

11-15-2023

## **Black Women's Experiences of Receiving Telemedicine Prenatal Care During COVID-19**

Dorothy Hiralien  
*Walden University*

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

---

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](mailto:ScholarWorks@waldenu.edu).

# Walden University

College of Psychology and Community Services

This is to certify that the doctoral dissertation by

Dorothy Hiralien

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. Ethel Perry, Committee Chairperson, Psychology Faculty

Dr. Debra Wilson, Committee Member, Psychology Faculty

Chief Academic Officer and Provost

Sue Subocz, Ph.D.

Walden University

2023

Abstract

Black Women's Experiences of Receiving Telemedicine Prenatal Care During COVID-

19

by

Dorothy Hiralien

MA, University of Saint Joseph, 2019

BS, College of the Holy Cross, 2015

Proposal Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

November 2023

## Abstract

Black women experience complications from pregnancy three times more than other populations. Mortality and preterm birth rates for Black women are significantly high and with COVID-19, all pregnant women had to adapt to changes in terms of how medical services were provided. With limited face-to-face visits during the height of COVID-19, some women could not get proper screening. The problem is that healthcare providers do not know how Black women describe their telehealth prenatal care experiences during COVID-19. The purpose of this study was to explore experiences of Black women in the United States regarding telemedicine for prenatal care. The biopsychosocial and holistic care models were used to identify experiences of Black women involving telemedicine for prenatal care during COVID-19. This generic qualitative study included semi-structured 35 to 62-minute interviews with 8 participants. Each interview was transcribed and coded manually using NVivo. There was a debriefing; 3 participants reviewed my interview analysis; however, it was not required. If there was more research exploring Black women's experiences, this could help with policy changes and development of programs and resources. This study provided firsthand knowledge regarding Black women that health providers can use in their practice to support this population during life-changing experiences. The positive social change is to increase awareness about Black maternal care and provide Black women quality prenatal care services that would reduce the high rate of preterm births or mortality. Black women deserve better outcomes, and this study was to give a voice to Black women to share their experiences.

Black Women's Experiences of Receiving Telemedicine Prenatal Care During COVID-

19

by

Dorothy Hiralien

MA, University of Saint Joseph, 2019

BS, College of the Holy Cross, 2015

Proposal Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

November 2023

## Dedication

This dissertation is dedicated to Black women and Black mothers. It is a tribute to the Black women who tragically lost their lives during childbirth and the Black moms who have endured the pain of miscarriage or the loss of a stillborn child.

## Acknowledgments

I thank my family, friends, and committee members for their unwavering support. Completing this dissertation would have been impossible without your constant encouragement and prayers. I want to extend a special acknowledgment to Dr. Perry for her consistent feedback, which she gave me every week. Her responsiveness and words of motivation were instrumental in keeping me on track. Lastly, I firmly believe that without God's divine intervention, none of this would have been attainable. I am eternally thankful for the opportunity to achieve this remarkable milestone, and I attribute it all to God's grace and guidance.

## Table of Contents

List of Tables .....	v
Chapter 1: Introduction to the Study.....	1
Background.....	2
Problem Statement.....	5
Purpose of the Study .....	6
Research Question .....	6
Conceptual Framework.....	7
Nature of the Study .....	7
Definitions.....	8
Assumptions.....	9
Scope and Delimitations .....	9
Limitations .....	10
Significance.....	11
Summary.....	12
Chapter 2: Literature Review .....	14
Literature Search Strategy.....	15
Conceptual Framework.....	16
Holistic Care Model.....	17
Literature Review Related to Key Variables and Concepts.....	19
Black History .....	19
Maternal Care for Black Women .....	21



Distrust with the Healthcare System.....	23
Access to Healthcare.....	24
Health Literacy and Advocacy.....	26
Mental Health.....	26
Substance Use.....	29
Doulas and Midwives.....	30
Birth Methods.....	31
COVID-19 and Telehealth.....	32
HIV/AIDS and STDs.....	34
Spirituality and Religion.....	36
Summary and Conclusion.....	37
Chapter 3: Research Method.....	39
Research Design and Rationale.....	40
Research Question.....	40
Central Concepts.....	40
Generic Qualitative Research Design.....	40
Role of the Researcher.....	41
<b>Methodology.....</b>	<b>42</b>
Population.....	42
Sampling Strategy.....	42
Inclusion and Exclusion Criteria.....	42
Sample Size.....	43

Instrumentation .....	43
Procedures for Recruitment, Participation, and Data Collection .....	45
Data Analysis .....	46
Issues of Trustworthiness.....	48
Credibility .....	48
Transferability .....	49
Dependability .....	49
Confirmability .....	50
Ethical Procedures .....	50
Summary .....	51
Chapter 4: Results .....	53
Setting .....	53
Demographics .....	54
Data Collection .....	55
Data Analysis .....	56
Evidence of Trustworthiness.....	57
Credibility .....	57
Transferability .....	58
Dependability .....	59
Results.....	59
Theme 1 .....	60
Theme 2 .....	62

Theme 3 .....	63
Theme 4 .....	64
Summary .....	67
Chapter 5: Discussion, Conclusions, and Recommendations .....	69
Interpretation of the Findings.....	69
Theme 1 .....	69
Theme 2 .....	71
Theme 3 .....	72
Theme 4 .....	73
Conceptual Framework.....	74
Limitations of the Study.....	77
Recommendations.....	78
Implications.....	78
Conclusion .....	80
References.....	82
Appendix A: Recruitment Flyer.....	101
Appendix B: Interview Questions.....	102
Appendix C: Demographic Data.....	104

## List of Tables

Table 1. Demographic Information .....	54
Table 2. Themes.....	60

## Chapter 1: Introduction to the Study

Black women are at a higher risk of dying during labor and delivery or being stillborn (Suarez, 2020). They are three times more likely to die during childbirth than White women (CDC, 2019). Research has emphasized the importance of health literacy and how it can improve the quality of care. For instance, pregnant Black women report that they receive inadequate support from their providers (Campbell, 2021). As a result, they are faced with the assumption that their concerns may not be significant. Ultimately, they have little choice but to accept and trust their providers.

COVID-19 impacted the world, and everyone had to quickly transition to remote work and use telehealth to remain safe (Nabi & Mishra, 2021). COVID-19 affected access to medical appointments, and all elective surgeries were paused (Tripathy et al., 2021). However, babies were still being born, and moms needed prenatal care to ensure a safe pregnancy. Providers were able to provide services to pregnant women because of telemedicine. The needs of patients still needed to be met, especially for pregnant women. Some patients in Denmark disliked the sudden transition (Sorknæs et al., 2015), but providers had to abide by state laws to ensure everyone remained safe. Telemedicine reduced transportation barriers faced by some women (Nelson et al., 2021), and telehealth has benefits, such as attending appointments from the comfort of your home. Healthcare workers and policymakers do not know about the experiences of Black women using telemedicine for prenatal care.

This study will educate healthcare providers on how they can best support Black women during their pregnancies. This study involved sharing their experiences regarding

telemedicine for prenatal care. This information is helpful because telehealth is still an option for patients even though face-to-face visits have resumed. Policymakers and healthcare providers will learn how Black women share their experiences with telemedicine as it was primarily used during COVID-19. Black women experience three times more higher rates of complications during pregnancy (CDC, 2019).

Chapter 1 includes background information about maternal care for Black women: I give a description of why this topic is explored and important. I provide background information about the severity of the poor maternal outcomes for Black women and discuss why interventions are needed. I used a generic qualitative study design because there is not much qualitative research exploring Black women and their experiences with telemedicine for prenatal care. The biopsychosocial and holistic care models were the conceptual frameworks for the study. Those frameworks helped with development of research questions and data analysis. I provide a brief list of terminology that is commonly used throughout the study for context and clarity. I describe assumptions that were made when considering Black women. Lastly, I discuss the significance of the study. This chapter includes details about how this study's information can benefit care and policymakers and why this study is worthy of attention.

### **Background**

Black women are still dying three times higher than other women (CDC, 2022). Black women seek more prenatal care than White women, but that does not reduce the complications they can potentially face (Thurston et al., 2021). Prenatal care clinics

should be a place where women can monitor their health and that of their babies, but Black women do not receive equitable care to protect their babies or themselves.

Health literacy, access to care, and mental health are significant factors when considering maternal care. Health literacy can increase the likelihood of making better decisions and health outcomes (Vasantha et al., 2022). Access to care can reduce the severity of pregnancy complications (Asbury, 2015), especially for Black women who are considered high-risk. Mental health is not given attention, which could be harmful. Prenatal depression is common among Black women (Conteh et al., 2022). Asking for help or admitting a problem can be a struggle for some people, especially for moms who feel they should know everything. COVID-19 added challenges and stress for many people, and being an expectant woman of any race or ethnic background was another factor to consider.

COVID-19 was a new virus that scientists were unfamiliar with, and many individuals were becoming ill and dying quickly. It took the lives of millions of people in the U.S., specifically Black Americans. Black Americans were dying more from the COVID-19 virus than other population groups (Zalla et al., 2022). In general, chronic health conditions negatively impacted the Black community at higher rates (Zalla et al., 2022).

COVID-19 provided challenges to healthcare providers because babies still needed to be delivered, and moms needed prenatal care. Since COVID-19 was new for everyone, this prompted exploring research to see how Black women experienced telemedicine for prenatal care. Telemedicine was used to continue providing services to

patients and reduce the spread of COVID-19 (Nataliansyah et al., 2022). Telemedicine did increase access to care for many individuals (Nelson et al., 2021), but it was an adjustment for providers and patients. Telemedicine was challenging for some individuals due to limited access to reliable Wi-Fi, privacy, and devices (Kalal et al., 2022). Some individuals were disadvantaged because they needed reliable Wi-Fi or a quiet space to talk. Face-to-face appointments have resumed, but telemedicine remains an option for patients in some health practices, and having both options provides flexibility to patients (Skinner et al., 2022).

After exploring different research articles and concepts to understand what is happening within the Black community, there was limited research on telemedicine experiences involving Black women's prenatal care. Healthcare workers and policymakers do not know how Black women described their experiences with telemedicine for prenatal care. Knowing this information is important because, considering the substantial impact COVID-19 has had on the world, knowing Black women's experiences with prenatal care can create more avenues for efficient care. With the development of training to increase cultural competency, identify racial bias, and create equitable care, having knowledge of the experiences of this topic will give healthcare workers and policymakers firsthand information about how to service a unique population.

Black history is unique. When considering childbirth, Black women are at a high risk of having a stillborn or dying during childbirth (Suarez, 2020). This was true before COVID-19, and since telemedicine was one of the primary ways of receiving medical



care during the height of COVID-19, understanding Black women's prenatal care experiences would be beneficial because despite face-to-face visits resuming, knowing how this method can be optimized for everyone using it is part of equitable care. There was limited research exploring the experiences of Black women using telemedicine for prenatal care. Learning about how Black women described their experiences with telemedicine is information the scholarly community should know because Black women are dying during childbirth from complications.

### **Problem Statement**

Black women are three times more likely than White women to die from pregnancy-related complications (CDC, 2019). Despite low-income Black women having more access to medical services more than low income White women, Black women experience preterm births 14%, while White women experience it at 8.57% (Thurston et al., 2021). This research was critical for Black maternal care because Black women are dying from complications that can be treated if noticed early on. Given the three times higher infant mortality rate for Black women (Howell et al., 2020), more information was needed to protect Black women and their babies. Black women should be able to have better outcomes when it comes to childbirth, and prenatal care is the start of it. Healthcare workers and policymakers do not know how Black women describe their prenatal care using telemedicine, and they should know because Black women are considered high-risk. This information will help healthcare practitioners learn about their patients' care and help educate healthcare providers when working with pregnant Black women.

Salsberg et al. (2019) stated 3.1% of Blacks and 6.6% of Hispanic students in the United States were in graduate health programs. Obstetrician gynecologists (OBGYN) and other healthcare providers, such as nurses, technicians or assistants play an essential role in the pregnancy journey for women from taking their vitals, doing ultrasounds, or getting blood work done, but there are not enough Black OBGYNs and health providers (Dugan-Moverley, 2021). Dugan-Moverley (2021) claimed with Black health providers, Black women could feel comfortable and have their concerns validated, making a difference in terms of how they experience their pregnancy. According to Salsberg et al. (2021), having diversity among health providers can increase cultural awareness and decrease poor outcomes for minorities. Therefore, I explored experiences of Black women with telemedicine for prenatal care during COVID-19.

### **Purpose of the Study**

The purpose of this study was to highlight Black women's experiences using telemedicine for prenatal care during COVID-19. I explored perceptions of Black women getting prenatal care using telemedicine during COVID-19. Some quantitative studies studied telehealth for women during COVID-19, but not specifically for Black women, and not many qualitative studies explored Black women's experiences with prenatal care. This study contributed to the little research specific to this topic. This study involved sharing their insights about prenatal care and telemedicine during COVID-19.

### **Research Question**

What are Black women's experiences involving telemedicine prenatal care during COVID-19?

## **Conceptual Framework**

The biopsychosocial model is a conceptual framework that involves exploring biological, psychological, and social concepts and how they relate to development, health, and diseases (Mehra et al., 2020). In 1977, George Engel developed the biopsychosocial model. This framework was used as to analyze themes involving experiences of Black women in the United States.

In addition, the biopsychosocial model is reductionist and reduces people into parts. In Chapter2, the biopsychosocial model is outlined in further detail, in addition to why it was used in this study. The holistic care model was used to cover factors such as religion or spirituality.

The holistic care model was used as a secondary model because such as religion and spirituality have come up throughout research. The holistic care model includes different factors such as religion and spirituality that the biopsychosocial model does not include. It is inclusive and is not reductionist (Tsai et al., 2021) It is used in current research exploring HIV, access to care, and quality of care. This model as a secondary framework helped that factors such as religion, HIV or substance use would be asked during interviews. This model was used because it captured a holistic picture of individuals and considers factors outside of the biopsychosocial model that is worth exploring.

## **Nature of the Study**

I used a generic qualitative approach to explore experiences of Black women with telemedicine for prenatal care during COVID-19. The generic qualitative approach

involves understanding human experiences (Kostere & Kostere, 2022). This approach allows a generalized perspective. Each participant had their own experiences, despite some possible similarities.

Everything is constructed and continuously based on experience or phenomenon (Merriam & Tisdell, 2016). I focused on how Black women describe their experience with telemedicine for prenatal care during COVID-19 and what meaning they attach to those experiences. Qualitative research involves exploring descriptive data (Kostere & Kostere, 2022), and understanding how people make sense of their world and what they have experienced (Merriam & Tisdell, 2016).

Data were collected through semi-structured 60-minute interviews. Participants were asked to do interviews in person or via a virtual interview using Zoom. Data were analyzed using manual coding and the qualitative software NVivo to identify codes and themes. In addition, I used the six-step thematic analysis developed by Braun and Clarke. The six steps are outlined step by step in Chapter 3.

### **Definitions**

Terminology that was most frequently used throughout this study is as follows:

*COVID-19*: A contagious disease caused by the SARS-CoV virus. This virus affects everyone differently, and symptoms include fever, chills, cough, and body aches (Zalla et al., 2022).

*Prenatal Care*: Medical services pregnant women receive during their pregnancy (Duberstein et al., 2021).

*Telemedicine*: A form of online communication and delivering information for healthcare providers involving counseling, education, and consulting via phone or video (Laursen et al., 2022).

### **Assumptions**

I assumed participants were open and honest about their experiences. It was assumed that participants would be open to sharing if they volunteered to participate in the study. However, there is no way to measure if verify participant's experiences. It was assumed that all Black women who received telemedicine prenatal care would have similar experiences despite living in different areas. It was assumed that Black women who participated in the study had at least one prenatal visit using telemedicine. I assumed participants were comfortable sharing; however, because these were personal experiences, they may have wanted to protect their stories.

Additionally, assumed Black women who met the criteria would be easy to find and Black women who met the criteria would want to participant. Understanding the sensitivity of this topic, some participants may have felt uncomfortable sharing their experiences.

### **Scope and Delimitations**

Participants in this study were adult Black women who resided in the U.S. and received prenatal care via telemedicine during COVID-19. I included women who received telemedicine prenatal care before COVID-19. I did not include women who did not identify as Black women. I did not interview participants who were current clients or received any clinical service from me. Black women residing in cities, rural, and

suburban communities in the United States were welcomed for a diverse pool of experiences and more insights.

Participants were expected to speak English and had lived births during COVID-19. Black women who had a conservator, did not speak, or understand English, or did not have biological children were excluded. Additionally, Black women who had a previous relationship with me were excluded.

Despite the target population being Black women, this study could potentially encourage further research to explore other population groups. Hispanic women also experience miscarriages or unsuccessful delivery (Rapp et al., 2021). Data may not only support Black women but other populations with similarly poor outcomes. Data from this study emphasized the importance of developing interventions and resources that can benefit all women, especially Black women with limited access to resources or complex medical histories.

### **Limitations**

A few limitations of the study were the method, which was a generic qualitative approach, and recruitment. The goal was to find 8-15 Black women who had telemedicine prenatal care during COVID-19, and only eight were used in this study. This could be a limitation considering there are more than eight Black women who have telemedicine prenatal care during COVID-19 in the United States. As a result, transferability was weak since I cannot assume that the experiences of the eight women who participated in the study accurately sum up the experiences of all the Black women in the United States.

Lastly, recruitment was a limitation for the study. There were several participants that volunteered but did not show up for the interview. Additionally, there were not many Black women who met all the criteria for the study. Ultimately, only eight participants were used in the study. As a Black woman and having my face on the recruitment flyer helped, which could be bias to think as well.

### **Significance**

The study contributed to addressing experiences involving prenatal care telemedicine for Black women during COVID-19. This study will help change how healthcare providers consider pregnant high-risk populations when providing or developing treatment. Given the impact COVID-19 had, it would be beneficial to understand how Black women navigated prenatal care using telemedicine. Black women in the United States are experiencing high pregnancy complications at 14% compared to White women, leading to more poor outcomes than White women (Thurston, 2021). Furthermore, this study contributed to the need for more research on pregnant Black women, considering high risks during pregnancy, labor, and delivery.

Understanding how services and interventions can benefit Black women can increase the likelihood of better outcomes, for instance, successful labor and delivery. Reducing the risks Black women face in maternal care is essential and should be valued, as Black women are three times more likely to experience pregnancy complications (CDC, 2019). Providing firsthand experiences of Black women can lead to social change

because Black women's difficulties should be valued and supported so Black women can have birthing experiences.

Policy developments within healthcare can benefit this study. Having the data from this study accessible will help in terms of future policy developments so policymakers and healthcare workers understand how Black women describe past and current experiences. Policymakers need to create supportive care to reduce poor outcomes for all women, especially Black women.

The study is significant for positive social change because Black women deserve better pregnancy outcomes. Some babies require long-term care if they experience problems during the early stages of development or are born prematurely. The cost of medical visits and hospitalization for preterm babies is an average of \$182,312 during their first year of life, and out-of-pocket fees average \$2,212 (Callander & Atwell, 2020). To better serve Black women, knowing how they describe their services is helpful. This study includes details about Black women's experiences during a pandemic and during pregnancy. Furthermore, this study will support Black women, providing better care, and valuing their health and safety regarding maternal care.

### **Summary**

Black women die during labor and delivery (Suarez, 2020). Black women need to be studied more, and they need to be understood to have a higher likelihood of having a positive pregnancy experience. This research can ensure that Black women have a chance of better pregnancy outcomes.



COVID-19 changed how medical practice providers service their patients. Prenatal visits were happening virtually or over the phone (Nataliansyah et al., 2022). Although this led to more access to medical visits for some women in the United States living in rural areas (Nataliansyah et al., 2021), telemedicine was a barrier for those who did not have reliable Wi-Fi or a private place to attend appointments but found that in the United States, there was an 80% decline in in-person visits (Kalal et al., 2022). Before COVID-19, Black women had disproportionate pregnancy outcomes compared to White women (Suarez, 2020). Black women are under-researched and at a higher risk for medical complications during pregnancy, so learning about their experiences with telemedicine was critical.

## Chapter 2: Literature Review

Since COVID-19, many appointments have become virtual only. The transition for providers had its challenges, such as learning a new platform, informing patients of changes in services, overcoming technical obstacles, so it did not meet the needs of some medical patients (Sorknaes et al., 2015). Having face-to-face appointments allowed providers to build rapport, notice concerns, and provide immediate testing and screenings, but most services were put on hold or delayed. For pregnant women, having to experience labor and delivery alone led to stress and concerns (Menconi, 2020). Black women are three times more likely die than White women during pregnancy, labor, or delivery (Suarez, 2020), and report discrimination from their health providers (Mehra et al., 2020). There are racial and ethnic concerns, such as racism, microaggression, and or discrimination for Black women and outcomes involving pregnancy, labor, and delivery. A thorough exploration of Black women's experiences regarding telemedicine for prenatal care during COVID-19 provides more insights regarding how to support these women.

The purpose of this study was to explore experiences of Black women involving virtual prenatal services. Some challenges include discrimination and racism, low birth weight, early delivery, and lack of access to care. This qualitative study might provide insights regarding how Black women reflect on their experiences of prenatal care using telemedicine during COVID-19.

This literature review includes the history of Black Americans and barriers to access to healthcare. I also explore underlying factors such as mental health and diversity.

This literature review includes information about racism, discrimination, mental health, and COVID-19.

### **Literature Search Strategy**

I used Google Scholar and the Walden University Library. Databases were: APA PsycInfo, MEDLINE, Business Source Complete SocIndex, CINAHI, CINAHL, Complementary Index, Science Direct, Education Source, Academic Search Complete, and Political Science Complete. I used the following search terms: *perceptions, experiences, African Americans, Black, people of color, female, women, labor/delivery, prenatal care, telehealth, telemedicine, beliefs, values, mental health, HIV, substance use, STD/STI, pandemic, pregnancy, OBGYN, healthcare, health literacy, chronic health conditions, mortality rates, spirituality, doulas, midwifery, COVID-19, women's health, access to care, vaccines, medication, Black history, maternal care, breastfeeding, insurance, medical expenses/costs, health professionals and postpartum depression, religion, support, caregivers, families, single mom, high risk pregnancies, geriatric pregnancies, menstrual cycle, fibroids, ovarian cysts, pap smear, culture awareness, race, racial biases, Black Lives Matter (BLM), discrimination, cultural competency, western medicine, c-section, vaginal birth, critical race theory, disabilities, communities, social determinants, socioeconomics, poverty, diet, exercise, therapy, counseling, lifestyle, treatment, medical appointments, fertility, interventions, preventative care, White privilege, advocacy, equality, Tuskegee experiment, and distrust in the healthcare system.*

Some books and journals were used to provide historical background. Peer-reviewed articles that were written between 2019 and 2023 were also used for this research. Some articles published prior to 2019 were used as they touched on significant critical aspects and provided context as well as background knowledge regarding this topic.

### **Conceptual Framework**

The biopsychosocial model includes three fundamental concepts that interact with each other and help shape experiences. The model was used to explore anxiety, health outcomes, COVID-19, depression, and substance use between 2019 and 2023. In addition, Black women face discrimination and racism, which may lead to complications of labor and delivery (Mehra et al., 2020). This study involved exploring Black women's telemedicine prenatal care experiences before the final stages of pregnancy.

This study is critical because of the unique changes COVID-19 brought to healthcare professionals. This current study benefited from using these three concepts because previous studies have shown the valuable information that this model can provide.

The biopsychosocial model helped guide this study and develop new research to explore social, biological, and psychological elements. This model helped emphasize psychological, biological, and social influences of development. The information helped with the development of alternative ways of providing services to pregnant women.

Exploring COVID-19 on Black women and their prenatal care was the heart of this research. The biopsychosocial framework has been used to explore COVID-19 and

understand its impact on the Black community (Roberts, 2021). The foundational aspects of development include social, biological, and psychological. Considering the longevity of this model, it will be helpful to have foundational aspects to understand what is happening in the world today. Despite the development of more holistic approaches, there is a different meaning to being able to ground research on foundational models to see if they can offer a new perspective. The biopsychosocial model is widely known by researchers and can reduce misunderstanding and make connections that make viable sense.

### **Holistic Care Model**

Since several underlying factors can arise when exploring prenatal care for Black women, the holistic care model will be used as a secondary framework. It is important not to minimize each person's experiences, so to be more inclusive, this model will help cover all bases. The holistic care model encapsulates factors such as spirituality and socioeconomic status, and other concepts that the biopsychosocial model also covers. Since the biopsychosocial model has been around for many years, but the holistic model is widely accepted. Out of all the concepts that the holistic care model includes, the ones that are not included under biopsychosocial model will be included in the holistic model.

The holistic care model incorporates more facets of life that could be part of an experience. For example, some individuals may have spiritual beliefs surrounding medical care and advice that may be a factor to consider. The holistic care model is generated from holistic nursing, in which the patient is treated to view all parts of the patient's identity (Tsai et al., 2021). This includes spirituality/religion, race, and other

factors that could provide more insight into a participant's experience with telehealth for prenatal care.

Over the years, this framework has been used to improve patient care quality (Sendaula et al., 2022). This is important because research has been exploring ways health providers can increase access to care, provide optimal patient care, and increase health literacy. This model has been used to explore HIV patients' readiness for treatment (Sendaula et al., 2022). The results showed that the holistic care model supported all areas of a patient's life, improving treatment effectiveness. Alexandros et al. (2021) used this model to explore family dynamics and caregivers. Their findings showed that patients with their barriers addressed and considered have better opportunities to address what prevents treatment progress.

Exploring the experiences of Black women with telehealth for prenatal care using this model will allow more information to be shared that can be important in the development of healthcare. There needs to be more research using this model to explore this topic, and this study will be able to contribute to the little research that exists. As such, this model will allow more experiences to be shared and consider different factors as important as those described in the biopsychosocial model. The holistic care model guided the study to provide more beneficial information for professionals. In addition, it can help with the development of telehealth and how it can better support all patients. In conclusion, the development of the holistic care model was helpful in this study because of its multidimensional aspects, which are also very important for most patients.

### **Literature Review Related to Key Variables and Concepts**

In the following section, several concepts will be outlined because the information will provide insight into the overall topic of maternal care and the concepts explored. In addition, when reviewing previous research articles from other researchers, these concepts were found to be important in their research. The concepts that are included in this literature review are Black history, maternal care for Black women, distrust in the healthcare system, access to health, health literacy and advocacy, mental health, substance use, doulas and midwifery, COVID-19 and telehealth, birth methods, HIV/AIDS and STDs, religion, and spirituality.

#### **Black History**

There is a long history of racial inequality and injustice against Black people (Reed, 2021). The start of slavery began in 1619 and lasted roughly 246 years (Harvey, 2019). Despite slavery ending in 1865, its lasting impact on Black Americans is still present. For example, research shows that Black Americans report implicit racism and discrimination in the workplace (DeCuir-Gunby et al., 2020). The thirteenth amendment in 1865 ended slavery; however, in 2022, Black Americans are still experiencing discrimination and microaggression, such as the existence of White privilege- the advantage of the White race in a society of racial injustices (Bhopal, 2020). With the development of Black Lives Matter (BLM), many Black Americans joined to protest injustices and inequalities, especially toward law enforcement and policymakers (McManus et al., 2019). There is still a long way to go because the advocacy for Black lives was not shown to be valuable to society. The racism and discrimination have carried

on to where Black Americans face challenges in securing jobs, access to care, and even securing a loan for a mortgage (Kopkin, 2018). Systematic racism is a part of America's history. This is made true by Black Americans sharing their experiences in the workplace, housing, education, and access to healthcare and White privilege, making it difficult to speak up about the injustices (Rodriguez et al., 2021).

The Tuskegee Syphilis study was a 40-year human experiment from 1932 to 1979, and it created distrust in the healthcare study for Black Americans, especially Black men (Mackey-Kallis, 2022). Approximately 400 Black American males were used to research untreated syphilis, and none of the participants were aware of the study but believed they were getting medical treatment (Mackey-Kallis, 2022). As a result, nearly half of the participants died from the disease. From then on, Black Americans were resistant to medical treatment for fear of being used as blinded participants in research. Currently, there are more preventable measures, such as informed consent, laws, and policy that protects patients to ensure this does not occur, but this has made it hard for Black Americans to know that their best interest is essential to their providers, especially since the last study participant died in 2004, so the ripple effect is still fresh. In addition, no one was prosecuted, and families only received an apology made by President Clinton (Lynch, 2021).

Studies show that African Americans have a higher mortality rate for COVID-19 than White Americans (Ferdinand, 2021). With the development of the COVID-19 vaccine, many Black Americans have refused to get the vaccine due to distrust in the healthcare system, and studies show that one way to reduce distrust in the healthcare



system is to include cultural humility (Ferdinand, 2021). Using Black participants in clinical research, being involved in the Black community, and having providers that look like them (Liverpool, 2021) will increase the cultural awareness of the Black community and how to serve them better. What is discussed is a small glimpse of an extensive list of mishaps that impacted the Black community, and today, the history cannot be erased but needs to be considered when treating Black patients.

### **Maternal Care for Black Women**

A long history of pain tolerance for Black Americans is being diluted and ignored (Mende-Siedlecki et al., 2019). Many Black patients will share their concerns, of pain or discomfort but they will not be taken seriously because they show their symptoms differently, leaving Black patients with undiagnosed issues. Having their concerns ignored can create a barrier to self-advocacy and treatment because of misdiagnosed or ignored issues. According to Mende-Siedlecki et al. (2019), Black patients are less likely to be prescribed opioids for their pain or prescribed any pain medication. There are biases for pain tolerance that exclude Black patients from receiving the same pain medication as White patients. These are essential factors to be considered when exploring the perceptions of Black women getting prenatal care using telehealth. Black women may not share their concerns about their pregnancy and have their concerns respected and valued by their providers.

Black Americans reported discrimination and racism from their healthcare providers (Liverpool, 2021). Specifically, Black women reported racism and discrimination from their healthcare providers (Glover, 2021). Discrimination and racism

are underlying factors that Black women may have to be aware of from their healthcare providers. Studies have shown that Black women are at a higher risk of early labor, stillborn, or mortality than White Americans (Suarez, 2020). Studies also show that Black women seek prenatal care more than White women (Thurston et al., 2021), but that does not reduce Black women's risks. According to the CDC, Black women are still at high risk (CDC, 2022). Black women require special care because their history is unique, so the care must be multidimensional to include different aspects that can make up the experiences of an individual, such as spirituality, environment, beliefs, values, and more (Thurston et al., 2021). As a result, this research will focus on different aspects explored in research, such as psychological, social, and biological. In addition, factors such as religion and spirituality will also be accounted for, as they can play a big part in someone's experience.

For multidimensional interventions to be used, there needs to be consideration of the diversity in patient needs and knowing that healthcare cannot be a one size fit. Western medicine is the most common practice, but it does not include the growing diversity of people living in America. Black patients benefit from having providers that look like them. It is suggested that having more Black doctors could decrease the health disparities among Black people (Dugan-Moverley, 2021). There are few Black OBGYNs in healthcare, but it is not as large as White OBGYNs (Dugan-Moverley, 2021). This ultimately gives Black women no choice but to receive care from White providers with whom Black women may not feel comfortable discussing their health concerns or issues. Consequently, Black women are to hope that their provider is open and understanding of

their needs to feel safe. If patients are seen by providers that look like them, their experiences and concerns can be understood and valued.

There has been a continuous discussion surrounding discrimination and racism in the healthcare field for Black women (Glover, 2021) and racial disparities, and why there is a gap in the outcome of Black and White women during childbirth. Discrimination, racism, and implicit biases have encouraged health agencies to provide training on racial biases and disparities to inform their providers about giving care to other ethnic groups. Since there is limited knowledge about Black maternal health, Black women are often challenged regarding their bodies, so their concerns are dismissed (Campbell, 2021). The problems of Black women are dismissed for several different reasons, lack of understanding from their providers, racial biases from providers, and discrimination (Mehra et al., 2020). Pregnant black women having their concerns dismissed has been happening for years, and studies show that Black women have a higher infant mortality rate (Howell et al., 2020). Part of medical practice is to have patients sign an informed consent form before any service. Having informed consent is a medical practice to protect health care providers and their services; however, the patient is still the primary individual in knowing their symptoms and having doctors, nurses, and other medical professionals of color matters because it can reduce cultural misunderstandings and protect Black women's history.

### **Distrust with the Healthcare System**

Going back many years, Black Americans have been used for experimental studies, leading Black Americans to be apprehensive about medical care (Ning et al.,

2021). This is a barrier for Black Americans to get proper treatment for medical conditions because they do not participate in routine medical visits (Ning et al., 2021). For example, the Tuskegee study exposed Black Americans to the Syphilis virus, and many Black Americans died without knowing what they were exposed to (Alsan et al., 2020). Not many Black Americans are willing to get vaccinated for COVID-19 because they are not entirely on board with trusting the healthcare system, despite the ethical standards to protect citizens.

More Black Americans died from COVID-19 than other races (Zalla et al., 2022). This information is consistent with health outcomes for chronic conditions and labor and delivery. Black women are more likely to die during labor and delivery than White women (Kothari et al., 2017). Resources have improved, but many are unaware of them or unwilling to accept them due to mistrust in the healthcare system. Pregnancy should be a beautiful experience, but statistics do not give Black women hope that their experience will be as beautiful as a White woman who is also pregnant (Suarez, 2020). White women also face challenges during their pregnancy, but they have a higher chance of surviving than Black women who also have the same complications (Schultz et al., 2022). The odds are not always in favor of Black Americans, particularly Black women. The hope is that this study will continue highlighting areas in the healthcare system that can support Black women and provide them with adequate care and attention.

### **Access to Healthcare**

Unfortunately, not everyone has access to quality health care. Mostly all medical services can be costly, and that is where health insurance comes in. However, if one does

not have insurance, the patient is left to pay out of pocket. Black and Hispanic women face challenges such as having no insurance, high co-pays for services, or not receiving care at the appropriate time (Rapp et al., 2021). Studies show that Black and Hispanic women face these barriers more frequently than White women (Rapp et al., 2021) and that Black women are three times more likely to die from pregnancy-related complications than White women (CDC, 2019). Black and Hispanic women have poor birth outcomes than White women. However, Black women face more challenges than Hispanic women (Bediako et al., 2015). Insurance is supposed to help with medical bills, but often the insurance does not cover the total fee, so the rest is left for patients to pay out of pocket. As a result, women, especially Black women, will delay their appointments or not receive medical attention due to medical bills and financial setbacks for families on a fixed income or living with limited means (Brown et al., 2021). Ultimately, this choice leaves Black women exposed to undiagnosed conditions, such as high blood pressure, diabetes, or fetal abnormalities (Asbury, 2015) during pregnancy that can harm the fetus and the woman.

Access to health care is essential, but multicultural interventions (Thurston et al., 2021) are helpful because there are many different cultures and ethnicities in the United States. Every culture has its history and beliefs, and it will be essential to keep that in mind with the development of interventions. The result of multicultural inventions will be flexible in respecting one's beliefs and culture while providing optimal care.

## **Health Literacy and Advocacy**

Health literacy is crucial in being able to make the right health decisions. Cross-sectional research has studied ways to improve health literacy, and results showed that health literacy, self-efficacy, and motivation for change are linked (Hepburn, 2018). Many preventable health risks exist, but limited resources can be a barrier. Promoting health literacy that is easy to understand and accessible is progress in a positive direction. Research shows that Black women are interested in learning about sexual health and reproduction (Chandler, 2020). Equally important, health literacy can reduce misconceptions about women's health (Chandler, 2020). Misconceptions lead to poor decisions, which may have a lasting effect on long-term health. Furthermore, knowledge is wealth, and studies have explored the difference health literacy can make (Vasantha et al., 2022).

Advocacy in different aspects of management (Hunte et al., 2022) can promote the well-being of Black women. Representation matters, and without the voice of Black women, it can be hard to know their needs. This study explores Black women's experiences receiving telemedicine for prenatal care because, during the pandemic, women still had children and had to adapt to the shift in services. Considering that a global pandemic can occur at any time, seeing how healthcare providers can serve their patients using the insight from their patients can improve the quality of care.

## **Mental Health**

Studies show that Black women experience severe mental illnesses due to their experience with high stress (Sweeney et al., 2021). In early 2020, COVID-19 forced the

world to shut down, including restaurants, gyms, and offices. The pandemic caused much stress for many individuals, increasing the need for mental health services. Black women were already a high risk for chronic illnesses and stress (Sweeney et al., 2021), and this pandemic added to the stress levels. Developing a new routine and finding alternative ways to cope with stress were needed to figure out how life could continue during the pandemic.

Prenatal depression is common among women, especially Black women (Conteh et al., 2022), because of the stress pregnancy can bring and the barriers Black women face outside of pregnancy, such as discrimination and racism (Ertel KA et al., 2012). COVID-19 has interrupted how the world functions, including the services individuals can receive for mental health. In general, the challenges Black Americans face, such as historical trauma, make it possible to have mental health risks (Novacek et al., 2020). During the pandemic's early stages, pregnant women could not have anyone in the medical room; some even gave birth alone.

Black women are less likely to be screened for depression (Conteh et al., 2022) because they do not show obvious signs of depression, so many pregnant Black women are not getting proper treatment earlier on to manage postpartum depression later. Studies show that Black women are exposed to higher stress levels, making them more likely to have depression (Ertel et al., 2012). However, pregnant Black women do not get adequate screenings and psychoeducation about prenatal depression or postpartum depression. However, Black women are also less likely to attend postpartum visits (Sweeney et al.,

2021) due to transportation or not understanding the importance, leaving them without the proper care to manage depression.

In addition to prenatal and postpartum depression, Black women report less support in other facets of motherhood (Sweeney et al., 2021). For example, Black women do not get enough help with breastfeeding and childcare (Sweeney et al., 2021). These stressors that come with a newborn can expose new moms to stress and increase the possibility of developing depression or postpartum depression. Whether it is a first-time mom or a mom for the second time, having a baby during COVID-19 was new for everyone, even healthcare providers. Prenatal care was a service that had to figure out a way to continue, and as a result, this could have potentially limited the resources for Black women.

As previously mentioned, there is a long history of racism and discrimination toward Black women. Black women report racism and bigotry, and research shows it contributes to prenatal depression (Ertel KA et al., 2012). Understanding the effects of implicit biases, racism, and discrimination toward Black women will make a difference in the experiences of Black women (Thiem et al., 2019), and those experiences could potentially cause mental health issues. COVID-19 and the shift of services, it will be helpful to understand how Black women experienced prenatal care. Knowing how telemedicine was for Black women will give healthcare providers an understanding of how they can better serve marginalized communities.



## **Substance Use**

Studies show that Black individuals have difficulty receiving appropriate care for substance use (Jordan et al., 2021). Substance use is a health crisis in the country, especially opioid use (Stevens & Stevens-Watkins, 2020). This is a significant concern; pregnant women are advised to refrain from alcohol or other drugs during their pregnancy. Opioid-related deaths are becoming too familiar in rural areas (Stevens & Steven-Watkins, 2020). Much of the research on opioid use has explored White Americans and very little on Black Americans (James & Jordan, 2018). Substance use in Black communities needs more attention to highlight what it is doing in the community and its impact on an unborn child.

Despite substance use decreasing life expectancy, White Americans live longer than Black Americans (Bridges, 2020). Marijuana use during pregnancy has increased, especially in areas where it has become legalized (Yee et al., 2022); this is concerning because it could harm the baby. Substance use during pregnancy has significant effects on an unborn child (Wei et al., 2020). This may be considered old information, but due to limited health literacy, this information is not accessible to some women. As a result, an unborn can be born with substances in their system. The drug epidemic in this country is affecting many different population groups; however, Black communities have lower survival rates than other population groups (James & Jordan, 2018). Consequently, substance use in Black communities is a concern.

## **Doulas and Midwives**

Doulas are non-medical professionals who provide support and knowledge to pregnant women (Collins et al., 2021), and some are certified, while others are not. Based on the certification, there are certain services they can and cannot provide. It is becoming more common for Black women to have a doula because of the help they can get and having their medical provider listen to their concerns (Collins et al., 2021). However, studies show that even Black doulas face racism (Oparah et al., 2021). Black women report having little support during and after their pregnancy, so having a doula can increase the possibility of getting help and obtaining knowledge about this experience.

Midwives are licensed and certified but not doctors (Suarez, 2020) and require schooling and board exams to become a midwife. Women who desire to have natural births or give birth at home typically work with a midwife to ensure proper care. Black midwifery believes in allowing moms to determine how they would like to give birth and understand the intimacy of pregnancy and childbirth (Suarez, 2020). Despite women being encouraged to have their children in a medical facility, home births are allowed, and midwives can participate in those experiences. Some midwives work in medical facilities, and due to the rules and regulations of the facility, they are limited in what they can do (Suarez, 2020).

Midwifery and doulas have existed for centuries, and birth outcomes have been better for low-risk pregnant Black women who decide to have a doula or a midwife (Suarez, 2020). However, some Black women may not be as fortunate and may not know the reason for having one. Health literacy is essential, and that includes maternal health

literacy. Black women can feel validated and supported when treated by a doula or midwife who looks like them and is confident that they are the experts regarding their bodies. This is a privilege that some Black women do not have due to cost and lack of awareness.

### **Birth Methods**

There are two methods for childbirth: vaginal birth or cesarean. Vaginal births are termed natural birth (Ozcan et al., 2021), and a cesarean is referred to as a C-section (Deninotti et al., 2020). Both methods can have complications, and the recovery can depend on the mother. However, c-sections are considered significant surgeries (Deninotti et al., 2020), but women are expected to recover while taking care of a newborn. Over the years, there has been an increase in c-sections for Black women (Snowden et al., 2020), and sometimes it is not medically necessary. For example, after having one c-section, some women are advised that they cannot have a vaginal birth (Levin et al., 2022). As a result, women have several planned c-sections when they are medically healthy to have vaginal births.

Having a vaginal birth may seem ideal, but pregnancy has complications, especially postpartum (Wang et al., 2022). Postpartum complications are not given enough attention, and many Black women often develop chronic health conditions during recovery (Crandall, 2020). Childbirth does affect a woman's body (Dunn et al., 2019), and with the responsibility of caring for a newborn, it can be challenging for women to notice changes in their bodies. Especially for a c-section that requires precise observation of any sudden discomfort to share with a medical provider (Hamilton et al., 2022). When

a woman gives birth to a child, it has its challenges, and as the research shows, Black women face those challenges at a higher rate than White women (Dove-Medows, 2020). Therefore, this study is significant in hearing experiences during the pandemic.

### **COVID-19 and Telehealth**

The world changed for everyone in late 2019 and early 2020 because of COVID-19, which forced everything to shut down for the safety of everyone. A shut down was encouraged to reduce the spread, and most businesses closed or began offering services differently (Nabi & Mishra, 2021). As a result, many healthcare practices had to limit their services, all elective surgeries were paused, and only essential procedures were happening (Tripathy et al., 2021). Since many significant businesses were shut down, people were out of work, and the open companies could not perform at the best of their ability due to staff shortages (Lesho et al., 2022). This shutdown also included healthcare staff, so getting access to COVID-19 tests was difficult. Some required a long wait at the pharmacy or delayed testing results. This posed a risk for essential workers who could not get tested as frequently as needed. In addition, the healthcare community was still trying to understand the virus and its side effects. Many people are dying from this rapidly spreading virus.

COVID-19 impacted the Black community more than any other population group (Anakwe et al., 2022). Individuals with chronic health conditions were considered high risk and advised to stay home and limit social gatherings. Black Americans are diagnosed with chronic health illnesses at a lower rate than White Americans, but mortality from chronic health conditions is higher among Black Americans (Robinson et al., 2020). An

underlying domino effect occurs for Black Americans; despite what they do, they are underrepresented, underserved, and disproportionately suffer from many health conditions. COVID-19 and pregnancy were an area that healthcare researchers had to explore, and they were unsure of the effects it could have on an unborn child (Rasmussen et al., 2020). With limited testing sites, COVID-19 rapidly spreading, and babies needing to be delivered, healthcare providers did not have enough time to prepare. Many services switched to telemedicine, so women could not get ultrasounds as frequently as they might have needed. COVID-19 changed practice, and healthcare providers and patients had to adjust (Karram & Baum, 2020) with no time frame of when things would return to normal.

Telehealth or telemedicine was commonly used during the pandemic and allowed access to medical care, especially in small areas of the world (Nataliansyah et al., 2022). This approach to offering care differed from what providers and patients were familiar with, but providers could only see a few individuals. Telemedicine was a development that afforded many individuals the opportunity for medical services, especially in rural areas (Nataliansyah et al., 2021). Despite this, some individuals did not have reliable Wi-Fi, phones, or laptops to connect with their providers (Kalal et al., 2022). Additionally, many providers and patients needed the training beforehand and had to learn as time passed (DeHart et al., 2022). Telehealth has its benefits but also has its challenges that both providers and patients can understand.

Telehealth for prenatal care was a transition that many providers thought increased the number of women who needed to be seen (Madden et al., 2020). Telehealth

also eliminated barriers to transportation or childcare (Nelson et al., 2021). Telehealth was able to reach many people, which has its benefits, but some individuals had limited computer skills or did not have a confined space to talk about their concerns freely. Nonetheless, telehealth was an innovation that many providers and patients appreciated. Considering the number of individuals who had trouble attending face-to-face appointments, providers could reach their patients and provide care.

There is paucity of research exploring pregnant Black women's experiences with telehealth. The barriers Black women face, and their concerns being ignored make it difficult for Black women to continue to express their concerns. COVID-19 forced everything to change, and barriers still exist with the immediate transition to telehealth (Kalal et al., 2022). Studies show that the provider-patient relationship improved with access to telehealth (Nelson et al., 2021). However, these studies explore the experiences of all women and not just Black women. Since Black women's history is unique and their pregnancy outcomes are risky, having their experience with that transition is insightful.

### **HIV/AIDS and STDs**

Black women are four times more likely to get HIV than White women in the United States (Morris & Kahlor, (2018). Medication has advanced through the years to treat HIV, making HIV move from a terminal disease to a chronic one (Baumgartner, 2014). HIV stands for human immunodeficiency virus, can develop into AIDS if it goes untreated. AIDS stands for acquired immune deficiency syndrome. Research has been done to explore the perceptions and barriers. Black women have that makes them at a higher risk, and studies show that Black women have been afraid to share their opinions

of condom use with their partners (Baumgartner, 2014). As a result, Black women are having unprotected sex and facing the reality of possibly getting HIV from their sexual partners. Having unprotected sex can also lead to pregnancy, which is also a concern. Studies show that adolescent girls are at a higher risk of teen pregnancy, HIV, or getting an STI from their partners than Hispanic or Asian girls (Opara et al., 2022).

There is a combination of factors that contributes to having unprotected sex with partners. For example, mental health, poor health literacy, and substance use are underlying factors some Black women face that make them a higher risk (Capasso et al., 2019). Research has explored prevented care to reduce the risk for Black women and increase health literacy. Results illustrated the importance of health communication that provides resources on how to get tested, where to get tested, and basic knowledge about the transmission (Morris & Kahlor, 2018). A negative stigma attached to STI/STDs and HIV/AIDS may make it challenging for individuals to talk about; however, health literacy is critical (Chandler, 2020). Normalizing this topic among the Black community can help individuals get the help they need to prevent transmission or get treated.

STDs can be transmitted to a baby from their mother. According to Chandler et al. (2020), Black women report getting health information from family and friends, not from their health care providers. This leads to misinformation and, ultimately, leaves the baby and mom at risk. There is an increase in providing prevented care; however, there must be an emphasis on increasing Black nurses and healthcare providers that can provide information that includes a cultural lens (Chandler et al., 2020). It is not impossible to have a child while also having an STD, but that is something healthcare providers should

know early in prenatal care to ensure the safety of the fetus and provide education on what labor/delivery and breastfeeding would look like for them. STD is high among Black women, which can determine what kind of care they need during their prenatal care. Black women are a high risk for pregnancy complications, and they are also at high risk for getting an STD. This could shape the experience Black women have for prenatal care, especially during COVID-19, with limited sites offering in-person visits for tests.

### **Spirituality and Religion**

Spirituality and religion are prominent fixtures for many Black Americans (Hall & Park, 2022). The support Black Americans get from church members and religious leaders has granted Black Americans hope in getting through challenging situations. Spirituality and religion are significant components in the Black community and shape their perceptions of life and some of the standards they live by (Millett et al., 2018). Considering the importance of spirituality and religion in the Black community, this could also shape Black women's experiences with pregnancy. For some, seeking support and advice from their religious leaders is valued (Millett et al., 2018), potentially leading to individuals favoring advice from their religious leaders more than their healthcare providers.

There is a multitude of faiths and religious beliefs that have their unique practices. Some beliefs have expectations for women and their responsibilities to their families. Therefore, it will be necessary to consider those beliefs that may be part of a woman's experience of prenatal care. For example, some Christian beliefs believe that sex is for married individuals and do not support abortions (Dozier et al., 2020). However, this



belief has evolved and is becoming more open and accepting. The experiences of Black women with pregnancy and their faith will be explored in this study. This will provide insight into how their belief systems shaped their views on medical care, support systems, and symptoms. During COVID-19, many individuals faced adversities in accessing care from their healthcare providers (Parker et al., 2021); this experience consequently left many looking for answers and support from their family and friends, who may not always have the best answer. However, faith and religion can give hope to those who do not know their future and what they could face.

Spirituality and religion are pillars of Black communities (Hall & Park, 2022). Therefore, it will be a factor that will be explored and considered throughout this study. Despite most Black community members practicing their faith, some may not have religious affiliations. To omit this factor can limit the information this study can get from individuals. Considering spirituality and religion will contribute to cultural competency, better help describe the holistic experience, and ensure Black patients get the care they need that also respects their religious beliefs and values.

### **Summary and Conclusion**

After reviewing issues pertaining to maternal care, it is evident that pregnancy is challenging, no matter the race. However, Black women experience more risks and complications, making pregnancy more complicated (Wang et al., 2022). As a result, they need more support from their healthcare providers who understand and validate their patients' needs. Black women deserve proper care during their pregnancies, and this study provided insights regarding how they experienced their prenatal care using

telemedicine. Considering topics that were explored in this literature review, information this study provided can hopefully create better ways to support pregnant women, especially women at high risk. Ultimately, it is through firsthand information that healthcare providers and policymakers can better develop resources for patients. considering the history of Black Americans means healthcare providers are ensuring a safe space for Black women to speak on their symptoms and value their concerns. Furthermore, this study involves researching an at-risk community because more research needs to be done to bridge the gap involving disproportionate birth experiences between White and Black women.

Black women have more severe complications and higher mortality rates during childbirth (Suarez, 2020). Several reasons contribute to this such as medical history and genetics, and healthcare providers must consider that during care they provide to their patients. Since COVID-19 is a recent pandemic, there are not many studies exploring Black women and their prenatal experience with telemedicine. I explored Black women's experiences with telemedicine for prenatal care during COVID-19. This will encourage healthcare providers and policymakers to explore what can be done.

Chapter 3 includes a detailed description of how the study was conducted. It includes the methodology, research design and rationale, my role as the researcher, and issues involving trustworthiness. Steps of the study are outlined so it can be replicated again.

### Chapter 3: Research Method

This study involved exploring Black women in the United States' perceptions and their experiences with telemedicine for prenatal care during COVID-19. Since Black women are three times more likely to have a stillborn or die during childbirth (Suarez, 2020), this study was critical in terms of providing more information about Black women and maternal care. COVID-19 added stress to the world, and many healthcare providers had to navigate sudden shifts in service. Before COVID-19, Black women in the United States faced adversity, reporting discrimination and lack of empathy from their providers (Liverpool, 2021). COVID-19 was an additional challenge, and considering how Black women describe their prenatal care will increase awareness and knowledge of healthcare workers and policymakers of supporting this high-risk population. Knowing this information can help medical practices prepare for the possible onset of another pandemic in the future.

This chapter includes an explanation of the logistics of how this study was completed. First, the research question is stated as this is what I sought to gather data about. I provided a rationale for why I decided to use the generic qualitative study design over other types of approaches. I discussed my role throughout the study and provided a detailed outline of the methodology. I explain sampling strategies, the target population, sample size, and inclusion and exclusion criteria. I provide a description of how I analyzed the data using a six-step thematic analysis developed by Braun and Clarke. I discuss how I collected data and procedures to ensure validity and reliability in this study.

## **Research Design and Rationale**

### **Research Question**

The qualitative research question for this study is: What are Black women's experiences with telemedicine prenatal care during COVID-19?

### **Central Concepts**

COVID-19 significantly impacted how services were provided. Healthcare providers had to adjust to safety demands while also providing prenatal care to pregnant women. Telemedicine is a primary way for most individuals to receive medical services. Considering face-to-face appointments have resumed, it is safe to explore how Black women experienced telemedicine during COVID-19. Black women are more likely to die during childbirth or have stillborn infants (Suarez, 2020). Considering the risks Black women faced before COVID-19, learning how they experienced COVID-19 and prenatal care is necessary for awareness and knowledge.

### **Generic Qualitative Research Design**

A generic qualitative research design was used for this study because I wanted to address the human experience. I wanted to interpret experiences involving telemedicine and prenatal care for Black women. This design was used to listen, understand, and analyze their experiences to address a real-world topic that can benefit healthcare providers. Furthermore, this approach was used for its emphasis on exploration and human experiences.

This approach was used to answer a specific question, so it was necessary to have an open mind in terms of what may differ between participants. The purpose of the

research was to provide information and understand experiences. This research included insights regarding how pregnant Black women experienced telemedicine for prenatal care during COVID-19 and risks and barriers they face during pregnancy. Ultimately, this study created more learning opportunities for healthcare providers to understand Black women and the risks they face and get firsthand information from them regarding how they perceive their care during the pandemic.

### **Role of the Researcher**

My role as the researcher was to interview Black women who have used telemedicine for prenatal care during COVID-19. Participants felt comfortable sharing their experiences with me, knowing they were validated and respected. Since I had the capability to complete interviews in person, I offered that option to participants. However, virtual interviews were also an option. I informed participants of their rights and explained confidentiality. I wanted participants to feel comfortable and know they could share what they would like and discontinue participation anytime during the interview.

It is essential to reduce conflicts of interest by selecting participants that do not have relationships with the researcher (Fisher, 2017). I did not have therapeutic relationships with participants. Having personal relationships with participants can create conflicts between participants and the researcher. These conflicts can prevent researchers from gathering accurate information.

Lastly, I addressed researcher bias by identifying my biases in relation to this topic. I worked on this by paying attention to how I felt and responded to participants.

My assumptions and previous knowledge of this topic based on research and personal experience were mitigated by using participants' words and explanations when analyzing data. I reviewed each interview to ensure data accurately described participants' experiences without bias.

## **Methodology**

### **Population**

The target population was Black women who received prenatal care using telemedicine during COVID-19. Participants were 18 years or older and from any socioeconomic background. Participants used telehealth during the start of the pandemic up until face-to-face visits resumed.

### **Sampling Strategy**

Purposeful sampling is a common form of sampling in qualitative research. This sampling method is used in qualitative studies to select a specific target population. I used snowball sampling. Snowball sampling involves identifying a few participants and asking them to make referrals (Merriam & Tisdell, 2016). I recruited the first two participants using social media. Participants were asked to identify other potential candidates who fit criteria for this study.

### **Inclusion and Exclusion Criteria**

Participants identified as Black women who had biologically carried children in their wombs. I selected a particular group of women who had prenatal care during COVID-19 between March 2020 and March 2022. Participants received prenatal care or gave birth during COVID-19, could speak, and understand the English language, were

pregnant when they were 18 or older, and had live births during COVID. I excluded Black women who did not have conservators, did not speak, or understand English, did not have any biological children, did not receive prenatal care or have children during COVID-19, did not identify as Black, or had a relationship with me via work, social circles, or past employment.

Participants were recruited by posting the flyer (see Appendix A) on social media like Facebook, LinkedIn, Instagram, and Twitter. Contact information was posted on the flyer so participants could contact me.

### **Sample Size**

There was no definite rule on sample size (Kostere & Kostere, 2022), but 8-15 participants were selected. Data saturation is commonly used in grounded theory (Kostere & Kostere, 2022) when the researcher no longer finds new information from participants. The researcher noticed no new themes or information, and the data was similar to what the researcher had already collected. Ideally, each participant interview generated new information contributing to the research, but once the data collection became repetitive, the researcher knew they had reached saturation.

### **Instrumentation**

Interviews ranged from 35 minutes to 62 minutes. I thoughtfully developed questions that were used as a guide to conduct interviews using videoconferencing platforms or in person. The interview questions (see Appendix B) were developed to gather data regarding experiences with telemedicine for prenatal care during COVID-19. The interview questions were developed based on topics explored in the literature review.

Semi-structured interviews created flexibility in moving along each question without any order and utilizing follow-up questions to get more information.

Semi-structured interviewing was utilized to offer flexibility in how questions are asked. The questions were developed to get a variety of information, so the wording of questions will be thought out. According to Merriam and Tisdell (2016), the wording of the questions was vital to gather detailed information. Kostere and Kostere (2022) state that the right questions must be asked to get rich data. Furthermore, each question had a purpose and provided different information to enhance this research.

The development of interview questions was necessary because there was a specific question I was looking to answer. To obtain data, I utilized questions developed from information studies that have already explored questions about this topic and a demographic form (Appendix C) that described the participants that will be interviewed. Each question had a purpose and provided important data. The biopsychosocial and holistic care models were used as the roadmap in developing the questions and were centered around their core concepts. The participants could skip questions if uncomfortable; however, they were asked in written order.

Alignment is critical for ensuring that the data collection flows to the very end of the study (Kostere & Kostere, 2022). As a result, each question developed had its purpose and aligned with what the research question was asking to ensure the data was useable in the study. According to Kostere and Kostere (2022), alignment increases the credibility and trustworthiness of the study so that readers can understand how the data was collected and if the data collection information can answer the research question.



Open-ended, probing, and clarifying (Kostere & Kostere, 2022) questions that are aligned with the title and research question create smooth transitions for readers to understand. Data collection was a critical part of the study and used to answer the research question, so the appropriate questions were asked.

### **Procedures for Recruitment, Participation, and Data Collection**

I utilized the Walden participation pool and social media to recruit participants. Confidentiality and ethical rights were explained so patients can be aware that their participation is not contingent on anything. I posted the recruitment flyer on social media (Facebook, Instagram, LinkedIn, and Twitter) to open more referral opportunities. The flyer was posted with a description of the study, inclusion requirements, and contact information for individuals who have questions or would like to participate. After participants completed an interview for approximately 40-60 minutes, I debriefed with participants to gather how they perceived the interview, answered follow-up questions, and explained the next steps for the study publication. Participants only needed to commit to one interview, so after debriefing and exiting, they were not asked to complete another interview.

I performed all the interviews and data collection. Participants were asked to complete video interviews in a quiet, comfortable space. Participants were informed of their rights, the purpose of the study, and contact information for follow-up. Participants were asked to commit to one approximately 40-60-minute interview via Zoom. Participants were informed of their choice to discontinue at any point during the interview. The importance of protecting the name and image of participants occurred,

with participants allowed to select a pseudonym for confidentiality. I informed participants that the interview will be recorded, so I did not take my attention away from giving my undivided attention to the participants during the interview. After each interview, I transcribed and coded the interviews. I coded, so that I can determine when I reached saturation. After eight interviews ranging from 35-62 minutes, I reached saturation.

### **Data Analysis**

Data analysis started by reviewing each recording or note and developing categories of themes. Participants were debriefed after each interview, so that information will also be part of the data analysis. After each interview, I listened to the audio and took notes to start the coding process. According to Kostere and Kostere (2022), the data that should be used in the study should answer the research question to reduce confusion and show alignment. Interviews were transcribed verbatim to ensure that there was alignment and that I had accurate information.

Braun and Clarke (2006) have six thematic analysis steps to decode and identify codes in this study. The thematic analysis follows a step-by-step process that supports the researcher in knowing the data, identifying initial codes, identifying themes, auditing, labeling, and writing the complete data analysis (Braun & Clark, 2006). The first step is to become familiar with the data (Braun & Clark, 2006), which was done by reviewing the recordings and transcription of each interview. The second step is to create initial codes (Braun & Clark, 2006), and this was done by reviewing the recordings and transcription and developing codes based on what is first identified. The third step is to

identify themes (Braun & Clark, 2006) based on the initial codes developed. The fourth step is to examine the themes (Braun & Clark, 2006) to identify common themes and see what information needs its own theme and what can be put together. The fifth step is to expound the themes (Braun & Clark, 2006) to have clarity and precise meaning for each theme. The final step is to formulate the analysis (Braun & Clark, 2006), and this final step is interpreting and summarizing the data. The thematic analysis process allowed me to review the data to know when I have reached saturation and ensure I accurately account for all the information received in the interview. The goal was to have enough information to answer my question or continue interviewing participants until I did. Braun and Clarke's (2006) thematic analysis were helpful for data analysis.

NVivo is a program that analyzes data by offering a concise way of organizing the data (Dhakal, 2022). NVivo was used to code and organize data to reduce the stress of manual coding. NVivo had different abilities that made it easier to visualize the data, such as color coding to label the data and different categories and themes that will be outlined. (Kerry, 2022). This tool goes hand in hand with a researcher and does not replace the need for a human researcher (Kerry, 2022). Themes and codes were generated, and I clearly pictured common patterns between interviews. In addition to NVivo, I manually hand coded because I created themes and codes on my own and match them with NVivo generates as well. Then I analyzed the themes to find patterns or significant findings that I did not know or any information that reflects previous data from recent studies. I wanted to accurately describe the findings, whether they support

previous studies. My purpose was to share the information to help healthcare providers and policymakers support Black women during a crucial time in their lives.

### **Issues of Trustworthiness**

#### **Credibility**

I debriefed with participants at the end of each interview so participants could share any feedback, and 2-3 participants were selected to verify if it accurately displays their experience. This was one way of ensuring credibility, accurately describing their reality, and seeing from their perspective (Ravitch & Carl, 2021). Recording and transcribing each interview was one of the ways I intended to analyze data accurately. In addition, the original 2-3 participants could review my analysis after I had created the themes via email or face-to-face so they had a first-hand look at what will be used in the study. In doing so, my interpretations and findings were verified and provided an accurate description of each participant.

I used prolonged contact by exploring the specific cultures from which the participants originated. As I mentioned, Black history is unique and complex, requiring special attention. As a result, I used the holistic model to learn about different cultures by asking participants to share their culture and compare it to literature and research. Lastly, I knew when I had reached saturation when the data became redundant (Kostere & Kostere, 2022), so I continued collecting data until I did not hear any new information. These steps ensured that the data was credible, and that internal validity supported the findings.

**Transferability**

According to Ravitch and Carl (2021), transferability is applying the findings in different contexts. I used snowball sampling and provided descriptive information about the context and participants. Generalizability has been deemed unimportant to some, but it has its purpose in helping to merge inductive and deductive research and getting thick data (Hays & McKibben, 2021). The emphasis on thick data was crucial in the development of new research and in providing critical points to explore. It gave more descriptive and raw data that was helpful in the development of the data analysis. In addition, Black women encompass many different ethnic backgrounds, so this study would gather participants of different backgrounds, such as African Americans and Caribbeans. That way, various backgrounds are accounted for, so the data can be transferable within the Black community.

**Dependability**

This research study accounted for dependability by having different ways of checking the data. For example, with transcription, audio recordings, and member checking, I kept track of information through those methods and determined dependability. Dependability is accounting for stability and change (Carl & Ravitch, 2021), which can occur, and by tracking pertinent information and using strategies, such as triangulation, I accounted for dependability. I used audit trails and reflexive journals to document raw data and brainstorm the data analysis. This helped develop the data into how it is written in the final formulation.

### **Confirmability**

Using audit trails accounted for confirmability because it includes the "record of raw data, documentation, and development techniques" (Ravitch & Carl, 2021). This was to protect the study by having what participants share as authentic as possible, removing any objectives of the researcher. Reviewing the audit trails included relevant information gathered from interviews. I used reflexive journals to keep track of my notes and thought processes for each interview. I kept track of how I was processing the data while also showing the research direction. Additionally, a few participants were randomly selected to review the analysis and they confirmed that their analysis accurately described their interview.

### **Ethical Procedures**

With the approval of Walden's IRB, I conducted this study abiding by all rules and regulations that protect humans and the integrity of this study. I understood this study contributed to the scholarly community, and I had nothing to gain from the results. All documents and instruments used in this study were approved, and I only began to recruit and collect data once I got approved by the IRB.

I continued to remind and ensure participants of their rights throughout the study, and participants had the final say on what they would like to be shared in the study. All flyers and marketing for recruitment were outlined with all essential information so participants could make their own decisions. I was transparent and explained to participants how this study would help with social change and the next steps of publication. Participants were asked to be recorded for data analysis and recordings

locked in a password-protected file for five years. None of the audio recordings were posted on any platform or used after this study's completion. Participants had the right to opt out of being recorded as well. All data will be destroyed after five years.

Participants were asked to provide a pseudonym to protect their identity. Participants have the right to discontinue before the study is published. I read and transcribe all data, and no one else will read or listen to any interviews. Participants would have access to the results and be reassured that the purpose is to educate health professionals and provide more research for Black women and prenatal care.

Before continuing the study, participants were also asked to complete a demographic form that asked for descriptive information about the interviewee. I understood that women shared personal experiences so they could share what they desired. I provided a safe, quiet space for participants to feel comfortable sharing, but I did not provide any clinical support. I prepared and had referrals for outside clinicians so that participants could seek clinical help and care.

### **Summary**

The purpose of the generic qualitative study was to address how Black women experienced telemedicine for prenatal care during COVID-19. This chapter included a detailed outline of how the study can be replicated. In addition, it included information about ethical considerations and participants' rights. Participants were recruited and provided detailed information. They were asked to commit to 40 to 60-minute semi-structured interviews. Participants were recorded for data analysis, but had the option to opt out of being recorded. Pseudonyms were assigned to each participant to protect their

identities. Information for this study will not be distributed or used for anything else.

Data were collected to answer the research question, and their responses were based on personal experience, and they each meet the study's criteria.

The study was shared with participants, so they were fully aware of what it was about. Chapter 4 includes results and data analysis. The goal was to gather rich data that can improve healthcare services in this country, especially for high-risk populations such as Black women.



## Chapter 4: Results

This study involved highlighting experiences with using telemedicine for prenatal care during COVID-19 for Black women. Black women are not studied enough to provide insights regarding their experiences), so I used a qualitative approach to provide this population opportunities to voice their experiences. This study contributes to limited research while also addressing Black women's experiences with healthcare providers and policymakers. Providing effective medical care to patients should be a high priority, and healthcare providers should care about how patients describe their care.

Chapter 4 includes demographic information, information on the setting that influenced participants, data collection, data analysis, evidence of trustworthiness, results, and a summary. This chapter includes concise information from participant interviews that will allow healthcare providers, policymakers, and other stakeholders to address experiences of Black women to improve maternal outcomes for this population.

### **Setting**

Research began at the end of May 2023 after getting approval from the Institutional Review Board (IRB #05-17-23-1054212). All interviews were done virtually, and participants were in their home or office. They were informed of some of the questions that would be asked before interviews and aware they could discontinue participation at any point. Interview questions may have triggered traumatic responses as the questions were asking about a personal experience. Since I wanted to gather information about Black women's experiences, addressing racial injustices could have led to anxiety, depression, or trauma. The generic qualitative design involves exploring

descriptive information regarding how individuals make meaning of an experience (Kostere & Kostere, 2022). I wanted to ask insightful questions to generate as much information as possible to understand their experiences. I was prepared to offer participants information about counseling services if needed.

### **Demographics**

There was a total of eight participants, and they all identified as Black women. All participants met participation criteria and were willing to volunteer to participate in the study. I had six participants who identified as Haitian American and two who identified as Black. I had seven participants who were working moms and one participant who identified as a stay-at-home mom. Seven participants were married, and one participant was engaged. Six participants practiced Christianity, and two did not practice any religion. All participants lived and worked in the U.S.

**Table 1**  
*Demographic Information*

<b>Participants</b>	<b>Age</b>	<b>Marital Status</b>	<b>Number of Children</b>	<b>Number of Miscarriages</b>	<b>Highest Level of Education</b>	<b>Employment Status</b>
P1	36	Married	2	0	Bachelor's degree	Employed full time
P2	25	Married	1	0	Associates degree	Employed full time
P3	36	Married	1	0	Master's degree	Employed full time

---

P4	34	Married	1	0	Bachelor's degree	Employed full time
P5	34	Married	1	0	Master's degree	Employed full time
P6	29	Married	1	0	Ph. D	Employed full time
P7	32	Engaged	2	0	Master's degree	Employed full time
P8	28	Married	1	0	Master's degree	Employed full time

---

### **Data Collection**

After IRB approval on May 17, 2023, I began to recruit participants by posting the recruitment flyer (see Appendix A) on social media such as Facebook, LinkedIn, and Instagram. I was able to recruit eight participants. Participants who met criteria for the study were then sent an informed consent form, which they were asked to read thoroughly and provide consent to proceed with interviews. Participants were asked to consent to one interview that would be held virtually for approximately 45 to 60 minutes. Interviews ranged from 35 to 62 minutes, depending on how much information participants shared. Participants agreed to a time and date that worked best with their schedule. Two participants were asked to complete a demographic form (see Appendix C) after the interview was completed via email. However, I did not readily get this information, so for the last six participants, I decided to ask about demographic

information before asking interview questions (see Appendix B). With the consent of participants, all interviews were done and recorded via Zoom. After interviews were done, they were manually transcribed and coded. After manual coding, NVivo was used to code, categorize, and generate themes.

I did not ask participants to disclose their annual income on the demographic form. I decided not to ask to ensure participants did not feel uncomfortable or have any negative emotions about sharing that information. Due to the changing economy, I deemed it important just to acknowledge employment status rather than putting emphasis on a particular number. To reduce socioeconomic biases, I omitted that question, so participants felt safe and comfortable.

Outside of omitting one question from the demographic form, no variation was done based on what was outlined in Chapter 3. I followed each step for each participant, so each participant was given the same information. Recruitment flyers were posted on social media, and the Walden participant pool was used. All participants signed the informed consent form and agreed to have interviews recorded.

### **Data Analysis**

A six-step thematic analysis was used to begin the coding process. I followed a step-by-step process that involved identifying initial codes and themes, auditing, labeling, and recording data. Each interview was manually transcribed to become familiar with the data. After transcription was completed, I reviewed how participants responded and observed their facial expressions and gestures to understand the meanings of their

responses. During the first initial coding sequence, I began to code based on manual transcribed responses in general terms for each interview question.

Each question for each participant went through the same process, and I was able to generate about 100 codes. During the second manual coding, I read through the transcripts. I merged codes together into categories to reduce the number of codes and make it easier to identify themes and patterns. This was done after reviewing the categories and finding how I could create a better understanding while eliminating extra words. This step took analysis because I wanted to ensure the participant's response was not watered down but also highlight the differences and similarities. I then identified themes based on the manually generated codes and imported transcripts into NVivo to do another run of coding and finding themes. NVivo provided an efficient way of tracking and visually analyzing the data. The thematic analysis was useful from start to finish and ensured that each transcript was analyzed the same way. In doing so, I identified one outlier during my manual coding, but after going through it a second time and also using NVivo, I was able to find consistency with other interviews despite a few answers being outliers. Altogether, I was able to answer my research question and gain more insight on how Black women describe their telemedicine prenatal care during COVID-19.

### **Evidence of Trustworthiness**

#### **Credibility**

At the end of the interviews, each participant was asked debriefing questions to gather feedback or allow participants to share any other experiences relating to the study that were worth sharing. I asked participants 2-3 if they were open to reviewing the

transcript. and analysis, and they agreed to do so. The 2-3 participants responded via email that they did not have any questions and felt like the analysis aligned with their experience. I wanted a few participants to review their analysis to ensure that their experiences were being written in a way that provided meaning and did not bring shame or humiliation to their experiences.

The minimum participant was met and that was due to saturation as a well having a difficult time recruiting. Black research is limited and one of ideas could be due to medical mistrust (He et al., 2021), and considering women were having babies during COVID-19, not many Black women were open to participating. There were several participants that reached out and scheduled but did not show up during the interviews. However, after several weeks of active search, I was able to find eight women and their interviews brought up similar information that I felt it was necessary for me to discontinue and began data analysis. According to Kostere & Kostere (2022), when data become repetitive, then saturation is reached and based on the 8 interviews, I felt confident that I reached saturation.

### **Transferability**

To assist with the recruitment, I used snowball sampling. This style of sampling provided me with descriptive information with shared experiences. According to Hayes and McKibben (2021), inductive and deductive research is about getting thick data and generalizability. There needs to be new research to continue exploring new ideas or experiences. As a result, with semi-structured interviews, I had the opportunity to ask follow-up questions or ask participants to expand on a response to ensure I understood or

identified layers to their experiences. Considering the recruitment process was looking for Black women, I was able to get Haitian-American and Black women, so data is transferable.

### **Dependability**

I used transcripts, audio recordings, video recordings, and member checking to account for dependability. Dependability is accounting for stability and change (Carl & Ravitch, 2021), so using all those methods to track change made it possible to check and review information to ensure that it matches. I used a thematic analysis chart to keep track of data and codes as the analysis progressed. The use of multiple methods to track data helps dependability as the data develops into a final analysis that would be formulated.

### **Confirmability**

The transcripts are written up using the participant's words. This raw data record shows the analysis formulation's development (Ravitch & Carl, 2021). Starting with raw data provides depth to the research and removes the researcher's objectives. I kept track of how each participant responded and reviewed video recordings to have a visual of how participants responded and matched their accuracy with the codes and themes. This development outlines how the data is based on participants' responses, not researcher biases.

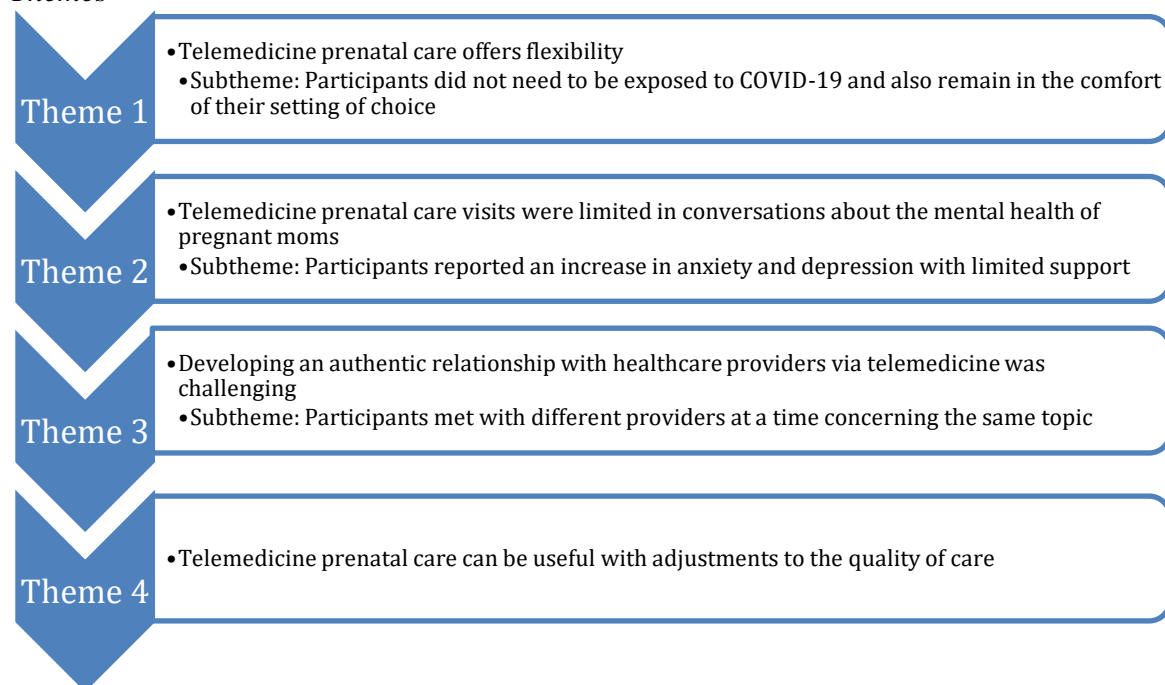
## **Results**

Four themes and subthemes were identified from the data analysis (see Table 2). Each participant had a semi-structured interview that had 20 questions that explored their

experiences with telemedicine prenatal care during COVID-19. Each of the themes connected with one another, and there were a few outliers that will also be discussed.

**Table 2**

*Themes*



**Theme 1**

COVID-19 was a global pandemic, and each state had its own mandates on how it intended to handle it. Each participant used telemedicine for their prenatal care and shared the ability to make appointments during their work schedule without major conflicts. P3 stated, “I didn't have to leave my house. Especially during the pandemic, especially when I was far along in pregnancy, the seatbelts were uncomfortable.” P7 shared, “I didn't have to leave my house. I could still be up in my pajamas and sitting on the couch.” This response was consistent for all participants, and it can be said that this provided accessibility to patients to see their providers. Participants were also



invested in keeping their unborn children safe from COVID-19 because, at the time, healthcare providers were also learning about the health risks for everyone, including unborn babies.”

P4 shared, “Nobody knew the effects of COVID on pregnant women at the time.

P5 shared, “I didn't want to expose myself to, you know...COVID.” That was a global concern for healthcare providers and patients, so the use of telemedicine created a way for patients to get prenatal care services without the risk of being exposed to COVID and reduce being uncomfortable. Participants appreciated this aspect of telemedicine and since extra guests were not allowed in in-person appointments, this offered their spouses to be a part of prenatal care visits. For instance, P3 shared, “I have my husband who clearly wants to be involved.”

Telemedicine allows spouses to be involved and ask questions about their babies. Allowing emotional and moral support for pregnant moms as everyone navigated the pandemic while determining how they would ensure a safe and healthy pregnancy and delivery. This provides access to care to all members involved, and women do not have to be alone during visits. Participants shared that family support was crucial during their pregnancy, and they could not imagine having their baby alone. P2 shared how her husband would speak on her behalf when she was in so much pain, and having him there as a support was helpful. Ultimately, telemedicine allowed family involvement to be present from the beginning.

## Theme 2

Participants described their telemedicine prenatal care experience as anxiety-provoking and sometimes depressing. For instance, knowing there were few opportunities to listen to the baby's heartbeat or see the baby took an emotional toll on some. P3 shared, "I would love to hear my daughter's heartbeat every day, just to make sure because even with a good experience, you get a little anxiety being pregnant." P5 shared, "We've always had postpartum depression, but it's like the depression while you're pregnant. And, like, nobody talks about it." P6 shared, "They don't talk about prenatal anxiety. People always talk about postpartum depression, but prenatal anxiety exists, and I was constantly anxious about not only losing my baby." Black women experience high levels of stress, which can cause severe mental illness (Sweeney et al., 2021), and adding a global pandemic can increase the stress, which can be harmful to an unborn child. Limited conversations about this information during telemedicine prenatal care were emotionally taxing for participants, and they shared that they felt providers did not care. P1 shared, "To be honest, I just felt like, I felt like they didn't care." The emotional well-being is just as important as the physical well-being. Black moms want to know that their healthcare providers care about their emotional health. Due to the statistics of Black maternal care, P6 shared having increased anxiety due to medical concerns and having to research and consult with other pregnant moms to compare their services, procedures, and labs. Mental conversations were neglected or not discussed as much as it needed to.

**Theme 3**

Being pregnant take courage and vulnerability as it requires moms to risk their life to bring life. During this phase, having a relationship with providers can support moms as they navigate the changes in their body, the growth of their baby and how life is going to upon the arrival of their baby. Participants shared that forming a relationship over video or phone was challenging because they met with different providers during each visit or received information from different providers in the web portal.

P6 shared:

It was just whoever was available at the time it was in the office. I mean, I would send messages through the portal. I think I would get a response, but it would be like from anybody like sometimes it'd be signed by, like, you know, a nurse or an assistant medical assistant.

P3 shared:

I think it was difficult because I didn't have just one because of like, all the switches, like I think I spoke to oh gosh, I don't even know how many doctors I spoke to. Like to the point where I just had a random doctor for my delivery because I talked to so many people. I think that I didn't really have a relationship with any specific doctor.

P6 shared:

The OB that I met with said that I would be on her team because they follow you based on like levels of risk; I was presenting with my blood pressure. And so she said, you'll just be on this purple team, and you'll see like one of these four

doctors, and then I never saw any of them again. I saw her, and then I never saw any of those, for it was just who was available, and I would say I didn't really develop a relationship with anybody.

As presented, participants did not have much of a relationship with healthcare providers, and since healthcare providers are privy to the personal well-being of patients, developing a professional relationship is critical. From the participant's responses, the relationship did not develop during the prenatal visits, and participants were seeing whoever was on shift and available.

#### **Theme 4**

Participants expressed that they felt telemedicine prenatal care got the job done due to the circumstances. Some participants had positive experiences from the beginning, while others had to advocate for some changes. Some recalled having to seek support through doulas or changing to work with midwives.

P1 shared:

And then I met this midwife who is, oh my god, like, she was amazing. And her thing was like, our first initial meeting, you know, it was video, but she was like, I don't care, whatever you need. If you ever feel something's not right. I want you to come in. So, it was easy for me to connect with my midwife once I switched. I requested the midwife. Once I requested the midwife, I had one in-person meeting with her, which went virtual.

P1 expressed extreme gratitude and appreciation to her midwife and how she offered encouragement to her during her visits. Her experience with telemedicine prenatal care began to improve once she felt validated and understood.

P5 shared:

I really enjoyed the midwives that I worked with. They were very kind and friendly, except for one who ultimately, I was like, I don't want to engage with this one ever. My doula was great, too, because she was another person, I think, familiar with different facilities. I was hesitant because I feel like a certain level of care doesn't always come through the phone or the screen as often.

These experiences were not completely bad, and women shared that ideally, they would prefer in-person visits, but during COVID-19, everyone had to adjust to the changes.

P6 shared an experience of reaching out to senior directors about the quality of care before she felt they were taking her care seriously. She shared:

I think when I sent that message and email and made it clear about how I felt, especially when talking about institutional racism, that changed the tone throughout the pregnancy, where they took me very seriously. But if anything, if I could change, I wish I didn't have to do that. I wish it were automatic- everything that I received wish I received right away; I didn't have to have to send that email or message to get that respect.

With advocacy, participants were able to get the proper care they deserved. However, for P7, she shared an experience of speaking up for herself but having her symptoms ignored for some time. P7 shared:

As the pregnancy progressed, I got a little bit frustrated because there were a number of issues that I was having, and I felt like no one was really listening. So I was sending messages through the portal. And it was like I was having ringing in my ears at one point I had a really bad rash between my thighs, and I wasn't going to send a picture of that through the portal or show that on video. And like, I was trying to explain it, and you know, they had said use like an over-the-counter cream. And it literally was not working like I needed something else. And I didn't finally get relief for that until probably 38 weeks. When I was going in. I remember the lady checking my cervix, and she's like, "wow, this is really bad." And I was like, I've been complaining about it for weeks, and she finally prescribed something. It took a while to actually for me to feel like I was being heard.

During telemedicine prenatal visits, P7 shared her symptoms and weeks later, is when she felt like her voice was being heard.

Telemedicine prenatal care could be effective with proper improvements on providing optimal care from the beginning. Black women should not have to ask for better care or have their symptoms ignored. The quality of care overall can be improved for Black women, but considering the flexibility telemedicine prenatal care offers, finding ways to improve the quality of care will provide Black women with a better experience.

## Summary

From data I collected, participants shared they enjoyed the flexibility of using telemedicine during uncertain times. It created more access for participants. Considering circumstances, telemedicine allowed services to continue for patients.

During the pandemic, there was also a mental health crisis. Participants did not receive enough support or information regarding mental health resources. They experienced anxiety and depression. The conversation about mental health does not start during postpartum visits but rather when patients are first aware of their pregnancy. Adjusting to telemedicine, keeping up with COVID-19, and being pregnant are challenges, and during prenatal visits, participants shared their providers did not discuss mental health or provide them with resources for services. As a result, participants had to do research on their own and determine how they were going to get these services. Mental health conversations should be prioritized, especially during pregnancy when much change occurs in a short amount of time.

Findings indicated developing authentic relationships can increase level of comfort. Participants indicated they met with different providers throughout their prenatal care. As a result, it was difficult to form relationships with one specific healthcare provider. This experience had its challenges, for example, having to get different responses from different providers, not recalling what information was shared, and being not sure if providers read up on previous visits. P3 acknowledged efforts of different providers she met and accepted she did not have a relationship with one provider. Despite efforts from providers to respond to patient messages immediately, patients value

relationships and want that from their healthcare providers. Part of sharing concerns is knowing the same person is receiving the information. Healthcare providers have private information about their patients, and forming relationships can bring a sense of security.

Lastly, participants agreed that telemedicine was not the problem and that quality of care was the bigger issue. P6 shared that she researched facilities specializing in natural births and offered services in person, but the facility she selected changed to telemedicine without a formal announcement. The lack of communication made it challenging for P6, and she advocated for better care. Participants denied having major issues getting into their telemedicine visits or phone calls. Some shared being familiar with technology, so they did not have issues, but the quality of care was not the same. Participants shared their experiences with advocating, changing providers, and researching information because their care did not appear right. Some shared the mental exhaustion of feeling like their concerns did not matter during visits. Some described their telemedicine prenatal care visits as rushed. Ultimately, some participants did not feel comfortable sharing their concerns or symptoms or waited for their next in-person visit for an immediate response. Some suggestions from participants included increasing diversity of providers and understanding that mothers' needs as just as important as babies'. Every participant agreed that healthcare lacks diversity, and many providers practice by the book, which leads to insufficiently addressing culture, socioeconomic status, and religion.

Chapter 5 includes an introduction, interpretations of findings, limitations of the study, recommendations, implications for social change, and conclusion.



## Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to highlight Black women's experiences using telemedicine for prenatal care during COVID-19. I looked to explore how Black women described their experiences to help healthcare workers and policymakers better understand how to serve them. There is limited research highlighting Black women and their telemedicine prenatal experiences. Black women experience high mortality rates during pregnancy, labor, and delivery (Collins et al., 2021). Since COVID-19, services shifted to telemedicine. As a result, it was important to address firsthand experiences with Black women to understand how telemedicine prenatal care was for them. This information could support how telemedicine can be used in the future and what areas in the healthcare system can be improved to support marginalized communities.

There were no major issues involving access to telemedicine visits, but participants felt rushed or had to advocate for proper care before they felt satisfied. Participants reported they did not get enough support for their mental health. Women should not have to ask for great care, especially Black women who face high mortality rates during pregnancy. Participants felt like they had no choice but to accept telemedicine due to COVID-19, but they did not expect that they would need to ask for their providers to be attentive to their needs.

### **Interpretation of the Findings**

#### **Theme 1**

The flexibility telemedicine provided was helpful for participants because they could remain in the comfort of their own homes. Telemedicine provides more access if

there is reliable Wi-Fi, a private place, and a cellular network (Nelson et al., 2021). If patients have proper technology, they appreciate the flexibility telemedicine offers. This results in not having as many ultrasound visits or frequent vital checks, which participants shared that they missed about telemedicine visits. They knew in-person visits would happen, but not as frequently. P1 shared that her midwife informed her of the flexibility of coming in person if necessary, so she felt comforted knowing she could have in-person visits. Participants enjoyed flexibility but also wanted the option for in-person visits if required. Due to state mandates, in-person visits required mothers to come alone, and spouses and partners could not be in the room.

### ***Subtheme 1***

After COVID-19 was declared a pandemic, it was imperative to distance socially. Healthcare providers were unsure how the virus could impact a fetus. Participants shared they felt safe being home and not having to be exposed to the virus. Some participants shared the anxiety of COVID-19 and not knowing what this could do to their baby, so telemedicine made it possible to have appointments with limited exposure. P8 shared she was worried she would have to give birth alone because a family member had to. In addition, P2 shared that COVID-19 tests were limited at the time, so it was difficult to find an appointment to test for COVID-19 before in-person visits. Telemedicine was used to continue providing services to patients and reduce the spread of COVID-19 (Nataliansyah et al., 2022).

**Theme 2**

Prenatal depression and anxiety are common for women (Conteh et al., 2022). Black women experience discrimination and racism, which can increase depressive and anxiety-related symptoms (Ertel et al., 2012). Black women are less likely to be screened for depression (Conteh et al., 2022). P5 shared having little education about anxiety during pregnancy. P6 shared feeling anxious about her child's wellbeing and guilt and shame about her decisions. Black women do not receive enough psychoeducation about mental health. Some participants did not recall being asked about their mental health or offered mental services. Conversations involving mental health should be provided to ensure mothers are emotionally healthy. There is an emphasis on physical health, but emotional health is often minimized.

***Subtheme 2***

Findings showed that participants had increased anxiety and depression throughout their pregnancy. P5 shared that she did not get enough support or conversations about anxiety and depression during her prenatal visits. P6 reported feeling anxious thinking about COVID-19, preexisting conditions, and medical tests and labs that were not done. Throughout telemedicine prenatal visits, participants did not recall their health providers asking about their mental health.

Black women are less likely to attend postpartum visits (Sweeney et al., 2021). Conversations about mental health should be discussed early on so women are aware of the signs and can understand they are not alone. In addition, this could encourage Black women to attend their postpartum visits to get screened. Mental health should not only be

discussed during postpartum visits but as soon as possible so women are able to establish their counseling services beforehand. This could reduce the number of women facing postpartum alone and acknowledge that depression can start as early as finding out about a pregnancy.

### **Theme 3**

There is a long history of medical mistrust within the Black community. Based on the findings, Black women want to form a relationship with their providers. Black women want to be acknowledged, want to feel supported, and they want to know that their story is important. Studies show that White women have a higher percentage of surviving the same complications Black women endure during pregnancy (Schultz et al., 2022), which is alarming. Participants shared their experience of fearing who could be the provider that would deliver their baby because they wanted to be in good hands. Ultimately, Black women want to build relationships with their providers and not feel like a number. P7 shared that she was introduced to a team of individuals who would be her providers but only met with them once. Her appointments after were with different health providers. Considering the medical mistrust, based on the findings, Black women are willing to be seen, but they need to build that relationship.

### ***Subtheme 3***

The high demand made it difficult to keep due to staff shortage. Studies showed that health providers were increasingly growing and impacted their services (Lesho et al., 2022). Findings show that some participants were met with different providers or other healthcare workers, so a connection was not made. This impacted the participant's ability

to have a relationship with their provider. Thankfully, participants still attended their appointments and did not discontinue services, but some participants were not sure how much information the provider already knew. As a result, some participants decided not to ask questions they wanted to ask or underreport some mild symptoms. Unfortunately, healthcare facilities were not properly staffed, so patients had to see whoever was available, which left patients with no other choice.

#### **Theme 4**

The quality of care during telemedicine prenatal care visits can benefit telemedicine visits. Participants shared that telemedicine made connecting with healthcare providers and asking for proper care was hard. P6 shared that her experience was terrible in the beginning, but after researching and emailing directors, she saw a difference in how they were servicing her. P1 shared that in the beginning, visits felt rushed, and she switched providers, and her experience improved. P7 shared frustrations about her care due to medical symptoms not being treated properly. These are experiences Black women had during telemedicine prenatal care visits, and after much thought, most agreed that if there is an increase in Black providers, proper education on culture, and prioritizing the needs of Black women, telemedicine can be more effective. As a result, the Black women who participated in the study shared the importance of health literacy and how it helped them feel empowered to advocate for their needs. Hepburn (2018) shared that health literacy increases better outcomes. Participants started off dissatisfied with telemedicine prenatal care but could say it started to improve once they advocated or changed their providers.

## Conceptual Framework

The biopsychosocial and holistic care models were the conceptual frameworks used in this study. As predicted, the holistic care model covered the themes identified in the study. For example, participants shared their cultural beliefs and how that affected how their pregnancy journey went. The biopsychosocial model does not consider culture as a factor but biological, psychological, and social constructs. The holistic care model views the different areas of one person to understand human experiences better, and for this study, the holistic care model allowed for flexibility in participant's experiences.

The participants were asked to share any pre-existing conditions that needed to be monitored because it is important to consider the biological aspects. Participants were also asked to describe their family medical history. The biopsychosocial model believes the biological component involves understanding development, health, and diseases (Mehra et al., 2020). Through the lens of the biopsychosocial model, the different responses participants shared, such as diabetes, cancer, fibroids, and infertility, can potentially increase the risks of complications or concerns that healthcare providers should know. In addition, the biopsychosocial model would want to emphasize how these pre-existing health conditions could impact the development of a fetus. The biopsychosocial model has been studied to explore prenatal care visits and health outcomes (Zoe et al., 2021), and the development of a fetus can certainly provide much insight on the outcome of a pregnancy. Based on the findings of this study, some women had pre-existing conditions or family history that were important to know, and participants shared that they were monitored to some degree. Specifically, for P8, who

had multiple visits a week to monitor the baby's development, the biopsychosocial response would be that biological development plays a role in the outcome of a baby, and that serves to be true.

The holistic perspective provided insight into other factors, such as religion or spirituality that the biopsychosocial model did not cover. For example, six out of the eight participants shared their religious beliefs and how that played a role in their journey. The holistic response is understanding that religion and spirituality are a big deal for some people and provides information on how patients respond to care. The holistic care model values other factors that individuals identify as shaping the patient's world, so including race, religion, or spirituality supports diversity (Sendaula et al., 2022). For the participants who shared that using prayer to ensure a healthy pregnancy truly made a difference for participants and acknowledged the different practices of faith. The holistic care model is new but widely accepted because it views different areas and parts and treats all areas and parts (Tsai et al., 2021). As a result, Black women were not just looking for medical support but emotional support within the lines of their experiences and circumstances. Based on the findings, one of the themes were getting mental health support during their telemedicine prenatal visits, which was an area that did not get much attention.

Lastly, the holistic care was studied to improve quality of care (Sendaula et al., 2022), and findings show that Black women believe that telemedicine could be improved by improving the quality of care. The holistic care model could improve the quality of care because this model identifies each individual rather than viewing patients as

constructs. The “one size fits all” does not fit when it comes to patient needs because each patient comes from a different background that shapes who they are, and ignoring that could be harmful. For example, P8 shared that one of her providers did everything “by the book” and that her concerns were minimized because they did not go according to textbooks. Alexandros et al. (2021) found that patients who had their barriers addressed had better treatment progress, and findings in this study credit Alexandros et al. (2021) findings. Participants shared that once they felt supported, validated, and understood, their experience improved.

Both conceptual frameworks were used to develop questions, and with the identified themes, they helped identify them. Participants were first asked to answer questions about their background because the biological, psychological, and social aspects cannot be ignored. They can share much critical information and offer insight into one’s experience. The holistic care model helped explain how religion can play a role or be important when considering prenatal care. Six out of eight participants shared how prayer played a huge role in getting through their pregnancy. In addition, participants shared their roles outside of moms that shape and influence the knowledge that they have. Those are essential aspects of this study that helped participants to advocate for themselves. Both conceptual frameworks explained how pre-existing conditions or religious beliefs/practices are information that healthcare providers should know, considering they can shape patient care.

The findings showed that Black women enjoyed the flexibility and wanted an emphasis on mental health and improved quality of care. According to the conceptual



frameworks, the psychological concept from the biopsychosocial model explains the importance of mental health and the stability it provides in thinking clearly. The findings supported the psychological concept, considering the participants' limited mental health support. The social concept was supported through flexibility as it provided the family's involvement in prenatal visits. The holistic care model supports the final theme of improving the quality of care because the quality of care fits the patient's needs- which can include several things, such as religion or socioeconomic status. The quality of care is unique to each individual, and the holistic care model supports the idea of treating all areas of a patient.

### **Limitations of the Study**

This study provided insight into how Black women describe their telemedicine prenatal care during COVID-19. In-depth information was found by learning how Black women would like to have when it comes to healthcare. I was not able to verify participants' experiences outside of what they shared. In addition, none of the participants had a poor outcome, so this study is limited to only positive outcomes. Poor outcome is described as having a stillborn. All the participants successfully had their babies.

For future studies, having a more diverse group of women would be helpful. Only two participants did not identify as Haitian American. Also, only two women did not identify as Christian. As a result, having more insight into different religious groups and other Black ethnicities could enhance future research.

### **Recommendations**

Learning about how Black women described their telemedicine prenatal care was informative and needed. This study could provide much insight to healthcare providers. For future studies, exploring trimesters and stages of prenatal care can be important. This study explored prenatal care, but it could shed more light in what symptoms Black women experiences during each trimester and how it was addressed, if it needed. The importance of prenatal care needs to be explored future by exploring religious groups. This accounted for religion, but it was not the focus of study. However, did not have a diverse group of religions to explore. This study could be enhanced by exploring women who have substance use, STD/STI. None of the participants disclosed that information, but as a researcher, I did not ask. In the Literature, religion/spirituality, substance abuse, and STD/STI were discussed, and it did not come in the study outside of participants identifying whether they followed a religion.

This study could go further by exploring other factors such as religion, substance use, or STD/STI for Black women. Black women are a large group of women, and within that population, there are subgroups that need more research. Researching those groups is imperative and can be beneficial for healthcare providers. Lastly, increasing research on Black women is needed, and research on Black women who have other identifiers can increase awareness.

### **Implications**

Black women deserve optimal maternal care. Their experiences matter so healthcare providers and policymakers understand how to support them. COVID-19

impacted the world, and healthcare providers were considered frontline workers, and patients expected the best care. Health providers swear under oath that they will provide the best care to patients, including Black women. Black women are double minorities, which means they face many barriers. Considering research findings, learning how to improve maternal Black care is imperative.

Healthcare providers and policymakers should care about Black women's experiences because Black women are dying at a higher rate than White women during pregnancy. To understand the gap in statistics, Black women need to be researched and explored to serve them better. Black women deserve better outcomes during their pregnancy. The findings in this study emphasized that telemedicine had its benefits, and it could serve more benefits if Black women were serviced with the best care from the beginning. Black women should not have to ask for proper care. In addition, healthcare providers should consider the chronic health conditions in Black communities and ensure that medical symptoms and concerns are not overlooked.

This study's positive social change gives Black women a voice in the research and how policies are developed. Bringing a baby into the world takes risk and courage, meaning healthcare providers are ensuring optimal care. This study stands with families who lost a wife, mother, aunt, sister, or niece during pregnancy. This highlights how providing optimal care is not just for the mom or baby but for families. Laws and policies need to protect all women, and since statistically, Black women are dying at a higher rate, determining how that can change starts with research. This would give Black women comfort, knowing that their needs are important.

In conclusion, the findings of this study can help agencies and other stakeholders support Black women and increase the positive experiences women can have. Black women should receive the care they deserve from the beginning and not have to worry about how their needs are going to be met. Medical mistrust occurs within the Black community, and reducing the fears and mistrust starts with showing Black patients that their needs are important and will be valued.

### **Conclusion**

The lives of pregnant Black women matter. More needs to happen to protect Black women. Black women have been dying at alarming rates for years, and it is still happening; intervention is required. There is limited qualitative research highlighting the experiences of Black women, and the best way to know how to help them is through research. The scholarly community advocates to ensure that populations are well-researched and included in the advancements happening in the world. Nobody should be left behind or in a disservice; intervention should be immediate once a population is identified as in need. As a result, Black women need more research, and the work does not stop here. The laws and policies should support all women, especially women in marginalized communities with limited resources.

It is essential to collect first-hand information to develop resources that fit the needs of the community. Resources need to fit marginalized communities' needs to reduce mortality rates within those communities. Maternal care for Black women can be a positive experience, but understanding the ways healthcare services can be improved or modified can potentially lead to lower mortality and morbidity. The resources, and

research need to continue until Black women have better outcomes during their pregnancy. Black women should not have to worry about being a statistic, and families should not have to worry about the safety of their family members. Patients should feel safe when seeing their healthcare providers and have should have their medical needs prioritized.

Black women deserve the same outcomes as White women. Their symptoms and concerns are just as important and need to be addressed. Voices of Black women need to be heard to develop resources that fit their needs. Reducing mortality rates for Black women should be a priority because Black women deserve to live.

## References

- Alsan, M., Wanamaker, M., & Hardeman, R. R. (2020). The Tuskegee study of untreated syphilis: A case study in peripheral trauma with implications for health professionals. *Journal of General Internal Medicine*, 35(1), 322–325. <https://doi.org/10.1007/s11606-019-05309-8>
- Anakwe, A., Majee, W., Ponder, M., & BeLue, R. (2022). COVID-19 and crisis communication among African American households. *Families, Systems, & Health*. <https://doi.org/10.1037/fsh0000705>
- Asbury, B. D. (2015). “Backdoor to eugenics”? The risks of prenatal diagnosis for poor, Black women. *Duke Journal of Gender Law & Policy*, 23(1), 1–23. <https://doi.org/10.1215/03616878-17-1-184>
- Baumgartner, L. M. (2014). African American women and HIV/AIDS. *New Directions for Adult and Continuing Education*, 142, 81–90. <https://doi.org/10.1002/ace.20097>
- Bediako, P. T., BeLue, R., & Hillemeier, M. M. (2015). A Comparison of birth outcomes among Black, Hispanic, and Black Hispanic women. *Journal of Racial and Ethnic Health Disparities*, 2(4), 573–582. <https://doi.org/10.1007/s40615-015-0110-2>
- Bhopal, K. (2020). Confronting White privilege: The importance of intersectionality in the sociology of education. *British Journal of Sociology of Education*, 41(6), 807–816. <https://doi.org/10.1080/01425692.2020.1755224>

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.  
<https://doi.org/10.1191/1478088706qp063oa>
- Bridges, K. M. (2020). Race, pregnancy, and the opioid epidemic: White privilege and the criminalization of opioid use during pregnancy. *Harvard Law Review*, 133(3), 770–851.
- Brown, H. L., Small, M. J., Clare, C. A., & Hill, W. C. (2021). Black women health inequity: The origin of perinatal health disparity. *Journal of the National Medical Association*, 113(1), 105–113. <https://doi.org/10.1016/j.jnma.2020.11.008>
- Callander, E. J., & Atwell, K. (2021). The healthcare needs of preterm and extremely premature babies in Australia-assessing the long-term health service use and costs with a data linkage cohort study. *European Journal of Pediatrics*, 180(7), 2229–2236. <https://doi.org/10.1007/s00431-021-04009-y>
- Campbell, C. (2021). Medical violence, obstetric racism, and the limits of informed consent for Black women. *Michigan Journal of Race & Law*, 26, 47–75. <https://doi.org/10.36643/mjrl.26.sp.medical>
- Capasso, A., DiClemente, R. J., & Wingood, G. M. (2019). Pregnancy coercion as a risk factor for HIV and other sexually transmitted infections among young African American women. *Journal of Acquired Immune Deficiency Syndromes*, 82(Suppl. 2), S155–S161. <https://doi.org/10.1097/QAI.0000000000002174>

Centers for Disease Control and Prevention. (2022). Maternal mortality rates in the United States, 2020. <https://www.cdc.gov/nchs/data/hestat/maternal-mortality/2020/maternal-mortality-rates-2020.htm>

Centers for Disease Control and Prevention. (2019). Racial and ethnic disparities continue in pregnancy-related deaths. <https://www.cdc.gov/media/releases/2019/p0905-racial-ethnic-disparities-pregnancy-deaths.html>

Chandler, R. (2020). Sexual and reproductive health knowledge gaps identified by Black women: Considerations for the nurse educator. *Association of Black Nursing Faculty Journal*, 31(3), 88–94. <https://doi.org/10.1363/psrh.12170>

Collins, C. C., Rice, H., Bai, R., Brown, P. L., Bronson, C., & Farmer, C. (2021). “I felt like it would’ve been perfect, if they hadn’t been rushing”: Black women’s childbirth experiences with medical providers when accompanied by perinatal support professionals. *Journal of Advanced Nursing*, 77(10), 4131–4141. <https://doi.org/10.1111/jan.14941>

Conteh, N., Wald, M., Smith, C., Gagliardi, J., & Davis, C. (2022). Racial disparities in perinatal mental health care during COVID-19: The pandemic has exacerbated barriers to screening, diagnosis, and treatment of women of color. *Current Psychiatry*, 21(1), 9–14. <https://doi.org/10.12788/cp.0206>

Crandall, K. (2021). Pregnancy-related death disparities in non-Hispanic Black women. *Women’s Health (London, England)*, 17, 17455065211019888. <https://doi.org/10.1177/17455065211019888>



- DeCuir-Gunby, J. T., Johnson, O. T., Womble Edwards, C., McCoy, W. N., & White, A. M. (2020). African American professionals in higher education: experiencing and coping with racial microaggressions. *Race, Ethnicity and Education, 23*(4), 492–508.  
<https://doi.org/10.1080/13613324.2019.1579706>
- DeHart, D., King, L. B., Iachini, A. L., Browne, T., & Reitmeier, M. (2022). Benefits and challenges of implementing telehealth in rural settings: A mixed-methods study of behavioral medicine providers. *Health & Social Work, 47*(1), 7–18. <https://doi.org/10.1093/hsw/hlab036>
- Deninotti, J., Denis, A., & Berdoulat, É. (2020). Emergency C-section, maternal satisfaction and emotion regulation strategies: effects on PTSD and postpartum depression symptoms. *Journal of Reproductive & Infant Psychology, 38*(4), 421–435. <https://doi.org/10.1080/02646838.2020.1793308>
- Dong, L., Bogart, L. M., Gandhi, P., Aboagye, J. B., Ryan, S., Serwanga, R., & Ojikutu, B. O. (2022). A qualitative study of COVID-19 vaccine intentions and mistrust in Black Americans: Recommendations for vaccine dissemination and uptake. *PLoS ONE, 17*(5), 1–19. <https://doi.org/10.1371/journal.pone.0268020>
- Dove-Medows, E., Deriemacker, A., Dailey, R., Nolan, T. S., Walker, D. S., Misra, D. P., Kavanaugh, K., & Giurgescu, C. (2020). Pregnant African American women's perceptions of neighborhood, racial discrimination, and psychological distress as influences on birth outcomes. *MCN: The American Journal of Maternal/Child Nursing, 45*(1), 49–56. <https://doi.org/10.1097/nmc.0000000000000589>

- Dozier, J. L., Hennink, M., Mosley, E., Narasimhan, S., Pringle, J., Clarke, L., Blevins, J., James-Portis, L., Keithan, R., Hall, K. S., & Rice, W. S. (2020). Abortion attitudes, religious and moral beliefs, and pastoral care among Protestant religious leaders in Georgia. *PloS One*, *15*(7), e0235971. <https://doi.org/10.1371/journal.pone.0235971>
- Duberstein, Z., Brunner, J., Panisch, L., Bandyopadhyay, S., Irvine, C., Macri, J., Pressman, E., Thornburg, L., Poleshuck, E., Bell, K., Best, M., Barrett, E., Miller, R., & O'Connor, T. (2021). The biopsychosocial model and perinatal health care: Determinants of perinatal care in a community sample. *Frontiers in Psychiatry*, *12*. <https://doi.org/10.3389/fpsyt.2021.746803>
- Dugan-Moverley, J. A. (2021). Suggestions to overcome racial inequities among health care professionals. *Clinical Diabetes*, *39*(2), 197–198. <https://doi.org/10.2337/cd20-0070>
- Dunn, A. B., Dunlop, A. L., Miller, A. H., Hogue, C. J., Crofton, J. M., & Corwin, E. J. (2019). Complement activation during early pregnancy and clinical predictors of preterm birth in African American women. *Journal of Perinatal & Neonatal Nursing*, *33*(4), E15–E26. <https://doi.org/10.1097/JPN.0000000000000443>
- Ertel, A., James-Todd, T., Kleinman, K., Krieger, N., Gillman, M., Wright, R., & Rich-Edwards, J. (2012). Racial discrimination, response to unfair treatment, and depressive symptoms among pregnant black and African American women in the United States. *Annals of Epidemiology*, *22*(12), 840–846. <https://doi.org/10.1016/j.annepidem.2012.10.001>

- Ferdinand, K. C. (2021). Overcoming barriers to COVID-19 vaccination in African Americans: The need for cultural humility. *American Journal of Public Health, 111*(4), 586–588. <https://doi.org/10.2105/AJPH.2020.306135>
- Fields, J. C., Brandt, J. S., Graham, H. L., Zeitlin, J., & Ananth, C. V. (2022). Changes in stillbirth rates among Black and White pregnant women in the United States, 1980-2019. *American Journal of Obstetrics and Gynecology, 226*(1), S774. <https://doi.org/10.1016/j.ajog.2021.11.1270>
- Fisher, C. B. (2017). *Decoding the ethics code: A practical guide for psychologists*, 4th Edition.
- Futterman, I., Rosenfeld, E., Toaff, M., Boucher, T., Golden-Espinal, S., Evans, K., & Clare, C. A. (2021). Addressing disparities in prenatal care via telehealth during COVID-19: prenatal satisfaction survey in East Harlem. *American Journal of Perinatology, 38*(1), 88–92. <https://doi.org/10.1055/s-0040-1718695>
- Glover, K. (2021). Can you hear me?: How implicit bias creates a disparate impact in maternal healthcare for Black women. *Campbell Law Review, 43*(2), 243–270.
- Hall, T. N., & Park, J. J. (2022). “Plant my feet on higher ground”: Understanding how Black megachurches create a college-going culture. *Journal of Diversity in Higher Education. <https://doi.org/10.1037/dhe0000390>*
- Hamilton, J. L., Shumbusho, D., Cooper, D., Fletcher, T., Aden, J., Weir, L., & Keyser, E. (2021). Race matters: maternal morbidity in the military health system. *American Journal of Obstetrics and Gynecology, 224*(5), 512.e1-512.e6. <https://doi.org/10.1016/j.ajog.2021.02.036>

- Harvey, M. (2019). Slavery, indenture, and the development of British industrial Capitalism. *History Workshop Journal*, 88, 66–88. <https://doi.org/10.1093/hwj/dbz027>
- Hays, D. G., & McKibben, W. B. (2021). Promoting rigorous research: Generalizability and qualitative research. *Journal of Counseling & Development*, 99(2), 178–188. <https://doi.org/10.1002/jcad.12365>
- He, N., Cleland, C., Gwadz, M., Sherpa, D., Ritchie, A., Martinez, B., & Collins, L. (2021). Understanding medical distrust among African American/Black and Latino persons living with HIV with sub-optimal engagement along the HIV care continuum: A machine learning approach. *SAGE Open*, 11. <https://doi.org/10.1177/21582440211061314>
- Hepburn, M. (2018). The Variables Associated With Health Promotion Behaviors Among Urban Black Women. *Journal of Nursing Scholarship*, 50(4), 353–366. <https://doi.org/10.1111/jnu.12387>
- Howell, E. A., Janevic, T., Blum, J., Zeitlin, J., Egorova, N. N., Balbierz, A., & Hebert, P. L. (2020). Double disadvantage in delivery hospitals for Black and Hispanic women and high-risk Infants. *Maternal and Child Health Journal*, 24(6), 687. <https://doi.org/10.1007/s10995-020-02911-9>
- Hunte, R., Klawetter, S., & Paul, S. (2022). “Black nurses in the home is working”: Advocacy, naming, and processing racism to improve Black maternal and infant health. *Maternal & Child Health Journal*, 26(4), 933–940. <https://doi.org/10.1007/s10995-021-03283-4>

- James, K., & Jordan, A. (2018). The opioid crisis in Black communities. *The Journal of Law, Medicine & Ethics : A Journal of the American Society of Law, Medicine & Ethics*, 46(2), 404–421. <https://doi.org/10.1177/1073110518782949>
- Jordan, A., Babuscio, T., Nich, C., & Carroll, K. M. (2021). A feasibility study providing substance use treatment in the Black church. *Journal of Substance Abuse Treatment*, 124. <https://doi.org/10.1016/j.jsat.2020.108218>
- Kalal, N., Vel, N., Mundel, S., Daiyya, S., Dhayal, S., Bishnoi, S., Asiwal, S., & Jhahhariya, S. (2022). Effectiveness and barriers of telehealth services during COVID-19 pandemic: A narrative review. *Indian Journal of Medical Specialties*, 13(1), 4–8. [https://doi.org/10.4103/injms.injms\\_62\\_21](https://doi.org/10.4103/injms.injms_62_21)
- Karram, M., & Baum, M. (2020). Telemedicine: A primer for today's OBGyn: Ready or not, you should be embracing the technology. Here's how to get started. *OBG Management*, 32(5), 28-32
- Kerry Dhakal. (2022). NVivo. *Journal of the Medical Library Association*, 110(2). <https://doi.org/10.5195/jmla.2022.1271>
- Kopkin, N. (2018). The conditional spatial correlations between racial prejudice and racial disparities in the market for home loans. *Urban Studies (Sage Publications, Ltd.)*, 55(16), 3596–3614. <https://doi.org/10.1177/0042098018755086>
- Kothari, C. L., Romph, C., Bautista, T., & Lenz, D. (2017). Perinatal periods of risk analysis: Disentangling race and socioeconomic status to inform a Black infant mortality community action initiative. *Maternal and Child Health Journal*, 21(Suppl 1), 49–58. <https://doi.org/10.1007/s10995-017-2383-z>

- Laursen, S. H., Boel, L., Udsen, F. W., Secher, P. H., Andersen, J. D., Vestergaard, P., Hejlesen, O. K., & Hangaard, S. (2022). Effectiveness of telemedicine in managing diabetes in pregnancy: A Systematic review and meta-analysis. *Journal of Diabetes Science and Technology*, 19322968221094624. <https://doi.org/10.1177/19322968221094626>
- Lesho, E., Newhart, D., Reno, L., Sleeper, S., Nary, J., Gutowski, J., Yu, S., Walsh, E., Vargas, R., Riedy, D., & Mayo, R. (2022). Effectiveness of various cleaning strategies in acute and long-term care facilities during novel corona virus 2019 disease pandemic-related staff shortages. *PLoS ONE*, 17(1), 1–11. <https://doi.org/10.1371/journal.pone.0261365>
- Levin, G., Rosenbloom, J. I., Shai, D., Yagel, S., Yinon, Y., & Meyer, R. (2022). Vaginal birth after cesarean in women with no prior vaginal delivery carrying a large for gestational age baby. *Birth: Issues in Perinatal Care*, 49(2), 212–219. <https://doi.org/10.1111/birt.12590>
- Liverpool, L. (2021). How medical tests have built-in discrimination against Black people. *New Scientist*, 251(3343), 16–18. [https://doi.org/10.1016/s0262-4079\(21\)01234-3](https://doi.org/10.1016/s0262-4079(21)01234-3)
- Lynch, J. (2021). Generational chronotopes and accounting for unethical medicine: Bill Clinton’s apologies for radiation research and the Tuskegee Syphilis Study. *Quarterly Journal of Speech*, 107(3), 284–304. <https://doi.org/10.1080/00335630.2021.1946129>

Mackey-Kallis, S. (2022). Tuskegee experiment. *Salem Press Encyclopedia*.

<https://doi.org/10.4135/9781412952507.n642>

Madden, N., Emeruwa, U. N., Friedman, A. M., Aubey, J. J., Aziz, A., Baptiste, C. D., Coletta, J. M., D'Alton, M. E., Fuchs, K. M., Goffman, D., Gyamfi-Bannerman, C., Kondragunta, S., Krenitsky, N., Miller, R. S., Nhan-Chang, C.-L., Saint Jean, A. M., Shukla, H. P., Simpson, L. L., Spiegel, E. S., & Yates, H. S. (2020).

Telehealth uptake into prenatal care and provider attitudes during the COVID-19 pandemic in New York City: A quantitative and qualitative analysis. *American Journal of Perinatology*, 37(10), 1005–1014. <https://doi.org/10.1055/s-0040-1712939>

McManus, H. D., Cullen, F. T., Jonson, C. L., Burton, A. L., & Burton, V. S., Jr. (2019).

Will Black Lives Matter to the police? African Americans' concerns about Trump's presidency. *Victims & Offenders*, 14(8), 1040–1062. <https://doi.org/10.1080/15564886.2019.1671288>

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>

Menconi, M. (2020). NY Hospitals issue problematic ban on birthing support Persons from Labor & Delivery Units. *Voices in*

*Bioethics*, 6. <https://doi.org/10.7916/vib.v6i.5897>

- Mende-Siedlecki, P., Qu-Lee, J., Backer, R., & Van Bavel, J. J. (2019). Perceptual contributions to racial bias in pain recognition. *Journal of Experimental Psychology: General*, *148*(5), 863–889. <https://doi.org/10.1037/xge0000600.supp> (Supplemental)
- Merriam, S.B., & Tisdell, E.J. (2016). *Qualitative Research: A Guide to Design and Implementation* (4th ed.). John Wiley and Sons, Inc
- Millett, M. A., Cook, L. E., Skipper, A. D., Chaney, C. D., Marks, L. D., & Dollahite, D. C. (2018). Weathering the storm: The shelter of faith for Black American Christian families. *Marriage & Family Review*, *54*(7), 662–676. <https://doi.org/10.1080/01494929.2018.1469572>
- Morris, A., & Kahlor, L. A. (2018). Intensifying the burden: The implications of individual responsibility messages in HIV public service announcements aimed at Black women. *Sex Education: Sexuality, Society and Learning, Research*, *29*(3). <https://doi.org/10.1016/j.psychres.2020.113475>
- Nabi, S., & Mishra, V. P. (2021). Analysis and impact of COVID-19 on economy and organization. *2021 International Conference on Computational Intelligence and Knowledge Economy (ICCIKE), Computational Intelligence and Knowledge Economy (ICCIKE), 2021 International Conference On*, 219–224. <https://doi.org/10.1109/ICCIKE51210.2021.9410734>
- Nataliansyah, M. M., Merchant, K. A. S., Croker, J. A., Zhu, X., Mohr, N. M., Marcin, J. P., Rahmouni, H., & Ward, M. M. (2022). Managing innovation: a qualitative study on the implementation of telehealth services in rural emergency



- departments. *BMC Health Services Research*, 22(1), 852. <https://doi.org/10.1186/s12913-022-08271-0>
- Nelson, G. A., & Holschuh, C. (2021). Evaluation of telehealth use in prenatal care for patient and provider satisfaction: A step toward reducing barriers to care. *The Journal for Nurse Practitioners*, 17(4), 481–484. <https://doi.org/10.1016/j.nurpra.2020.12.026>
- Novacek, D. M., Hampton-Anderson, J. N., Ebor, M. T., Loeb, T. B., & Wyatt, G. E. (2020). Mental Health Ramifications of the COVID-19 Pandemic for Black Americans: Clinical and Research Recommendations. *Psychological Trauma: Theory, Research, Practice & Policy*, 12(5), 449–451. <https://doi.org/10.1037/tra0000796>
- Nürnbergger, P., von Lewinski, D., Rothenhäusler, H.-B., Braun, C., Reinbacher, P., Kolesnik, E., & Baranyi, A. (2022). A biopsychosocial model of severe fear of COVID-19. *PloS One*, 17(2), e0264357. <https://doi.org/10.1371/journal.pone.0264357>
- Ohlendorf, J. M., Anklam, A. L., & Gardner, L. (2019). “I am a Runner”: A qualitative analysis of women-runners’ pregnancy experiences. *Women and Birth*, 32(3), e307–e314. <https://doi.org/10.1016/j.wombi.2018.07.021>
- Opara, I., Pierre, K., Assan, M. A., Scheinfeld, L., Alves, C., Cross, K., Lizarraga, A., & Brawner, B. (2022). A systematic review on sexual health and drug use prevention interventions for Black girls. *International Journal of Environmental Research and Public Health*, 19(6). <https://doi.org/10.3390/ijerph19063176>

- Oparah, J., James, J., Barnett, D., Jones, L., Melbourne, D., Peprah, S., & Walker, J. (2021). Creativity, resilience and resistance: Black birth workers' responses to the COVID-19 pandemic. *Frontiers in Sociology*, 6. <https://doi.org/10.3389/fsoc.2021.636029>
- Ozcan, H., Samur, I., Uzun, F., & Sahin, R. (2021). Cultural methods used by women who give vaginal birth to cope with birth labour pain. *International Journal of Caring Sciences*, 14(2), 1106–1114.
- Parker, J. S., Haskins, N., Lee, A., Hailemeskel, R., & Adepoju, O. A. (2021). Black adolescents' perceptions of COVID-19: Challenges, coping, and connection to family, religious, and school support. *School Psychology*, 36(5), 303–312 <https://doi.org/10.1037/spq0000462>
- Percy, W. H., Kostere, K., & Kostere, S. (2015). Generic qualitative research in psychology. *Qualitative Report*, 20(2), 76–85 <https://doi.org/10.46743/2160-3715/2015.2097>
- Piyathilake, C. J., Badiga, S., Chappell, A. R., Johanning, G. L., & Jolly, P. E. (2021). Racial differences in dietary choices and their relationship to inflammatory potential in childbearing age women at risk for exposure to COVID-19. *Nutrition Research*, 90, 1–12. <https://doi.org/10.1016/j.nutres.2021.04.004>
- Rapp, K. S., Volpe, V. V., & Neukrug, H. (2021). State-level sexism and women's health care access in the United States: Differences by race/ethnicity, 2014–2019. *American Journal of Public Health*, 111(10), 1796–1805. <https://doi.org/10.2105/ajph.2021.306455>

- Rasmussen, A., Smulian, J. C., Lednický, J. A., Wen, T. S., & Jamieson, D. J. (2020). Coronavirus disease 2019 (COVID-19) and pregnancy: what obstetricians need to know. *American Journal of Obstetrics and Gynecology*, 222(5), 415–426. <https://doi.org/10.1016/j.ajog.2020.02.017>
- Ravitch, S.M., & Carl, N.M. (2021). *Qualitative research: Bridging the conceptual, theoretical, and methodological* (2<sup>nd</sup> ed.). Sage Publications, Inc
- Reed, D. (2021). Racial disparities in healthcare: how COVID-19 ravaged one of the wealthiest African American counties in the United States. *Social Work in Public Health*, 36(2), 118–127. <https://doi.org/10.1080/19371918.2020.1868371>
- Robinson, M. A., Kim, I., Mowbray, O., & Washington, T. (2020). The effects of hopelessness on chronic disease among African Americans and Caribbean Blacks: Findings from the national survey of American life (NSAL). *Community Mental Health Journal*, 56(4), 753–759. <https://doi.org/10.1007/s10597-019-00536-z>
- Robledo, C. A., Yeung, E. H., Mendola, P., Sundaram, R., Boghossian, N. S., Bell, E. M., & Druschel, C. (2017). Examining the prevalence rates of preexisting maternal medical conditions and pregnancy complications by source: Evidence to inform maternal and child research. *Maternal And Child Health Journal*, 21(4), 852–862. <https://doi.org/10.1007/s10995-016-2177-8>
- Rodríguez, J. E., Campbell, K. M., & Washington, J. C. (2021). Dismantling Anti-Black Racism in Medicine. *American Family Physician*, 104(6), 555–556.
- Roman, L.A., Raffo, J.E., Dertz, K. Agee, B., Evans, D., Penninga., K., Pierce, T., Cunningham, B., VanderMeulen, P. (2017). Understanding perspectives of

African American medicaid-insured women on the process of perinatal Care: An opportunity for systems improvement. *Maternal Child Health*

<https://doi.org/10.1007/s10995-017-2372-2>

Salsberg, E., Richwine, C., Westergaard, S., Martinez, M., Oyeyemi, T., Vichare, A., Chen, C. (2021). Estimation and comparison of current and future racial/ethnic representation in the US health care workforce. *JAMA Network Open*.

<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2777977>

Schultz, D., Lovejoy, S., & Peet, E. (2022). Tackling Persistent and Large Disparities in Birth Outcomes in Allegheny County, Pennsylvania. *Maternal & Child Health Journal*, 26(5), 978–984. <https://doi.org/10.1007/s10995-021-03289-y>

Sendaula, E., Buwembo, M., & Opio, D. (2022). Clinical profile of HIV-infected adults receiving a holistic approach of care model in Nakawa, Kampala District. *PLoS ONE*, 17(7), 1–8. <https://doi.org/10.1371/journal.pone.0272039>

Skinner, H. J., Casares, M., Wombles, C., Brooks, K., Hussain, A., Hee Seo, J., Gireesh, E. D., Claudio, A. O., Lee, K. H., Hill, M., & Westerveld, M. (2022). Comparison of care accessibility, costs, and quality with face-to-face and telehealth epilepsy clinic visits. *Epilepsy & Behavior : E&B*, 127, 108510. <https://doi.org/10.1016/j.yebeh.2021.108510>

Snowden, J. M., Osmundson, S. S., Kaufman, M., Blauer Peterson, C., & Kozhimannil, K. B. (2020). Cesarean birth and maternal morbidity among Black women and White women after implementation of a blended payment policy. *Health Services Research*, 55(5), 729–740. <https://doi.org/10.1111/1475-6773.13319>

- Sorknæs, A. D., Hounsgaard, L., Olesen, F., Jest, P., Bech, M., & Østergaard, B. (2015). Nurses' and patients' experiences of teleconsultations. *International Journal of Integrated Care (IJIC)*, *15*, 1–2. <https://doi.org/10.5334/ijic.2286>
- Souza, S. C. S., da Silva, D. F., Nagpal, T. S., & Adamo, K. B. (2020). Eating habits, advice from family/friends, and limited personal effort may increase the likelihood of gaining outside gestational weight gain recommendations. *Maternal & Child Health Journal*, *24*(12), 1473–1481. <https://doi.org/10.1007/s10995-020-03007-0>
- Stevens, W. D., & Stevens-Watkins, D. (2020). Opioid-related overdose deaths among African Americans: Implications for research, practice and policy. *Drug & Alcohol Review*, *39*(7), 857–861. <https://doi.org/10.1111/dar.13058>
- Suarez, A. (2020). Black midwifery in the United States: Past, present, and future. *Sociology Compass*, *14*(11), 112. <https://doi.org/10.1111/soc4.12829>
- Surkan, P. J., Dong, L., Ji, Y., Hong, X., Ji, H., Kimmel, M., Tang, W.-Y., & Wang, X. (2019). Paternal involvement and support and risk of preterm birth: Findings from the Boston birth cohort. *Journal of Psychosomatic Obstetrics & Gynecology*, *40*(1), 48–56. <https://doi.org/10.1080/0167482X.2017.1398725>
- Sweeney, A. M., Wilson, D. K., Zarrett, N., Brown, A., Quattlebaum, M., Gorman, B., & Loncar, H. (2021). Evaluating experiences of stress and coping among African American women during the COVID-19 pandemic to inform future interventions. *Health Education & Behavior*, *48*(6), 739–746. <https://doi.org/10.1177/10901981211039148>

- Thiem, K. C., Neel, R., Simpson, A. J., & Todd, A. R. (2019). Are Black women and girls associated with danger? Implicit racial bias at the intersection of target age and gender. *Personality & Social Psychology Bulletin*, 45(10), 1427–1439. <https://doi.org/10.1177/0146167219829182>
- Thurston, H., Fields, B. E., & White, J. (2021). Does increasing access to prenatal care reduce racial disparities in birth outcomes? *Journal of Pediatric Nursing*, 59, 96–102. <https://doi.org/10.1016/j.pedn.2021.01.012>
- Tripathy, D., Roy, A. K., Khanna, R. C., Jalali, S., Panigrahy, B., Parija, D. C., & Rath, S. (2021). Point-of-care rapid antigen testing for COVID-19 at a tertiary eye care facility: Role in commencement of elective surgeries, contact tracing and implementation of back-to-work policy. *Indian Journal of Ophthalmology*, 69(4), 964–970. [https://doi.org/10.4103/ij.o.IJO\\_3119\\_20](https://doi.org/10.4103/ij.o.IJO_3119_20)
- Tsai, L.-M., & Yan, Y.-H. (2021). A preliminary study on applying holistic health care model on medical education behavioral intention: a theoretical perspective of planned behavior. *BMC Medical Education*, 21(1), 307. <https://doi.org/10.1186/s12909-021-02746-0>
- Vasanth-Kohila, R., & V. Hemavathy. (2022). Effectiveness of health education on knowledge of hypertension among hypertensive patient -- a pilot analysis. *Cardiometry*, 22, 497–503. <https://doi.org/10.18137/cardiometry.2022.22.497503>
- Vilakazi, L. (2022, July 28). Black American women and the fight against uterine fibroids. *Washington Informer*, 57(41), 24.

- Wang, C. Y., Yee, L. M., & Feinglass, J. M. (2022). Delivery complications and postpartum hospital use in California. *Women's Health Issues, 32*(1), 57–66. <https://doi.org/10.1016/j.whi.2021.08.004>
- Watters, E. R., & Martin, G. (2021). Health outcomes following childhood maltreatment: An examination of the biopsychosocial model. *Journal of Aging and Health, 33*(7–8), 596–606. <https://doi.org/10.1177/08982643211003783>
- Wei, H., Zhang, C., & Silveyra, P. (2020). The relationships between prenatal smoking exposure and telomere lengths in fetuses, infants, and children: A systematic literature review. *Journal of Addictions Nursing, 31*(4), 243–252. <https://doi.org/10.1097/JAN.0000000000000364>
- Yee, L. M., Kacanek, D., Brightwell, C., Haddad, L. B., Jao, J., Powis, K. M., Yao, T.-J., Barr, E., Broadwell, C., Siminski, S., Seage III, G. R., & Chadwick, E. G. (2021). Marijuana, opioid, and alcohol use among pregnant and postpartum individuals living with HIV in the US. *JAMA Network Open, 4*(12), e2137162. <https://doi.org/10.1001/jamanetworkopen.2021.37162>
- Zalla, L. C., Mulholland, G. E., Filiatreau, L. M., & Edwards, J. K. (2022). Racial/ethnic and age differences in the direct and indirect effects of the COVID-19 pandemic on US mortality. *American Journal of Public Health, 112*(1), 154–164. <https://doi.org/10.2105/ajph.2021.306541>
- Zhang, S., Cain, D. S., & Liao, M. (2021). Racial/ethnic disparities in the decision points of mental health service use and psychotropic medication receipt among

depressed youth. *Youth & Society*, 53(4), 610–635.

<https://doi.org/10.1177/0044118X19871853>



## Appendix A: Recruitment Flyer

# Volunteers Needed

## for a research study

**The focus of this research study is to interview Black women who received telemedicine prenatal care during COVID-19.**

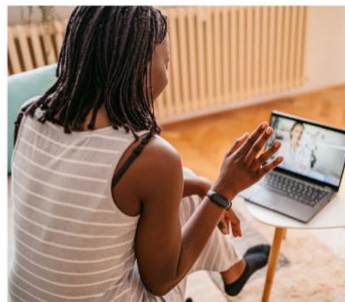
Black women are three times more likely to die during childbirth. Black women face pregnancy complications and risks that are preventable. This study is to explore the experiences with telemedicine for prenatal care during COVID-19 for Black women. This information is to help care providers understand how to support Black women during their pregnancy journey and things to consider when treating pregnant Black women.

**About the study:**

- One 45-60 minute virtual or face-to-face interview that will be audio-recorded.
- To protect your privacy, the published study would use fake names.

**Volunteers must meet these requirements:**

- 18 years old or older.
- Black Female.
- Received telehealth prenatal care during COVID-19.



This interview is part of the doctoral study for **Dorothy Hiralien, a Ph.D. student at Walden University.**

Interviews will take place during **May 2023.**

To confidentially volunteer,  
**contact the researcher: Dorothy Hiralien**  
**[Dorothy.hiralien@waldenu.edu](mailto:Dorothy.hiralien@waldenu.edu)**

**Study Supervisor: Dr. Ethel Perry, PHD.**  
**[ethel.perry@mail.Waldenu.edu](mailto:ethel.perry@mail.Waldenu.edu)**

## Appendix B: Interview Questions

1. Tell me about yourself; what is your ethnicity?
2. What cultural beliefs surrounding pregnancy, labor, and delivery, do you practice? What religion do you follow, if any?
3. Do you have any pre-existing conditions that should be monitored during pregnancy? If so, what? Also, how did your provider monitor the medical conditions? Describe the family medical history of the women in your family.
4. Describe what your prenatal visits were during COVID-19.
5. Tell me your thoughts when COVID-19 shut everything down.
6. Tell me how you learned about telemedicine and your first impression of telehealth. What questions did you have about the switch from face-to-face to virtual/phone?
7. Was there ever a time you had trouble getting into your telehealth visit? If so, describe what was happening.
8. How could you find a quiet space to speak to your provider?
9. Tell me how you adapted to telemedicine for prenatal care.
10. Tell me how you were able to share your questions with your provider.
11. What questions did you have about telemedicine and your pregnancy, and what kind of questions did you comfortable asking during your appointments?
12. How would you describe the quality of care during your telehealth visits, and did you feel supported?

13. In what ways do you think prenatal care can be improved or could have been different?
14. How accessible was it to get in touch with your providers, and how were you able to develop a relationship with your provider?
15. What support did you receive from your provider during your prenatal care visits?
16. Tell me how you made the best of the sudden transition from face-to-face visits to telemedicine.
17. Have you ever received prenatal care before COVID-19? If so, were there any major differences in the quality of care?
18. After experiencing telemedicine for prenatal care, what were the pros and cons?
19. Describe your ideal prenatal experience.
20. How did COVID-19 impact your prenatal care visits?

## Appendix C: Demographic Data

Please answer the following questions designed to give me some basic information. Your personal information will not be shown to anyone outside of the study. You may leave a question blank if you do not want to answer it.

1. Choose a fake name: \_\_\_\_\_
2. Age: \_\_\_\_\_
3. What is your marital status right now? \_\_\_\_\_
4. How many children do you have? \_\_\_\_\_
5. Have you had any miscarriages? \_\_\_\_\_
6. If you answered yes to question 5, how many miscarriages have you had? \_\_\_\_\_
7. What is your highest level of education? \_\_\_\_\_
8. What is your employment status? \_\_\_\_\_