clinical trial study. *American Journal of Obstetrics and Gynecology*, 227(6), 893.e1–893.e15. <https://doi.org/10.1016/j.ajog.2022.06.066>
- Curtis, D. S., Fuller-Rowell, T. E., Carlson, D. L., Wen, M., & Kramer, M. R. (2022). Does a rising median income lift all birth weights? County median income changes and low birth weight rates among births to Black and white mothers. *The Milbank Quarterly*, 100(1), 38-77. <https://doi.org/10.1111/1468-0009.12532>
- Curtis, E. A., Comiskey, C., & Dempsey, O. (2016). Importance and use of correlational research. *Nurse Researcher*, 23(6). <https://doi.org/10.7748/nr.2016.e1382>
- Cutland, C. L., Lackritz, E. M., Mallett-Moore, T., Bardají, A., Chandrasekaran, R., Lahariya, C., Nisar, M. I., Tapia, M. D., Pathirana, J., Kochhar, S., Muñoz, F. M., & Brighton Collaboration Low Birth Weight Working Group (2017). Low birth weight: Case definition & guidelines for data collection, analysis, and presentation of maternal immunization safety data. *Vaccine*, 35(48 Pt A), 6492–6500. <https://doi.org/10.1016/j.vaccine.2017.01.049>
- Dagher, R. K., & Linares, D. E. (2022). A critical review on the complex interplay between social determinants of health and maternal and infant mortality. *Children*, 9(3), 394. <https://doi.org/10.3390/children9030394>
- Dailey, R. K., Peoples, A., Zhang, L., Dove-Medows, E., Price, M., Misra, D. P., & Giurgescu, C. (2022). Assessing perception of prenatal care quality among Black

women in the United States. *Journal of Midwifery & Women's Health*, 67(2), 235-243. <https://doi.org/10.1111/jmwh.13319>

Davidson, C., Denning, S., Thorp, K., Tyer-Viola, L., Belfort, M., Sangi-Haghpeykar, H., & Gandhi, M. (2022). Examining the effect of quality improvement initiatives on decreasing racial disparities in maternal morbidity. *BMJ Quality & Safety*, 31(9), 670-678. <https://doi.org/10.1136/bmjqs-2021-014225>

Dihwa, V., Shadowen, H., & Barnes, A. J. (2022). Medicaid can and should play an active role in advancing health equity. *Health Services Research*, 57(2), 167-176. <https://doi.org/10.1111/1475-6773.14069>

Donohue, J. M., Cole, E. S., James, C. V., Jarlenski, M., Michener, J. D., & Roberts, E. T. (2022). The US Medicaid program: Coverage, financing, reforms, and implications for health equity. *JAMA*, 328(11), 1085-1099. <https://doi.org/10.1001/jama.2022.14791>

East, C. N., Miller, S., Page, M., & Wherry, L. R. (2023). Multigenerational impacts of childhood access to the safety net: Early life exposure to Medicaid and the next generation's health. *American Economic Review*, 113(1), 98-135. <https://doi.org/10.1257/aer.20210937>

Eliason, E. L., Daw, J. R., & Allen, H. L. (2021). Association of Medicaid vs marketplace eligibility with maternal coverage and access to prenatal and postpartum care. *JAMA Network Open*, 4(12), e2137383. <https://doi.org/10.1001/jamanetworkopen.2021.37383>

Emerson, R. W. (2015). Convenience sampling, random sampling, and snowball sampling: How does sampling affect the validity of research? *Journal of Visual*

Impairment & Blindness, 109(2), 164–168.

<https://doi.org/10.1177/0145482x1510900215>

Epstein, C. M., Houfek, J. F., Rice, M. J., & Weiss, S. J. (2021). Integrative review of early life adversity and cortisol regulation in pregnancy. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 50(3), 242-255.

<https://doi.org/10.1016/j.jogn.2020.12.006>

Farringer, D. R. (2021). Medicaid expansion expectations. *West Virginia Law Review*, 124(3), 821-872.

Faul, F., Erdfelder, E., Lang, A.G., and Buchner, A. (2007). G*Power 3: A Flexible Statistical Power Analysis Program for Social, Behavioral, and Biomedical Sciences. *Behavior Research Methods*, 39, 175-191.

<http://dx.doi.org/10.3758/BF03193146>

Field, A. (2018). *Discovering statistics using IBM SPSS statistics*. SAGE Publications.

Fisher, C. B. (2014). *Decoding the ethics code: A practical guide for psychologists* (3rd ed.). SAGE Publications.

Fox, A., Howell, F. M., Weber, E., & Janevic, T. (2023). Left behind: Medicaid immigrant exclusions and access to maternal health care across the reproductive-perinatal continuum. *Medical Care Research and Review*, 80(6), 582-595.

<https://doi.org/10.1177/10775587231170066>

Frayne, J., Hauck, Y., Nguyen, T., Liira, H., & Morgan, V. A. (2021). Reproductive planning, vitamin knowledge and use, and lifestyle risks of women attending pregnancy care with a severe mental illness. *Scandinavian Journal of Primary Health Care*, 39(1), 60-66. <https://doi.org/10.1080/02813432.2021.1882081>

- Fryer, K., Munoz, M. C., Rahangdale, L., & Stuebe, A. M. (2021). Multiparous Black and latinx women face more barriers to prenatal care than white women. *Journal of Racial and Ethnic Health Disparities*, 8, 80-87. <https://doi.org/10.1007/s40615-020-00759-x>
- Gamberini, C., Angeli, F., & Ambrosino, E. (2022). Exploring solutions to improve antenatal care in resource-limited settings: an expert consultation. *BMC Pregnancy and Childbirth*, 22(1), 449. <https://doi.org/10.1186/s12884-022-04778-w>
- Garfield, L., & Watson-Singleton, N. N. (2021). Culturally responsive mindfulness interventions for perinatal Black women: A call for action. *Western Journal of Nursing Research*, 43(3), 219-226. <https://doi.org/10.1177/0193945920950336>
- Ghazi, T., Naidoo, P., Naidoo, R. N., & Chuturgoon, A. A. (2021). Prenatal air pollution exposure and placental DNA methylation changes: Implications on fetal development and future disease susceptibility. *Cells*, 10(11), 3025. <https://doi.org/10.3390/cells10113025>
- Giurgescu C., Misra, D., Slaughter-Acey, J. C., Gillespie, S. L., Nowak, A. L., DoveMedows, E., Engeland, C. G., Zenk, S. N., Lydic, T. A., Sealy-Jefferson, S., Ford, J., Drury, S., & Stemmer, P. (2022). Neighborhoods, racism, stress, and preterm birth among Black women: A Review. *Western Journal of Nursing Research*, (44)1, <https://doi.org/10.1177/01939459211041165>
- Gordon, S. H., Hoagland, A., Admon, L. K., & Daw, J. R. (2022). Comparison of postpartum health care use and spending among individuals with Medicaid-paid

- births enrolled in continuous Medicaid vs commercial insurance. *JAMA Network Open*, 5(3), e223058. <https://doi.org/10.1001/jamanetworkopen.2022.3058>
- Grand-Guillaume-Perrenoud, J. A., Origlia, P., & Cignacco, E. (2022). Barriers and facilitators of maternal healthcare utilization in the perinatal period among women with social disadvantage: A theory-guided systematic review. *Midwifery*, 105, 1-29. <https://doi.org/10.1016/j.midw.2021.103237>
- Guglielminotti, J., Landau, R., & Li, G. (2021). The 2014 New York State Medicaid expansion and severe maternal morbidity during delivery hospitalizations. *Anesthesia & Analgesia*, 133(2), 340-348. <https://doi.org/10.1213/ANE.0000000000005371>
- Gutterman, A. S. (2020). *Research methods and design*. Business Expert Press.
- Haas, J. P. (2012). Sample size and power. *American Journal of Infection Control*, 40(8), 766-767. <https://doi.org/10.1016/j.ajic.2012.05.020>
- Hailu, E. M., Carmichael, S. L., Berkowitz, R. L., Snowden, J. M., Lyndon, A., Main, E., & Mujahid, M. S. (2022). Racial/ethnic disparities in severe maternal morbidity: An intersectional life course approach. *Annals of the New York Academy of Sciences*, 1518(1), 239-248. <https://doi.org/10.1111/nyas.14901>
- Harris, S. J., Brelsford, K.M., Kavanaugh-McHugh, A, & Wright Clayton, E. (2020). Uncertainty of prenatally diagnosed congenital heart disease: A qualitative study. *JAMA Network Open*, 3(5). <https://doi.org/10.1001/jamanetworkopen.2020.4082>
- Harvey, S. M., Oakley, L. P., Gibbs, S. E., Mahakalanda, S., Luck, J., & Yoon, J. (2021). Impact of Medicaid expansion in Oregon on access to prenatal care. *Preventive Medicine*, 143, 106360. <https://doi.org/10.1016/j.ypmed.2020.106360>

- Heisler, M., Lapidos, A., Kieffer, E., Henderson, J., Guzman, R., Cunmulaj, J., Spencer, M., & Ayanian, J. Z. (2022). Impact on health care utilization and costs of a Medicaid community health worker program in Detroit, 2018–2020: A randomized program evaluation. *American Journal of Public Health, 112*(5), 766-775. <https://doi.org/10.2105/AJPH.2021.306700>
- Hemphill, N. O., Crooks, N., Zhang, W., Fitter, F., Erbe, K., Rutherford, J. N., Hall, K. S., & Koenig, M. D. (2023). Obstetric experiences of young Black mothers: An intersectional perspective. *Social Science & Medicine, 317*, 115604. <https://doi.org/10.1016/j.socscimed.2022.115604>
- Ho, F. O., Zheng, C., Frazier, M., Nimmagadda, S. R., Gupta, R. S., & Bilaver, L. A. (2024). Geographic variability of Medicaid acceptance among allergists in the US. *American Journal of Managed Care, 30*(8), 374-379. <https://doi.org/10.37765/ajmc.2024.89588>
- Horan, H., Mobley, E., Lavender, C., Thompson, A., Bryant, W., McDaniel, J., Robertson, E., McIntosh, S., & Albright, D. L. (2023). “I am busy enough...”: Navigating challenges experienced by Medicaid providers serving pregnant women living with substance use disorders in Alabama. *Journal of Nursing Scholarship, 55*(3), 556-565. <https://doi.org/10.1111/jnu.12867>
- Horner-Johnson, W., Akobirshoev, I., Amutah-Onukagha, N. N., Slaughter-Acey, J. C., & Mitra, M. (2021). Preconception health risks among US women: Disparities at the intersection of disability and race or ethnicity. *Women's Health Issues, 31*(1), 65-74. <https://doi.org/10.1016/j.whi.2020.10.001>

- Howell, E. A., Egorova, N. N., Janevic, R., Brodman, M., Balbierz, A., Zeitlin, J., & Hebert, P. L. (2020). Race and ethnicity, medical insurance, and severe maternal morbidity disparities within hospitals. *Obstetrics and Gynecology*, *135*(5), 285-293. <https://doi.org/10.1097/aog.0000000000003667>
- Ignoffo, S., Margellos-Anast, H., Banks, M., Morris, R., & Jay, K. (2022). Clinical integration of community health workers to reduce health inequities in overburdened and under-resourced populations. *Population Health Management*, *25*(2), 280-283. <https://doi.org/10.1089/pop.2021.0376>
- Interrante, J. D., Admon, L. K., Stuebe, A. M., & Kozhimannil, K. B. (2022). After childbirth: Better data can help align postpartum needs with a new standard of care. *Women's Health Issues*, *32*(3), 208-212. <https://doi.org/10.1016/j.whi.2021.12.001>
- Jackson, M., Agbai, C., & Rauscher, E. (2021). The effects of state-level Medicaid coverage on family wealth. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, *7*(3), 216-234. <https://doi.org/10.7758/RSF.2021.7.3.10>
- Jahn, J.L., Wallace, M., Theall, K.P., Hardeman, R.R. (2022). Neighborhood proactive policing and racial inequalities in preterm birth in New Orleans, 2018-2019. *American Journal of Public Health*, *113*(1), 21-28. <https://doi.org/10.2105/AJPH.2022.307079>
- Janevic, T., Piverger, N., Afzal, O., & Howell, E. A. (2020). “Just because you have ears doesn’t mean you can hear”—Perception of racial-ethnic discrimination during childbirth. *Ethnicity & Disease*, *30*(4), 533. <https://doi.org/10.18865/ed.30.4.533>

- Jean-Francois, B., Bailey Lash, T., Dagher, R. K., Green Parker, M. C., Han, S. B., & Lewis Johnson, T. (2021). The potential for health information technology tools to reduce racial disparities in maternal morbidity and mortality. *Journal of Women's Health, 30*(2), 274-279. <https://doi.org/10.1089/jwh.2020.8889>
- Johnson, L. (2021). Exploring factors associated with pregnant women's experiences of material hardship during COVID-19: A cross-sectional Qualtrics survey in the United States. *BMC Pregnancy and Childbirth, 21*, 1-14. <https://doi.org/10.1186/s12884-021-04234-1>
- Johnson, N. M., Hoffmann, A. R., Behlen, J. C., Lau, C., Pendleton, D., Harvey, N., Shore, R., Li, Y., Chen, J., Tian, Y. & Zhang, R. (2021). Air pollution and children's health review of adverse effects associated with prenatal exposure from fine to ultrafine particulate matter. *Environmental Health and Preventive Medicine, 26*(1), 1-29. <https://doi.org/10.1186/s12199-021-00995-5>
- Joudeh, L., Harris, O. O., Johnstone, E., Heavner-Sullivan, S., & Propst, S. K. (2021). "Little red flags": Barriers to accessing health care as a sexual or gender minority individual in the rural Southern United States—A qualitative intersectional approach. *Journal of the Association of Nurses in AIDS Care, 32*(4), 467-480. <https://doi.org/10.1097/JNC.0000000000000271>
- Kaur, R., Kant, S., Mani, K., Yadav, K., & Gupta, S. K. (2023). Maternal healthcare services in a rural area of Haryana during the COVID-19 pandemic: A community-based study. *Indian Journal of Community Medicine, 48*(5), 715–720. https://doi.org/10.4103/ijcm.ijcm_43_23

- Kemet, K. A., Campbell, A. L., & Valera, P. (2022). "It's like they don't want to listen to us": Black women's experiences of perceived racism and discrimination in maternal healthcare. *BMC Pregnancy and Childbirth*, 22(1), 1–10.
<https://doi.org/10.1186/s12884-022-04572-8>
- Kilanowski, J. F. (2017). Breadth of the socio-ecological model. *Journal of Agromedicine*, 22(4), 295-297. <https://doi.org/10.1080/1059924X.2017.1358971>
- King, S. E., Sawadogo-Lewis, T., Black, R. E., & Robertson, T. (2021). Making the health system work for the delivery of nutritional interventions. *Maternal & Child Nutrition*, 17(1), 1-12. <https://doi.org/10.1111/mcn.13056>
- Klare, M., Dougherty, A. M., Chang, M., Mendes, A., & Graziano, S. (2024). Health system barriers and predictors of prenatal care utilization at a large academic medical center. *Discover Social Science and Health*, 4(1), 38.
<https://doi.org/10.1007/s44155-024-00096-y>
- Knowlton, L. M., Arnow, K., Trickey, A. W., Tran, L. D., Harris, A. H., Morris, A. M., & Wagner, T. H. (2024). Hospital presumptive eligibility emergency medicaid programs: An opportunity for continuous insurance coverage? *Medical Care*, 62(9), 567-574. <https://doi.org/10.1097/MLR.0000000000002026>
- Krueger, D., Malkov, E., & Perri, F. (2024). How do households respond to income shocks? *Journal of Economic Dynamics and Control*, 168, 1-10.
<https://doi.org/10.1016/j.jedc.2024.104961>
- Lacci-Reilly, K. R., & Brunner Huber, L. R. (2023). Women, Infants, and Children enrollment and pregnancy-related behaviors and outcomes among Medicaid

recipients in the United States. *Birth*, 50(1), 161-170.

<https://doi.org/10.1111/birt.12700>

Lamberski N. (2022). Utilizing a Theory of Change for better health outcomes. *Frontiers in Veterinary Science*, 9, 1-10. <https://doi.org/10.3389/fvets.2022.929365>

Langley-Evans, S. C., Pearce, J., & Ellis, S. (2022). Overweight, obesity and excessive weight gain in pregnancy as risk factors for adverse pregnancy outcomes: A narrative review. *Journal of Human Nutrition and Dietetics*, 35(2), 250-264.

<https://doi.org/10.1111/jhn.12999>

Lee, S. Y., Cabral, H. J., Aschengrau, A., & Pearce, E. N. (2020). Associations between maternal thyroid function in pregnancy and obstetric and perinatal outcomes. *The Journal of Clinical Endocrinology & Metabolism*, 105(5), e2015-e2023.

<https://doi.org/10.1210/clinem/dgz275>

Lemon, L., Edwards, R. P., & Simhan, H. N. (2021). What is driving the decreased incidence of preterm birth during the coronavirus disease 2019 pandemic? *American Journal of Obstetrics & Gynecology MFM*, 3(3), 100330.

<https://doi.org/10.1016/j.ajogmf.2021.100330>

Logan, R. G., Daley, E. M., Vamos, C. A., Louis-Jacques, A., & Marhefka, S. L. (2021). “When is health care going to be care?” The lived experience of family planning care among young Black women. *Qualitative Health Research*, 31(6), 1169-1182.

<https://doi.org/10.1177/1049732321993094>

Maclean, J. C., McClellan, C., Pesko, M. F., & Polsky, D. (2023). Medicaid reimbursement rates for primary care services and behavioral health outcomes.

Health Economics, 32(4), 873-909. <https://doi.org/10.1002/hec.4646>

- MacLehose, R. F., Ahern, T. P., Lash, T. L., Poole, C., & Greenland, S. (2021). The importance of making assumptions in bias analysis. *Epidemiology*, *32*(5), 617-624. <https://doi.org/10.1097/EDE.0000000000001381>
- Mahajan, S., Caraballo, C., Lu, Y., Valero-Elizondo, J., Massey, D., Annapureddy, A. R., Khera, R., & Krumholz, H. M. (2021). Trends in differences in health status and health care access and affordability by race and ethnicity in the United States, 1999-2018. *JAMA*, *326*(7), 637-648. <https://doi.org/10.1001/jama.2021.9907>
- Margerison, C. E., Hettinger, K., Kaestner, R., Goldman-Mellor, S., & Gartner, D. (2021). Medicaid expansion is associated with some improvements in perinatal mental health: Study examines Medicaid expansion and perinatal mental health. *Health Affairs*, *40*(10), 1605-1611. <https://doi.org/10.1377/hlthaff.2021.00776>
- McCloskey, L., Bernstein, J., Goler-Blount, L., Greiner, A., Norton, A., Jones, E., & Bird, C. E. (2021). It's time to eliminate racism and fragmentation in women's health care. *Women's Health Issues*, *31*(3), 186-189. <https://doi.org/10.1016/j.whi.2021.03.005>
- McCusker, K., & Gunaydin, S. (2015). Research using qualitative, quantitative, or mixed methods and choice based on the research. *Perfusion*, *30*(7), 537-542. <https://doi.org/10.1177/0267659114559116>
- McGaughey, P., & Howland, R. E. (2025). Variation in the Use of Guideline-Based Care by Prenatal Site: Decomposing the Disparity in Preterm Birth for Non-Hispanic Black Women. *Journal of Midwifery & Women's Health*. Advance online publication. <https://doi.org/10.1111/jmwh.13745>

- McMaughan, D. J., Oloruntoba, O., & Smith, M. L. (2020). Socioeconomic status and access to healthcare: interrelated drivers for healthy aging. *Frontiers in Public Health*, 8, 231. <https://doi.org/10.3389/fpubh.2020.00231>
- Mehra, R., Alspaugh, A., Dunn, J. T., Franck, L. S., McLemore, M. R., Keene, D. E., Sweeney, M. M., & Ickovics, J. R. (2023). ““Oh gosh, why go? ‘because they are going to look at me and not hire’”: Intersectional experiences of Black women navigating employment during pregnancy and parenting. *BMC Pregnancy and Childbirth*, 23(1), 17. <https://doi.org/10.1186/s12884-022-05268-9>
- Mehra, R., Boyd, L. M., Magriples, U., Kershaw, T. S., Ickovics, J. R., & Keene, D. E. (2020). Black pregnant women “get the most judgment”: a qualitative study of the experiences of Black women at the intersection of race, gender, and pregnancy. *Women’s Health Issues*, 30(6), 484-492. <https://doi.org/10.1016/j.whi.2020.08.001>
- Michel, A., & Fontenot, H. (2023). Adequate prenatal care: An integrative review. *Journal of Midwifery & Women’s Health*, 68(2), 233-247. <https://doi.org/10.1111/jmwh.13459>
- Miller, E. R., & Hudak, M. L. (2023). Medicaid and newborn care: Challenges and opportunities. *Journal of Perinatology*, 43(8), 1072-1078. <https://doi.org/10.1038/s41372-023-01714-4>
- Mohajan, H. K. (2020). Quantitative research: A successful investigation in natural and social sciences. *Journal of Economic Development, Environment and People*, 9(4), 50-79.
- Monroe, B. S., Rengifo, L. M., Wingler, M. R., Auriemma, J. R., Taxter, A. J., Ramirez, B., Albertini, L. W., & Montez, K. G. (2023). Assessing and improving WIC

enrollment in the primary care setting: A quality initiative. *Pediatrics*, 152(2), 1-9.

<https://doi.org/10.1542/peds.2022-057613>

Mooney, C. Z., & Duval, R. D. (1994). Bootstrapping: A Nonparametric approach to statistical inference. *Journal of the American Statistical Association*, 89(427), 1150. <https://doi.org/10.2307/2290969>

Morgan, J., Bauer, S., Whitsel, A., Combs, C. A., Society for Maternal-Fetal Medicine (SMFM), & Quality Committee. (2022). Society for Maternal-Fetal Medicine Special Statement: Postpartum visit checklists for normal pregnancy and complicated pregnancy. *American Journal of Obstetrics and Gynecology*, 227(4), 1-7. <https://doi.org/10.1016/j.ajog.2022.06.007>

National Center for Health Statistics (US). (2021). Data Sources. In *Health, United States, 2019* [Internet]. National Center for Health Statistics (US).

<https://www.ncbi.nlm.nih.gov/books/NBK569305/>

Newton-Levinson, A., Griffin, K., Swartzendruber, A., & Kramer, M. (2024). “I probably have access, but I can’t afford it”: Expanding definitions of affordability in access to contraceptive services among women with low income in Georgia, USA. *BMC Health Services Research*, 24(1), 1-13. <https://doi.org/10.1186/s12913-024-11133-6>

Nkwake, A. M. (2013). Why are assumptions important? In M. Bamberger (Ed.), *Working with assumptions in international development program evaluation* (pp. 93–111). Springer. https://doi.org/10.1007/978-3-030-33004-0_7

Ognogho, E., & Saque, C. B. (2020). Effect of Medicaid expansion status on risk of late or no prenatal care in black and white US mothers: An analysis of US natality

data, 2010-1. *The Lancet Global Health*, S27. [https://doi.org/10.1016/S2214-109X\(20\)30168-6](https://doi.org/10.1016/S2214-109X(20)30168-6)

Ogunwole, S. M., Bozzi, D. G., Bower, K. M., Cooper, L. A., Hardeman, R., & Kozhimannil, K. (2022). Health equity considerations in state bills related to doula care (2015–2020). *Women's Health Issues*, 32(5), 440-449.

<https://doi.org/10.1016/j.whi.2022.04.004>

Ogunwole, S. M., Oguntade, H. A., Bower, K. M., Cooper, L. A., & Bennett, W. L. (2023). Health experiences of African American mothers, wellness in the postpartum period and beyond (HEAL): A qualitative study applying a critical race feminist theoretical framework. *International Journal of Environmental Research and Public Health*, 20(13), 6283.

<https://doi.org/10.3390/ijerph20136283>

Okoro, O. N., Hillman, L. A., & Cernasev, A. (2020). “We get double slammed!”: Healthcare experiences of perceived discrimination among low-income Black women. *Women's Health*, 16, 1745506520953348.

<https://doi.org/10.1177/1745506520953348>

Oribhabor, G. I., Nelson, M. L., Buchanan-Peart, K. A. R., & Cancarevic, I. (2020). A mother's cry: a race to eliminate the influence of racial disparities on maternal morbidity and mortality rates among Black women in America. *Cureus*, 12(7).

<https://doi.org/10.7759/cureus.9207>

Outland, B. E., Erickson, S., Doherty, R., Fox, W., Ward, L., & Medical Practice and Quality Committee of the American College of Physicians. (2022). Reforming physician payments to achieve greater equity and value in health care: A position

paper of the American College of Physicians. *Annals of Internal Medicine*, 175(7), 1019-1021. <https://doi.org/10.7326/M21-4484>

Palmer, M. (2020). Preconception subsidized insurance: Prenatal care and birth outcomes by race/ethnicity. *Health Economics*, 29(9), 1013–1030. <https://doi.org/10.1002/hec.4116>

Peahl, A. F., Moniz, M. H., Heisler, M., Doshi, A., Daniels, G., Caldwell, M., Kolenic, G., Dalton, V. K., & Byrnes, M. K. & Byrnes, M. (2022). Experiences with prenatal care delivery reported by Black patients with low income and by health care workers in the US: A qualitative study. *JAMA Network Open*, 5(10), e2238161. <https://doi.org/10.1001/jamanetworkopen.2022.38161>

Peahl, A. F., Smith, R. D., & Moniz, M. H. (2020). Prenatal care redesign: creating flexible maternity care models through virtual care. *American Journal of Obstetrics and Gynecology*, 223(3), 389-e1. <https://doi.org/10.1016/j.ajog.2020.05.029>

Peterson, E. E., Davis, N. L., Goodman, D., Cox, S., Mayes, N., Johnston, E., & Barfield, W. (2019; updated 2022). Racial/ethnic disparities in pregnancy-related deaths. Centers for Disease Control and Prevention. <https://www.cdc.gov/reproductivehealth/maternal-mortality/disparitiespregnancy-related-deaths.html>

Peterson, E. E., Davis, N. L., Goodman, D., Cox, S., Mayes, N., Johnston, E., Syverson, C., Seed, K., Shapiro-Mendoza, C., Callaghan, W. M., & Barfield, W. (2019). Racial/ethnic disparities in pregnancy-related deaths — United States, 2007–

2016. *Morbidity and Mortality Weekly Report*, 68(35), 762–765.

<https://doi.org/10.15585/mmwr.mm6835a3>

Pilav, S., De Backer, K., Easter, A., Silverio, S. A., Sundaresh, S., Roberts, S., & Howard,

L. M. (2022). A qualitative study of minority ethnic women's experiences of

access to and engagement with perinatal mental health care. *BMC Pregnancy and*

Childbirth, 22(1), 421. <https://doi.org/10.1186/s12884-022-04698-9>

Ploplis, G. (2021). Systemic racism, abortion, and bias in medicine: All threads woven in

the cloth of racial disparity for mothers and infants. *Journal of Law & Health*, 35,

370-418.

Reid, C. N., Fryer, K., Cabral, N., & Marshall, J. (2021). Health care system barriers and

facilitators to early prenatal care among diverse women in Florida. *Birth*, 48(3),

416-427. <https://doi.org/10.1111/birt.12551>

Riggan, K. A., Gilbert, A., & Allyse, M. A. (2021). Acknowledging and addressing

allostatic load in pregnancy care. *Journal of Racial and Ethnic Health Disparities*,

8(1), 69-79. <https://doi.org/10.1007/s40615-020-00757-z>

Roof, R. A. (2015). The association of individual spirituality on employee engagement:

The spirit at work. *Journal of Business Ethics*, 130(3), 585-599.

<https://doi.org/10.1007/s10551-014-2246-0>

Ruderman, R. S., Dahl, E. C., Williams, B. R., Davis, K. D., Feinglass, J. M., Grobman,

W. A., Kominiarek, M. A., & Yee, L. M. (2021). Provider perspectives on barriers

and facilitators to postpartum care for low-income individuals. *Women's Health*

Reports, 2(1), 254-262. <https://doi.org/10.1089/whr.2021.0009>

- Ruderman, R. S., Dahl, E. C., Williams, B. R., Feinglass, J. M., Kominiarek, M. A., Grobman, W. A., & Yee, L. M. (2023). Obstetrics provider perspectives on postpartum patient navigation for low-income patients. *Health Education & Behavior, 50*(2), 260-267. <https://doi.org/10.1177/10901981211043117>
- Ruiz, R. J., Grimes, K., Spurlock, E., Stotts, A., Northrup, T. F., Villarreal, Y., Suchting, R., Cernuch, M., Rivera, L., Stowe, R. P., & Pickler, R. H. (2022). The mastery lifestyle intervention to reduce biopsychosocial risks for pregnant Latinas and African Americans and their infants: protocol for a randomized controlled trial. *BMC Pregnancy and Childbirth, 22*(1). <https://doi.org/10.1186/s12884-02205284-9>
- Saadat, N., Zhang, L., Hyer, S., Padmanabhan, V., Woo, J., Engeland, C. G., Misra, D. P., & Giurgescu, C. (2022). Psychosocial and behavioral factors affecting inflammation among pregnant Black women. *Brain, Behavior, & Immunity-Health, 22*, 100452. <https://doi.org/10.1016/j.bbih.2022.100452>
- Salahuddin, M., Matthews, K., Elerian, N., Lakkey, D. L., & Patel, D. A. (2022). Infant mortality and maternal risk factors in Texas: Highlighting zip code variations in 2 at-risk counties, 2011–2015. *Preventing Chronic Disease, 19*, 210266. <http://dx.doi.org/10.5888/pcd19.210266>
- Saluja, B., & Bryant, Z. (2021). How implicit bias contributes to racial disparities in maternal morbidity and mortality in the United States. *Journal of Women's Health, 30*(2), 270-273. <https://doi.org/10.1089/jwh.2020.8874>

- Saygili, M., & Bayindir, E. E. (2024). Association of Medicaid expansion with birth outcomes: evidence from a natural experiment in Texas. *BMC Public Health*, 24(1), 1486. <https://doi.org/10.1186/s12889-024-19007-6>
- Scott, M., & Qamar, Z. (2024). Navigating nutrition inequities: BIPOC maternal health and the special supplemental nutrition program for Women, Infants, and Children (WIC)'s fruit and vegetable voucher. *The Journal of Perinatal & Neonatal Nursing*, 38(1), 18-24. <https://doi.org/10.1097/JPN.0000000000000793>
- Sebens, Z., & Williams, A. D. (2022). Disparities in early prenatal care and barriers to access among American Indian and white women in North Dakota. *The Journal of Rural Health*, 38(2), 314-322. <https://doi.org/10.1111/jrh.12649>
- Seeram, E. (2019). An overview of correlational research. *Radiologic Technology*, 91(2), 176-179.
- Shrank, W. H., DeParle, N. A., Gottlieb, S., Jain, S. H., Orszag, P., Powers, B. W., & Wilensky, G. R. (2021). Health costs and Financing: Challenges and strategies for a new administration: Commentary recommends health cost, financing, and other priorities for a new US administration. *Health Affairs*, 40(2), 235-242. <https://doi.org/10.1377/hlthaff.2020.01560>
- Silva, P. H. A. D., Aiquoc, K. M., Silva Nunes, A. D. D., Medeiros, W. R., Souza, T. A. D., Jerez-Roig, J., & Barbosa, I. R. (2022). Prevalence of access to prenatal care in the first trimester of pregnancy among Black women compared to other races/ethnicities: A systematic review and meta-analysis. *Public Health Reviews*, 43, 1604400. <https://doi.org/10.3389/phrs.2022.1604400>

Somerville, K., Neal-Barnett, A., Stadulis, R., Manns-James, L., & Stevens-Robinson, D.

(2021). Hair cortisol concentration and perceived chronic stress in low-income urban pregnant and postpartum Black women. *Journal of Racial and Ethnic Health Disparities*, 8(2), 519-531. <https://doi.org/10.1007/s40615-020-00809-4>

Soucy, N. L., Terrell, R. M., Chedid, R. A., & Phillips, K. P. (2023). Best practices in prenatal health promotion: Perceptions, experiences, and recommendations of Ottawa, Canada, prenatal key informants. *Women's Health*, 19, 1-12.

<https://doi.org/10.1177/17455057231158223>

Sterling, H. M., & Allan, B. A. (2022). Predictors and outcomes of US quality maternity leave: A review and conceptual framework. *Journal of Career Development*, 49(6), 1435-1453. <https://doi.org/10.1177/08948453211037398>

Sullivan, G. M., & Feinn, R. (2012). Using effect size—or why the p value is not enough. *Journal of Graduate Medical Education*, 4(3), 279–282.

<https://doi.org/10.4300/JGME-D-12-00156.1>

Taylor, B. L., Howard, L. M., Jackson, K., Johnson, S., Mantovani, N., Nath, S.,

O'Mahen, H., Rees, A., Rhodes, E., & Sweeney, A. (2021). Mums alone:

Exploring the role of isolation and loneliness in the narratives of women

diagnosed with perinatal depression. *Journal of Clinical Medicine*, 10(11), 2271.

<https://doi.org/10.3390/jcm10112271>

Taylor, J. K. (2020). Structural racism and maternal health among Black women. *Journal of Law, Medicine & Ethics*, 48(3), 506-517.

<https://doi.org/10.1177/1073110520958875>

- Terlap, M. (2023). Reworking women's work: Legal and policy solutions for alleviating poverty among working women. *Georgetown Journal on Poverty Law & Policy*, 30(3), 639-662.
- Thomas, K., Quist, S., Pehrah, S., Riley, K., Mittal, P. C., & Nguyen, B. T. (2023). The experiences of Black community-based doulas as they mitigate systems of racism: A qualitative study. *Journal of Midwifery & Women's Health*, 68(4), 466-472. <https://doi.org/10.1111/jmwh.13493>
- Thompson, T. A. M., Young, Y. Y., Bass, T. M., Baker, S., Njoku, O., Norwood, J., & Simpson, M. (2022). Racism runs through it: Examining the sexual and reproductive health experience of Black women in the South: Study examines the sexual and reproductive health experiences of Black women in the South. *Health Affairs*, 41(2), 195-202. <https://doi.org/10.1377/hlthaff.2021.01422>
- Tyler, E. T. (2022). Black mothers matter: The social, political, and legal determinants of black maternal health across the lifespan. *Journal of Health Care Law & Policy*, 25, 49-89.
- Upadhyay, S., Stephenson, A. L., Weech-Maldonado, R., & Cochran, C. (2022). Hospital cultural competency and attributes of patient safety culture: A study of US hospitals. *Journal of Patient Safety*, 18(3), 80-86. <https://doi.org/10.1097/PTS.0000000000000908>
- Wallace, M., Dyer, L., Felker-Kantor, E., Benno, J., Vilda, D., Harville, E., & Theall, K. (2021). Maternity care deserts and pregnancy-associated mortality in Louisiana. *Women's Health Issues*, 31(2), 122-129. <https://doi.org/10.1016/j.whi.2020.09.004>

- Wang, E., Glazer, K. B., Sofaer, S., Balbierz, A., & Howell, E. A. (2021). Racial and ethnic disparities in severe maternal morbidity: a qualitative study of women's experiences of peripartum care. *Women's Health Issues, 31*(1), 75-81.
<https://doi.org/10.1016/j.whi.2020.09.002>
- Wang, Z., Zhao, S., Cui, X., Song, Q., Shi, Z., Su, J., & Zang, J. (2021). Effects of dietary patterns during pregnancy on preterm birth: A birth cohort study in Shanghai. *Nutrients, 13*(7), 2367. <https://doi.org/10.3390/nu13072367>
- Welch, L., Canady, R. B., Harmell, C., White, N., Snow, C., & Low, L. K. (2022). We are not asking permission to save our own lives in Black-led birth centers to address health inequities. *The Journal of Perinatal and Neonatal Nursing, 36*(2), 138-149.
<https://doi.org/10.1097/jpn.0000000000000649>
- Wishart, D., Cruz Alvarez, C., Ward, C., Danner, S., O'Brian, C. A., & Simon, M. (2021). Racial and ethnic minority pregnant patients with low-income experiences of perinatal care: A scoping review. *Health Equity, 5*(1), 554-568.
<https://doi.org/10.1089/heq.2021.0017>
- Yates, L., Birken, S., Thompson, T. A., Stuart, G. S., Greene, S., Hassmiller Lich, K., & Weinberger, M. (2022). A qualitative analysis of Medicaid beneficiaries' perceptions of prenatal and immediate postpartum contraception counseling. *Women's Health, 18*. <https://doi.org/10.1177/17455057221124079>
- Zinga, J., McKay, F. H., Lindberg, R., & van der Pligt, P. (2022). Experiences of foodinsecure pregnant women and factors influencing their food choices. *Maternal and Child Health Journal, 26*(7), 1434-1441.
<https://doi.org/10.1007/s10995-022-03440-3>