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Midwifery Care's Potential to Improve Birth Outcomes and Experiences for Black Women and Infants

Neville Wintergerst-Burch
nevillewintergerstburch@gmail.com

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Neville Wintergerst-Burch

Bellarmine University

Advisor: Dr. Pam Power

Reader: Dr. Kelly Ruppel

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Abstract

Black women and infants experience higher morbidity and mortality rates compared to white women and infants in the United States. Forces of systemic racism and poverty often lead to inadequate access to prenatal care for Black women, and care received is often compromised by implicit bias or barriers related to insurance coverage, impersonal provider-patient relationships, and poor healthcare literacy. Despite the rich history of Black Granny midwives in the United States, most Black women began using physicians for obstetric care in the 20th and 21st centuries. This integrative review explores how improving access to midwifery care for Black women could result in improved birth outcomes, patient autonomy, trusting patient-provider relationships, and maternal satisfaction with the obstetric experience. It also addresses the barriers that prevent Black women from utilizing midwifery, including the low Black representation among midwives. Removing these barriers and implementing programs that increase midwifery access could help to address health equity issues that exist for Back child-bearing women.

Contents

Introduction

Racial disparities in birth outcomes stem from a combination of structural, economic, sociocultural, and individual-level components which coalesce into unjust realities for Black women and infants. The United States' obstetric healthcare system, which is largely physician-based, often focuses on implementing expensive, invasive medical interventions in the birth process and neonatal period while underappreciating the importance of primary prevention in the preconception and prenatal periods. Midwifery care offers opportunities to improve access to quality preventative care for Black women, suggesting the need to expand midwifery services in the country. Midwifery care is cost-effective and supports women's psychological and social needs while providing safe physical care.

Background

The United States (US) considers itself a global leader in technological and medical advancement, but some of the nation's key indicators of health, maternal and infant mortality rates, reveal that our obstetric healthcare system is not producing adequate outcomes compared to other developed countries. The maternal mortality rate (MMR) refers to the ratio of deaths directly related to pregnancy and delivery per the annual number of live births, and the infant mortality rate (IMR) refers to the ratio of infant deaths before 12 months per the annual number of live births. In 2018, the Center for Disease Control (CDC) reported that the US MMR was

17.4 maternal deaths per 100,000 live births, which is strikingly higher than other developed countries' low rates—for instance 1.7, 1.8, 3.2, 6.5, and 8.6 in New Zealand, Norway, Germany, the United Kingdom, and Canada, respectively (Tikkanen et al., 2020). Despite growing national attention on United States' shortcomings in obstetric care, the US MMR saw significant increases in the following two years, rising to 21.3 in 2020 (Hoyert, 2020). Leading causes of maternal death include postpartum hemorrhage, hypertensive diseases of pregnancy, including pre-eclampsia and gestational hypertension, embolism, infection, and cerebrovascular accidents (Collier & Molina, 2019). Most of these causes, especially postpartum hemorrhage, gestational hypertension, and infection, are preventable and/or treatable. Early detection and treatment of diseases such as hypertension can prevent deadly complications for the mother and infant, emphasizing the importance of consistent primary and antenatal care.

The CDC also released a mortality report in 2019 that presented the US infant mortality rate (IMR) of 5.58 per 1,000 live births (Kochanek, et al., 2019). Unlike the US MMR, which increased over the past two decades, the US IMR has been steadily decreasing since 1995 (Ely & Driscoll, 2020). The IMR is moving in the right direction, but the country still has many improvements to make before it reaches the benchmarks set by other wealthy, highly developed countries. The Central Intelligence Agency (CIA) World Factbook ranks countries from the highest to lowest IMR; the United States ranks 176 among 227 countries. Some examples of higher-ranking countries include Singapore at an IMR of 1.56, Japan at 1.92, Finland at 2.15, and Australia at 3.05 (Central Intelligence Agency, 2021). Leading causes of infant mortality include congenital malformations, low birth weight, preterm births, unintentional injuries, sudden infant death syndrome (SIDS), maternal complications, cord and placental complications, neonatal

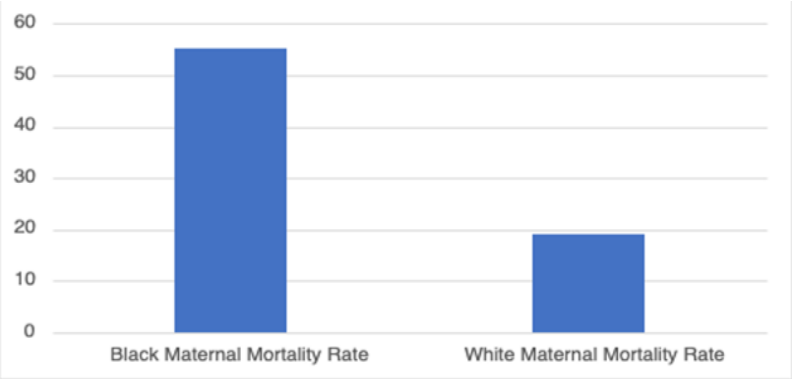
respiratory distress, and bacterial sepsis of the newborn (Kochanek, et al., 2019). Quality antenatal and intrapartum care and postpartum education can prevent many of these lethal complications. The high US MMR and IMR emphasizes the need for overall analysis of the weaknesses within the country's obstetric and neonatal healthcare system, but there is an even more dire need for a specific population of Americans.

Health indicators frequently reveal disparities between Black Americans and white Americans, and these disparities are especially severe in obstetric and neonatal indicators. In 2020, the maternal mortality rate for Black women was 55.3 deaths per 100,000 live births, compared to 19.1 for white women (Hoyert, 2020). This disparity existed for infants as well, as the infant mortality rate was 10.75 per 1,000 births for Black infants and 4.63 per 1,000 births for white infants in 2018 (Ely & Driscoll, 2020). These disparities are illustrated in Figures 1 and 2 below. These disparities demand attention, as Black patients should be able to attain the same quality of care and health outcomes as white Americans in the US. Forces of structural racism and poverty often lead to inadequate access to prenatal care for Black patients, and the quality of care received is often compromised by implicit biases, disrespect from providers, or systematic barriers related to insurance coverage and low healthcare literacy. No woman should have to enter pregnancy and childbirth with the fear that her race alone puts her and her infant at higher risk for death. When this fear is overwhelming, it can even discourage Black women from attending prenatal care visits, as they do not want bad news from an obstetrician to add to their existing stress (Tucker Edmonds, 2015). The Preventing Maternal Death Act of 2018 provided each state with 12 million dollars annually, for five years, to fund commissions that investigate causes for maternal mortality within each state (Bridges, 2020). However, the legislation ignored

the topic of race despite available data on racial disparities in maternal mortality, and the movement did not result in a significant improvement in the maternal mortality rate.

Figure 1

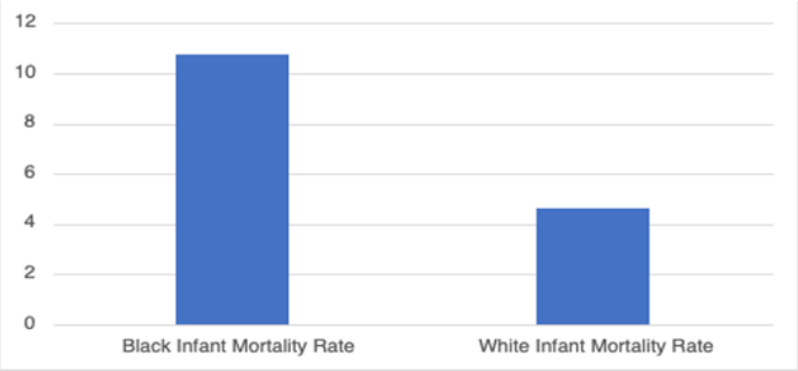
US Maternal Deaths per 100,000 Live Births, 2020



Note. The maternal mortality rate for Black women greatly exceeds the maternal mortality rate for white women.

Figure 2

US Infant Deaths per 1,000 Births, 2018



Note. The infant mortality rate for Black infants greatly exceeds the infant mortality rate for white infants.

The United States' response to its poor birth outcomes has been largely reactionary, treating birth complications rather than preventing them. This is evidenced by the country's high use of invasive medical interventions during birth and the growing American neonatal intensive care unit (NICU) industry. In 2020, 31.8% of births were delivered via cesarean section, which is a much higher rate than most other wealthy, developed countries (Osterman, et al., 2022). Cesarean deliveries are sometimes medically necessary to protect the life of the mother or neonate, such as in cases of fetal hypoxia, placenta previa, prolapsed umbilical cord, prolonged labor, or fetal mispositioning that is unable to be corrected manually (Mayo Clinic, n.d.). However, many cesarean deliveries in the US are elective, meaning physicians or patients choose a cesarean section without medical indication. Before women undergo an elective cesarean section, they should be educated on how cesarean sections carry greater risks of postpartum hemorrhage, infection, deep vein thrombosis and pulmonary embolisms, and anesthetic reactions, compared to vaginal births (Mayo Clinic, n.d.). Cesarean sections also increase the risk for complications in subsequent pregnancies, including placenta previa, placenta accreta, and uterine rupture. Compared to women who deliver vaginally, women who receive cesarean deliveries require longer recovery periods and longer hospital stays, have increased costs of care, and experience delayed skin-to-skin contact and delayed breastfeeding in the immediate postpartum period. Between 2016 and 2017, the Health Care Cost Institute gathered data on 351,272 deliveries for commercially insured women in 35 states (Johnson, et al., 2020). Among this sample, the average total cost of insurer and out-of-pocket payments was $12,235 for a

vaginal delivery and $17,004 for a cesarean section delivery, demonstrating the additional costs for a cesarean section. Childbirth accounts for an estimated four out of every five dollars spent on maternal-newborn care (Johnson, et al., 2020). If a greater portion of these funds were redistributed towards prenatal care, many costly childbirth complications could be prevented, reducing the average cost of birth in the US.

According to a retrospective cohort analysis based on National Center for Health Statistics and CDC natality data, American NICU admission rates increased by 37% from 2008 to 2018 (Kim et al., 2021). Common causes of NICU admission include prematurity, defined as gestation under 37 weeks, respiratory distress syndrome, hypoglycemia, infection, hypoxia during labor, and congenital abnormalities. However, there is a trend of lower acuity neonates being admitted to the NICU, which can result in unnecessary healthcare expenses (Edwards & Horbar, 2018; Haidari, et al., 2021). NICU costs vary greatly based on the neonate's condition and the hospital in which they're treated, but in a study including 763,566 commercially insured infants, preterm infants accrued an average of $76,153 in medical expenditures in the first 6 months of life (Beam et al., 2020). For infants born at 24 weeks gestation, the average cost was $603,778. Many of these infants require additional medical care, developmental therapies, and/or special education beyond their first 6 months of life, accumulating more costs. Reactive care, such NICU treatment, is both costly and burdensome on the healthcare system. While there are some congenital conditions which cannot be prevented and inherently require lifesaving treatment, many other conditions are affected by maternal health before and during pregnancy. Even for the neonates whose congenital conditions will necessitate NICU treatment, identification of these conditions early in the pregnancy at prenatal care appointments can

produce the best health outcomes for the infant and mother. By addressing the barriers that restrict Black women from receiving primary and prenatal care, proactive measures and quality care can improve the health of families and communities and reduce overall maternal-infant healthcare costs.

Adequate primary and antenatal care can prevent women and infants from developing many conditions that require costly and risky invasive treatment. For example, several of the conditions that predispose a woman to delivering a preterm baby, including hypertension, diabetes mellitus, sexually transmitted diseases, and drug or alcohol use, can be prevented or treated with primary care (Stanford Children's Health, n.d.). Early initiation of consistent, thorough antenatal care is associated with lower rates of maternal and infant morbidity, including preterm delivery (Deshpande, et al., 2020). Several factors influence the effectiveness of antenatal care, including time of initiation, frequency of visits, healthcare provider type, continuity of care, quality of care, and patient education topics. According to the perinatal care guidelines published by the American College of Obstetricians and Gynecologists and the American Academy of Pediatrics, a woman with an uncomplicated pregnancy should attend an antenatal care visit every 4 weeks in the first 28 weeks of gestation, every 2 weeks until 36 weeks' gestation, and weekly thereafter (2017). In 2020, 77.7% of American women received antenatal care in the first trimester, and 6.2% of women did not receive prenatal care until the third trimester or received no prenatal care; thus, a significant portion of the American population is not meeting the benchmark for antenatal care initiation (Osterman, et al., 2022). Looking closer demographic differences, 68.4% of Black women received antenatal care in the first trimester compared to 82.8% of white women, and 8.2% Black women received late or no

prenatal care compared to 4.5% of white women, revealing a greater deficit for Black women (Osterman et al., 2022). Since adequate prenatal care is associated with improved birth outcomes, this deficit may contribute to the disparities in birth outcomes for Black women and infants.

In the United States, perinatal care is largely physician-led, while most countries rely on midwifery-led pregnancy and birth care. Physicians across the US offer quality obstetric care and are skilled in caring for patients with high-risk pregnancies, but incorporating midwifery as a healthcare option could benefit patients whose needs are not being met by the country's current obstetric care model. Midwives offer quality, cost-effective primary care and perinatal care that has historically assisted underserved populations, including women of color and uninsured patients (DeClerq, et al., 2001). They emphasize the importance of preventative care rather than reactionary care that requires costly, invasive medical interventions. When most Americans hear the word "midwife," they do not think of a clinical professional with years of training; rather, they may imagine an old woman in the 1800s, delivering a baby in a farmhouse. The perception of midwives as unintelligent and dirty was intentionally engrained in the minds of Americans in the late 19th century with the rise of physician-led obstetric care (Bonaparte, 2014). For centuries, midwifery care flourished in the United States, especially with Black midwives—often called Granny midwives—who attended the births of both Black and white infants in southeastern states. These women trained with experienced midwives as apprentices and eventually became experts at their trade. They gathered knowledge of helpful herbs, positioning techniques, non-pharmacological pain-relief and anxiety-relief methods for childbirth. Granny midwives were respected in their communities and provided personalized childbirth care. However, as

obstetricians grew in number and political power, they sought to absorb the midwives' patient population. This led to a racist and sexist initiative to regulate and restrict midwife care under the veil of an effort to improve infant mortality rates in the region (Craven & Glatzel, 2010). Sanitary codes and re-education sessions portrayed Granny midwives as unintelligent, unclean, and unscientific, while white, male physicians were viewed as superior, wielding political and financial power over the midwives. Midwives' bags were inspected for "unfit" tools and herbs, and many older Black midwives were no longer permitted to practice (Bonaparte, 2014). By the early 20th century, the number of midwives, and especially Black midwives, had plummeted and been replaced with physicians. Through this evolution, Black women lost access to trusted healthcare providers with whom they had developed close relationships. The cost associated with this loss was both fiscal and societal, impacting the health of Black families.

Midwifery in the United States is resurging as more women seek a personal, less medicalized approach to pregnancy and birth. The midwifery model of care is based on the belief that pregnancy and birth are natural life processes, rather than disease processes. Midwives provide holistic, woman- and family-centered care with an emphasis on preventative care, relationship-building and education (Association of Women's Health, Obstetric and Neonatal Nurses, 2016). Invasive and technological medical interventions are minimized, but midwives identify patients with high obstetric risk that should be referred to physician-led care. Most midwives attend births in hospitals, but they also attend births in freestanding birth centers and homes and provide care in outpatient medical centers, community centers, and clinics. Several forms of midwifery exist within the US: Certified Nurse Midwives (CNM), Certified Midwives (CM), and Certified Professional Midwives (CPM). CNMs and CMs are independent obstetric,

gynecological, and primary health care providers with specialized graduate degrees in midwifery. They are licensed by the American Midwifery Certification Board. In 2019, 9.9% of US births were attended by a CNM or a CM, a rate which has been increasing in recent years (American College of Nurse Midwives, 2021). As of February 2022, there were 13,524 CNMs and CMs in the United States, with CNMs making up about 95% of this number (American Midwifery Certification Board, 2022). In Kentucky, there are 130 CNMs, but CMs are not permitted to practice. While CNMs practice in all 50 states, only 9 states currently recognize CMs as healthcare providers. CNMs—often referred to as "nurse midwives"—have the most education, greatest scope of practice, and most autonomy of all midwives, including prescriptive authority, as they are board-certified Advanced Practice Registered Nurses (APRN) (American College of Nurse Midwives, 2017). Degrees of autonomy for CNMs vary by state, with some states requiring midwives to practice under collaboration agreements or supervision agreements with physicians. Conversely, CMs are not nurses but still attain graduate education in midwifery. CPMs, who are certified by the North American Registry of Midwives (NARM), have a narrower scope of practice compared to CNMs and CMs and are licensed in 34 states (National Association of Certified Professional Midwives, n.d). CPMs are autonomous health professionals with at least a high school diploma who receive midwifery education through an apprenticeship model and must pass the NARM examination to practice (The Association of Women's Health, Obstetric and Neonatal Nurses, 2016). Despite the rich history of Black midwives, currently most women who are midwives and who use midwives are white, middle-class women. Causes of this phenomenon include restricted insurance coverage for midwives, inadequate integration

of midwives into state healthcare systems, and the silencing of Black midwives in the 19th century which seems to persist today.

Purpose

The purpose of this integrative review is two-part: a) understand the barriers that prevent Black women from receiving adequate obstetric care and b) explore if/how improving access to midwifery care can empower childbearing Black women in their care, which can contribute to improved birth outcomes for Black women and their infants. Major barriers within midwifery that will be discussed include the inadequate Medicaid coverage for midwives in certain states, inadequate integration of midwives into state healthcare systems, and the majority-white midwife demographic. Gaining a more comprehensive understanding of these barriers will create a call to action to address these barriers by implementing policies and programs that improve midwifery access. With improved midwifery access, more Black women can utilize midwifery care.

Method

Between March 2021 and October 2021, searches for peer-reviewed articles in academic journals were conducted using the "academic complete" search function in EBSCOhost database. Search terms included combinations of "midwifery OR midwife OR midwives," "Black OR African American OR African-American," "antenatal," "prenatal," "birth" OR "childbirth," "labor," "delivery," "intrapartum," "postnatal," "postpartum," "maternal mortality," "maternal morbidity," and "birth outcomes." While many articles appearing under these terms were disregarded due to lack of relevance based on the title, approximately 50 abstracts were read. Studies that were chosen for final review met the following inclusion criteria: 1) written in English, 2) published in an academic journal from 2006 to 2021, 3) studied populations in the

United States and/or Canada, and 4) focused on the experiences of Black childbearing women, midwives' impact on birth outcomes or perceptions of obstetric care, and/or disparities between Black and white women and infants. Articles fitting these criteria were read in-depth to ensure their credibility, validity and relevance to the research topic. Sixteen articles were chosen to be included in the integrative review, warranting further analysis. A variety of study designs were included, such as systematic reviews, a literature review, observational quantitative studies, qualitative studies, and descriptive studies. All research was analyzed by an independent reviewer, data was organized into a literature review table, and the following themes were identified: barriers that restrict Black women's access to quality pregnancy and birth care, midwifery-led care resulting in improved or similar maternal and infant outcomes compared to physician-led care, midwives improving autonomy for women, and midwives providing compassionate care in trusting patient relationships.

Literature Review

Article Name	Author (Year Published)	Purpose/Aims	Article Design	Sample Selection Criteria/Description	Data Collection	Results
Alternative prenatal care interventions to alleviate Black-White maternal/infant health disparities	Adams & Thomas (2017)	This article argued that alternative methods of prenatal care, such as midwifery, doulas, and group care, are associated with equal or improved outcomes for Black infants and mothers compared to the medicalized physician-based prenatal model currently prevalent in the United States.	Literature Review	Chosen studies pertained to the history of pregnancy and birth care for Black women, contributors to the high Black maternal mortality rate, and alternative methods of prenatal care for Black women.	The researchers examined several studies that demonstrated the effects of doula, group, and midwifery-led prenatal care on birth outcomes for Black women. Outcomes examined included infant mortality rate, maternal mortality rate, birth satisfaction, cesarean section rate, pain medication use, preterm birth rates, and personal engagement in care.	Black women are underrepresented in the patient population who use midwives. They are also underrepresented in the midwife and doula provider community. Midwives who use holistic care and provide emotional support can achieve equal or better maternal mortality rates in low-risk and moderate-risk mothers while using fewer medical interventions than physicians. Doulas provide birth support, leading to fewer medical interventions, less desire for pain medication and improved birth satisfaction. Group care, in which Black women participate at a greater rate than white women, can improve women's communication and comfort with asking questions about care. These alternative forms of prenatal care could improve the pregnancy and birth experience for Black mothers and increase their satisfaction with their providers. Conducting further research on barriers faced by Black women and implementing these alternative forms of care could help reduce Black-white maternal/infant health disparities.

Racial disparities in maternal mortality	Bridges (2020)	This article aims to explain the causes for racial disparities in maternal mortality in the United States. The author argues that the Preventing Maternal Death Act of 2020 does not effectively address these disparities because it does not address systemic racism's effect on maternal health.	Descriptive Health Policy Analysis	The Preventing Maternal Death Act was analyzed in the context of a broader discussion of structural racism in the United States, which was supported with extensive literature.	N/A	This article rebukes the historical idea that Black people are prone to disease based biological and dispositional factors. Instead, it explains how systemic racism contributes to poor health through chronic stress from discrimination, implicit biases in healthcare settings, generational poverty, food deserts, unhealthy housing environments, limited access and transportation to healthcare settings, and lack of finances to support health promotion behaviors. These factors can contribute to inadequate maternal care and higher rates of chronic diseases such as Diabetes Mellitus, cardiovascular disease and obesity for Black women, which can put women at greater risk for pregnancy complications and maternal death. The author argues that the approach to reducing maternal mortality disparities between white women and women of color must address the multifactorial nature of racism. The effects of poverty on maternal health are especially influential, so improving access to prenatal care for impoverished Black women could greatly improve pregnancy and birth-related outcomes.

Community perceptions of black infant mortality: a qualitative inquiry	Close et al. (2013)	This study aims to explore community perceptions of the high Black infant mortality rate (IMR) in a Glasden County, Florida. This rural county was chosen because, as of 2013, it was the only Floridian county with a predominantly Black population, and its Black IMR was 11 per 1000 births compared to the state's average of	Qualitative	Convenience sampling was used, as flyers were posted at local community centers, churches and groceries. Snowball sampling was also used, as participants were asked to nominate other residents of the county for the focus groups. 64 Black participants volunteered, including 24 males and 40 females. Their ages ranged from 18 to 75. The participants were divided into eight focus groups.	Eight focus groups met for one-hour sessions over six months. Fifteen volunteers from local community agencies received training and conducted conversations, which involved open-ended questions concerning infant mortality. Questions included, "Health researchers that study infant health do not know exactly why Black babies die more often than White babies. What are some of the reasons you think that this happens?" and "What are some of the things that mothers must have or all mothers must do in order to have a healthy pregnancy and healthy baby?" Researchers listened to and transcribed the	The participants reported not knowing about the high Black IMR, but most participants personally knew a mother who had lost an infant or they had delivered a preterm or very low birthweight child themselves. The participants discussed barriers to accessing quality prenatal care, including rushed prenatal visits with long wait times compared to white women, low-quality care for patients on Medicaid, inadequate transportation, mistrust of medical providers rooted in a history of discrimination in the United States, and fear associated with medical visits. These factors contribute to delayed or inconsistent preconception and prenatal care. They identified individual factors that may contribute to the higher Black IMR, including poor preconception physical health and nutrition due to poverty and/or cultural habits, stress, lack of paternal support, and smoking and alcohol use during pregnancy. They suggested that there should be more education in Black communities on how to prevent infant mortality; this could be accomplished through media or education at schools or community centers. One

		6.9 per 1000 births.			focus groups' conversations. This data was then coded with NVIvo qualitative software and refined by the researchers.	emphasis was the need to encourage Black women to routinely attend health check-ups rather than seeking healthcare only when ill. Suggestions for improving trust in medical provider described providers entering the Black communities and explaining their purpose, approaching with the aim to help fulfill needs rather than criticize Black people.
A qualitative examination of factors that influence birthing options for African-American women	Farrish & Robertson (2014)	The purpose of this study was to determine what factors influenced Black women's decisions to have a home birth.	Qualitative	Convenience and snowball sampling was used. Researchers attended a traditional childbearing organizational conference and asked attendees if they would like to participate in the study. These women provided connections that led to more participants.	Interviews were conducted between May and July 2011. Women were asked open-ended questions pertaining to their choice of birthing location. Questions included "How did your culture play a part in the choice?" "Did your economic status play a role in choosing this method?", Did you feel in control during your home birth?", and "Describe the	The three emerging themes from the women's responses for why they chose a home birth were desire for control, avoidance of pharmacological pain relief, and dissatisfaction with the medical aspects of intrapartum care. Women also referenced a desire to connect with their cultural heritage by using indigenous African birthing practices.

				22 Black women who had a home birth agreed to participate in interviews.	relationship between you and your midwife."	
Racial disparities in birth care: Exploring the perceived role of African American women providing midwifery care and birth support in the United States	Guerra-Reyes & Hamilton (2016)	This article aims to address the gap in literature pertaining to Black women providing and receiving midwifery care. The study explored the community of Black midwives and their clients that is connected via the internet.	Internet-mediated Qualitative	Researchers identified websites where maternal care providers or Black clients shared information or stories. Inclusion criteria for websites included a public site, management by a Black individual or group, and writing on the site by a midwife or doula. These websites centered on offering birthing services and/or advocacy. 28 websites were included in the study. Race and job role was self-identified.	Online narratives by Black midwives and doulas were reviewed. These narratives were captured via screenshot, then uploaded to an online data analysis program called Dedoose. Themes were derived from the data in an inductive manner.	Themes arising from the information included connection to the Black history of midwives in the United States or African ancestors, midwifery as a calling and legacy for Black women, midwives having a dual role of activism/advocacy in addition to birth care, promoting maternal autonomy and birth options, and promoting midwifery as a career path for minority women.

The characteristics of compassionate care during childbirth according to midwives: a qualitative descriptive inquiry	Krausé et al. (2020)	This study aims to identify what midwives consider to be compassionate childbirth care, suggesting standards for quality midwifery care.	Qualitative	Midwives were recruited via snowball sampling on Facebook. The researchers searched Facebook for any midwife pages and groups using the words "midwife" and "childbirth." They posted a notification about the study on 86 pages and groups. 98 responses from midwives were accrued.	The electronic survey was self-administered by midwives and was anonymous. The survey asked for demographic data, such as where the midwife worked, along with open-ended questions asking participants to describe experiences of compassionate childbirth care and list words associated with compassionate maternity care. Responses were coded and analyzed according to Tesch's eight steps to identify themes.	The following themes were identified: making meaningful connections with women, initiating individualized understanding of every woman, and action through care and support. The midwives emphasized the importance of positive interpersonal communication, establishing trust with their patients, prioritizing maternal decision-making, showing empathy, emotional support, continual education, and respect for patients.
Reduced prevalence of small-for gestational-age and preterm birth for women of low	McRae et al. (2018)	This study investigated whether midwifery-led antenatal care was associated	Observational Retrospective Cohort Quantitative	The study included 57,872 pregnant women. Providers' billing records were examined to determine which practitioners the	Outcome data was obtained from the British Colombia Perinatal Data Registry, which compiled hospital and home birth records as	For women of low socioeconomic status who had low to moderate pregnancy/birth risk, using a midwife (MW) for antenatal care was associated with lower rates of SGA (4.83% for MW, 7.06% for GP, 8.59% for OB), PTB (4.4% for MW, 6.32% for GP, 8.69% for OB), and LBW

socioeconomic position: a population-based cohort study comparing antenatal midwifery and physician models of care		with lower rates of small-for-gestational-age (SGA), preterm (PTB), or low birth weight (LBW) neonates, compared with general practitioner (GP) or obstetrician (OB) led care, for women of low socioeconomic status,		women utilized. 4705 women used a midwife, 45114 used a GP, and 8053 used an OB as their primary antenatal provider. To be included, participants met the following criteria: residents of British Colombia, singleton fetus, low or moderate perinatal risk, antenatal care with an OB, GP or midwife, delivery between January 2005 and December 2012, and received medical insurance premium assistance. Citizens were eligible for this insurance if their annual income was less than ~$30000 for a family of	well as data concerning diseases from the Canadian Institutes of Health Information Discharge Abstract Database.	(1.93% for MW, 3.19% for GP, 4.88% for OB) neonates compared to using a general practitioner or obstetrician for antenatal care. While all the women were of low income, patients using midwifery were more likely to live in wealthier towns or neighborhoods compared to patients using GPs or OBs, revealing how accessibility to midwives is greater in wealthy, urban areas. Unlike GPs and OBs, midwives are not eligible for financial incentives to practice in rural, remote areas in the District of Colombia, which may contribute to lower midwife availability in those areas.

				three. Patients who had high perinatal risk, received routine care from two or more types of providers, or were registered as Status Indian were excluded from the study.		
"We wanted a birth experience, not a medical experience": Exploring Canadian women's use of midwifery	Parry (2008)	Parry examines Canadian women's reported birth experiences to determine why they chose midwifery.	Qualitative	The study recruited Canadian women who had utilized or were utilizing midwifery care. They were recruited through convenience sampling—via posting advertisements at a midwifery clinic in Ontario, Canada and at a prenatal workshop—and snowball sampling. Eight women agreed to participate in the study. Four of the women were nulliparous and four	Parry conducted interviews with the eight white women, seven of which were pregnant and one of which had recently given birth. Each interview began with Parry asking the participant to discuss her experiences with pregnancy, and the discussion unfolded in a conversational nature. The interviews lasted between 1-2.5 hours.	All the participants expressed resistance to the pervasive medicalized model of pregnancy and birth, so they sought midwifery care as an alternative with unique benefits. Parry identified eight themes from the women's responses: (1) a natural approach to pregnancy/childbirth, (2) continuity of care, (3) woman-centered care, (4) informed choice/shared decision making, (5) emotional care, (6) professional ability, (7) family- friendly policies and practices, and (8) personal control.

				were multiparous. All of the women had received post-secondary education and were in committed relationships with men.		
Midwifery and quality care: findings from a new evidence-informed framework for maternal and newborn care	Renfrew et al. (2014)	This study examined midwifery's contribution to global maternal and infant health to identify methods that could improve maternal and neonatal healthcare.	Mixed-Methods, Synthesis of Systematic Reviews	N/A	The study involved three forms of review. Review 1 involved meta-syntheses of 229 qualitative studies on women's experiences with maternal and newborn care. Review 2 was an analysis of 461 systematic reviews on practices for quality maternal and newborn care. Review 3 included 7 reviews of randomized controlled trials that examined how midwifery interventions affected maternal and infant outcomes. Three case	Midwifery care by educated, licensed, regulated midwives was associated with improved outcomes and efficient use of resources, especially when they were well-integrated into the healthcare system. In Review 1, women reported that they could be empowered by education and gain an understanding of how the healthcare system is organized. In addition to exhibiting clinical competence, providers should provide respectful, personalized care to build trusting relationships with patients. Review 2 identified maternal and infant care practices that fell within the scope of midwifery and found that 56 outcomes were improved by these practices. Review 3 identified studies in which midwifery care was associated with fewer invasive medical procedures, such

					studies of India, China and Brazil were also included due to their high birth rates.	as cesarean birth, instrumental birth and episiotomies, and improved outcomes such as reduced rates of maternal infection, postpartum hemorrhage, perineal trauma, preterm birth, small for gestational age infants, low birth weight infants, maternal mortality, and perinatal, neonatal and infant mortality compared to obstetrician-led care. Midwifery care was also associated with improved rates of satisfaction with the birth experience and improved breastfeeding rates.
The Impact of Racism and Midwifery's Lack of Racial Diversity: A Literature Review	Serbin & Donnelly (2016)	The authors aim to address whether greater diversity in the medical field could improve pregnancy and birth outcomes for women of color. They investigate the presence	Systematic Review	Inclusion criteria included studies that exhibited the following characteristics: 1) racially concordant or racially discordant maternity care provided, at least in part, by midwives; 2) women of color's experience of race and discrimination in maternity care provided, at least in part, by midwives;	The seven studies were grouped based on whether they addressed patient or provider experiences. They were analyzed by two independent reviewers who recognized key conclusions.	All the studies suggested that diversifying the midwifery field could improve the care experience for women of color. Midwives of color are likely to have a greater understanding of the discrimination and stress that patients experience as women of color, so they are uniquely positioned to provide high-quality care for women of color. While concern about the lack of diversity in the midwife community exists, structures and processes to address this concern are lacking.

		of midwives of color and racism within the field of midwifery. Unnecessary use of medical interventions and racial disparities for maternal outcomes are identified as the major problems within American obstetric care.		and 3) midwives of color's experience of race and discrimination in clinical, educational, and/or professional settings. Exclusion criteria included studies conducted outside the United States, a focus on recent immigrant populations, and non-English abstract. 7 qualitative studies were chosen. 3 centered on the experience of the patient and 4 were about the experience of providers of pregnancy and birth care. Five of the studies focused on Black women.		
Understanding low-income African American	Tucker Edmonds, et al. (2015)	These researchers conducted interviews in	Qualitative	"Family advocates" recruited women from the MMC (Maternity Care	Five two-hour interviews were conducted in focus groups. Prompts	Family and friends' encouragement was the most common primary motivator for attending prenatal care visits, followed by concern for the baby's wellbeing. The

women's expectations, preferences, and priorities in prenatal care		a community setting to determine what motivators and barriers Black women experienced when considering prenatal care. They also asked the women what they valued in prenatal care. Their goal was to identify these factors so the healthcare system can encourage prenatal care, remove barriers to prenatal care, and improve the prenatal		Coalition) in Philadelphia, at five of their locations. The 22 participants were low-income Black women who engaged with the MMC. Most of the women used Medicaid and the Special Supplemental Nutrition for Women, Infants and Children (WIC) and/or food stamp programs. The average age of the women was 25.	included, "What motivates you to attend prenatal care?", "Write down 3 things that made it hard for you to attend your prenatal care visits," and "Create the perfect prenatal care system," in which participants were asked what they would like to keep and change about their prenatal care. The discussions were recorded, transcribed, and analyzed.	biggest barriers reported were insurance issues (difficulty navigating the Medicaid system), lack of transportation, ambivalence due to unintended pregnancy, lack of support, fear or worry, and long wait times. When they were asked to describe the "perfect prenatal care system," they overwhelmingly reported wanting improved relationships with their providers, citing experiences where there was a lack of a personal relationship with their physician and discontinuity of care. 12 participants cited liking the midwifery care model, as it empowered them and encouraged them to participate in their care.

		care experience for women.				
Mapping integration of midwives across the United States: impact on access, equity and outcomes	Vedam et al. (2018)	Researchers analyzed all 50 US states to rank them based on how well midwifery was integrated into their state's healthcare system. Higher levels of integration were expected to facilitate improved collaboration between healthcare providers and consequently better	Descriptive	N/A	The researchers created the Midwifery Integration Scoring System (MISS) to rank the states, including factors such as midwife scope of practice, provider autonomy, prescriptive authority, availability of Medicaid reimbursement, restrictions to certain practice settings, and presence of quality improvement systems that operated in hospitals, birth centers and home health. Higher MISS scores indicated more midwife integration in that state.	High MISS scores were correlated with higher rates of spontaneous vaginal births, vaginal births after cesarean section (VBAC), and breastfeeding along with lower rates of medical interventions during birth, preterm births, infant mortality, and low birth rate infants. In states with higher rates of Black births, MISS scores were significantly lower and there was limited access to midwives.

		maternal health outcomes.				
Racial and ethnic disparities in severe maternal morbidity: A qualitative study of women's experiences in peripartum care	Wang et al. (2020)	This study aimed to give a voice to women who had experienced a severe maternal morbidity event during childbirth in a hospital. Events included ICU admission, emergency hysterectomy, eclampsia and blood transfusion. The study compared Black and	Qualitative	Purposive convenience sampling was used. The researchers utilized the medical database at a large academic medical center in New York City to identify women who had experienced severe maternal morbidity events. They reached out to these women via telephone and letters. Flyers were also posted at community centers and clinics for pregnant and postpartum women. 22 women met in focus groups stratified based on	Moderators of focus groups asked open-ended questions to encourage discussions about the participants' pregnancy and intrapartum experiences. The moderator for the Black and Latina groups identified as a woman of color. Discussions were taped and transcribed verbatim, and additional researchers recorded notes on body language, facial expressions, and group dynamics.	Many women expressed gratefulness for the life-saving care that they received in the hospitals, but they also expressed poor continuity of care, communication issues, lack of autonomy, and unmet emotional and physical needs in the hospital. Black and Latina women described more of these issues compared to the third focus group, especially pertaining to continuity of care, miscommunication, and long wait times for short clinical encounters.

		Latina women's responses with white women's responses because women of color experience maternal morbidity events at disproportionately high rates.		self-identified race. The three groups were Black, Latina, and white/Asian/other.		
Birth Outcomes of Women Using a Midwife versus Women Using a Physician for Prenatal Care	Weisband et al (2018)	This article examines clinical nurse midwifery care compared to physician care for low-risk nulliparous	Retrospective Observational Quantitative	The study included women who gave birth at the Ohio State University Wexner Medical Center (OSUWMC) between January 2012 and December 2019 who attended at least one prenatal care visit with a	The following medical interventions were analyzed: labor induction, labor augmentation, episiotomy, and epidural analgesia. The following outcomes were analyzed: cesarean birth, third-	Midwives at OSUWMC practice separately from physicians with complete autonomy; patients are transferred to physicians if cesarean section or other advanced medical interventions are deemed necessary. The study revealed that patients receiving midwifery care experienced lower rates of all medical interventions. The most significant maternal-related differences were labor induction (25.1% for

		women, aiming to identify differences in medical interventions and outcomes.		midwife or physician at OSUWMC before 20 weeks gestation. Inclusion criteria: nulliparous, singleton pregnancy, low-risk pregnancy. Women were excluded from the study if they did not meet criteria for a low-risk pregnancy according to OSCUMC midwives' clinical guidelines on indications for required transfers of care. These guidelines excluded women with an active seizure disorder, active tuberculosis, acute hepatitis, advanced syphilis, cardiac disease, HIV infection, hydatidiform mole, indication of cocaine or unprescribed	and fourth-degree perineal lacerations, postpartum hemorrhage, shoulder dystocia, severe maternal morbidity, preterm birth, stillbirth or neonatal death, 5-minute Apgar <7, and admission level to level 3 or 4 NICU.	midwives, 36% for physicians), epidural analgesia (49.9% for midwives, 69.8% for physicians), and episiotomy (2.2% for midwives, 4.8% for physicians). Midwife care had a slightly higher rate of postpartum hemorrhage (0.8% compared to 0.3% for physicians) and shoulder dystocia (1.8% compared to 1.2% for physicians), likely due to higher rates of vaginal births. However, physician care had higher rates of severe maternal morbidity (0% for midwives, 0.2% for physicians), which was defined as experiencing one of the following issues: acute renal failure, liver failure, respiratory failure, obstetric shock, cerebrovascular accident, pulmonary embolism, amniotic fluid embolism, eclampsia, septicemia, complications of anesthesia, or a cardiac event, and their length of stay for birth was more than 72 hours. All neonatal outcomes were better for midwives, with preterm birth the most significant (5.3% for midwives, 11.4% for physicians). This article reveals how midwifery care can produce safe outcomes for low-risk women while drastically reducing medical intervention. It also provides a reminder that midwives' higher rate of vaginal births involves the risks of postpartum hemorrhage and

				opiates and benzodiazepines use, systemic lupus erythematosus, pre-existing diabetes, previous vertical uterine incision, renal disease, sickle-cell disease, status asthmaticus, and treatment with methadone or buprenorphine/naloxone (Suboxone). Thus, 1266 women were excluded from the study based on these criteria. 8779 women fit all the inclusion criteria and were included in the analysis. Of all the participants, 8.2%, or 721 women, saw a midwife and 91.8%, or 8058 women, saw a physician. Black women and women using Medicaid were		shoulder dystocia, so prevention measures for those complications should be reinforced.

				more likely to be seeing a physician than a midwife. Women who had a previous pregnancy complication or previous cesarean section were also slightly more likely to use a physician.		
Midwifery and Antenatal Care for Black Women: A Narrative Review	Yoder & Harvey (2018)	This study examines how the current literature addresses Black women's experiences with prenatal care, especially that led by midwives. The researchers aim to understand	Systematic Review	To be included in the systematic review, studies met the following criteria: (a) published between 2006 and 2017, (b) conducted in the United States, (c) included a minimum of 13% participation by Black women, and (d) addressed antenatal care. Studies involving Black immigrant participants were excluded.	The studies were analyzed to identify themes.	The following themes were identified: (1) care disparities that affect quality and frequency of antenatal care for Black women, including subthemes (a) discrimination and (b) other influences; (2) Black women's perceptions and preferences related to their antenatal care; and (3) midwifery-led care for Black women. The studies report that Black women understand the importance of prenatal care, but barriers such as lack of transportation, inaccessibility to clinics, mistrust of medical providers, unintended pregnancies, and discrimination within clinics. Many studies suggest midwife care as a potential option for improving Black antenatal care by reducing medical costs and improving access in community settings. In addition, midwives focus on

		why Black women receive lower rates of prenatal care compared to white women.		16 articles were chosen for the systematic review. 8 were quantitative and 8 were qualitative. 4 of the studies addressed midwives' role in prenatal care.		health promotion and development of close relationships with their patients, which may reduce stress and discrimination and improve education effectiveness, maternal health behaviors, and patient autonomy. The researchers identify a gap in literature regarding Black women's perception of midwifery care.

Discussion

Barriers to Accessing Quality Care

Seven of the studies included in the integrative review discussed the barriers that prevent Black women from receiving access to quality obstetric care. Several of the studies suggest that midwifery care has a unique potential to help dismantle these barriers. However, barriers specifically within midwifery, including lack of racial diversity among midwives, must be addressed to enable the midwifery profession to improve access to quality care for Black women.

Barriers Related to Access

Yoder & Harvey (2018) conducted a systematic review of 16 studies on antenatal care for Black women, seven of which addressed midwifery care. Qualitative studies conducted by Close (2013), Tucker Edmonds (2015) and Wang (2021) engaged Black women in discussions related to their obstetric care experiences and/or their perceptions of factors that affect Black women's access to quality obstetric care. Black women described long wait times for short and/or impersonal clinical encounters, which inhibits relationship-building between the patient and provider and discourages women from attending prenatal and postnatal care visits (Close, et al., 2013; Tucker Edmonds, et al., 2015; Wang, et al., 2021; Yoder & Harvey, 2018). Some Black women expressed feeling like they were forced to wait longer for their visits than white women (Close, et al., 2013; Yoder & Harvey, 2018). Lack of transportation due to financial inability to purchase a car or impractical bus schedules also made it difficult for Black women to attend appointments and added to the frustration of delays (Close, et al., 2013; Tucker Edmonds, 2018; Yoder & Harvey, 2018). One Black woman illustrated these barriers as she reported, "You know sometimes we go to the health department, and we have to sit and wait so long. Sometimes we

go down there, and we don't even have to wait that long at all before they send us back [out] and we have to come another day. We don't have transportation to get there, so we can't go back the next day, this discourages you. Make you don't want to go back, so you sit up another two or three months before you go back again" (Close et al., 2013). This testimony demonstrates how forcing women to wait hours for appointments communicates to them that healthcare providers do not respect their time, which impairs the patient-provider relationship before the clinical encounter even begins. This is especially frustrating when their long wait time results in a low-quality, rushed clinical encounter. Midwives address some of these access barriers by practicing in a variety of locations—including clinics, homes, and hospitals—and scheduling long appointment times; these factors will be discussed in more depth in the *Care for the Whole Patient* theme.

Barriers Related to Trust and Relationships

Another barrier noted in four studies was Black women's poor relationships with obstetric providers, which contributes to patient mistrust and discourages them from attending obstetric care visits (Close, et al., 2013; Tucker Edmonds, et al., 2015; Yoder & Harvey, 2018; Wang, et al., 2021). When providers build trusting, caring relationships, and care is individualized, they promote transparency between themselves and the patient, encourage the creation of a care plan that fits the patient's needs and desires, and allows thorough education and dialogue on the patient's condition and treatment options. Many white women already experience provider relationships that do not meet this ideal, but Black women report more instances of relationships where they do not feel respected by their provider (Wang, et al., 2021). Due to a history of Black Americans being mistreated within healthcare and obstetric research,

Black women are predisposed to distrusting their providers. Black women in Yoder & Harvey's study (2018) described the discrimination they experienced within antenatal clinics, as providers' behaviors suggested that they held negative racial stereotypes. Black patients described providers who spoke to them in a condescending manner, expected that they used illicit drugs, and expressed surprise at their intelligence or industriousness. Participants in Tucker Edmonds' study (2015) felt a lack of respect or compassion from their providers, which discourages women from seeking care. One participant described how Black women would be more willing to attend visits with a respectful provider: "Respect, you know, make her feel like she's just, like you're a team . . . as opposed to—I'm going to go and be berated by a doctor today about not taking my prenatal vitamins or whatever the case is, you know? If they feel like both of us are working for the same goal, I think people would be more willing to come" (Tucker Edmonds, 2015).

Black women across all four studies reported instances where they did not receive clear communication about their plans of care, felt their voices were not heard in the decision-making process—depriving them of autonomy—or did not receive adequate education on pregnancy and birth complications or the importance of preventative and prenatal care (Close, et al., 2013; Tucker Edmonds, et al., 2015; Wang, et al., 2021; Yoder & Harvey, 2018). In Wang et al.'s study (2021), Black and Latina women described more instances of poor continuity of care, lack of respect from providers, long wait times for short clinical encounters, and miscommunication with patients or between members of the healthcare team compared to white and Asian patients. For instance, one participant in the Black women's focus group was not informed about why she was being given a cesarean section; she recalled, "They were like 'no you need a C-section,' so I'm asking them, 'why do I need a C-section,' and they're like 'don't worry about it'" (Wang et

al., 2021). The Black women in this focus group did not feel as though they were explicitly discriminated against based on their race; however, the gaps in care that they experienced may reflect providers' implicit biases, the lack of representation of Black providers in obstetrics, or institutionalized racism in the medical system (Bridges, 2020). In Tucker Edmonds et al.'s (2015) study, Black mothers said their fear and worry about the pregnancy and low feelings of self-worth resulted in avoidance of antenatal care, as antenatal appointments only further contributed to their anxiety. Midwifery offers a solution, as midwives' personalized, compassionate approach brings empathy into antenatal care, creating antenatal care that improves mothers' confidence about their pregnancy and birth. Tucker Edmonds et al. (2015) and Yoder & Harvey (2018) explain that midwifery's focus on patient-centered care and developing strong patient-provider relationships can improve Black women's pregnancy and birth experiences, overcoming the present barrier of impaired relationships. This argument will be analyzed in more depth in the *Compassionate Patient-Midwife Relationships* theme.

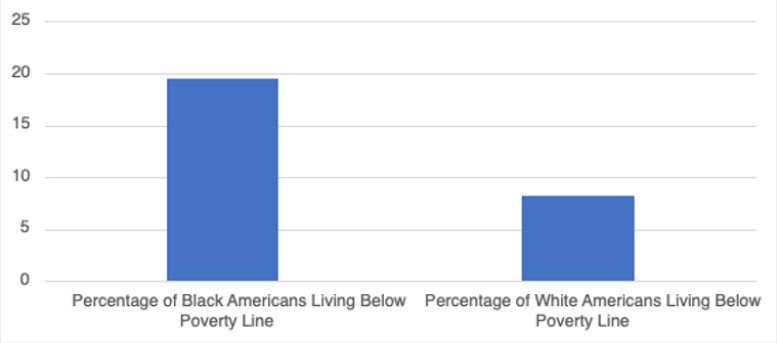
Barriers Related to Poverty and Insurance

Lack of insurance or economic issues were cited as the primary barriers to prenatal care in Tucker Edmonds' (2015) focus groups. Additionally, Yoder & Harvey (2018) examined a population case control study involving 59 hospitals which found that Black women were more likely than white women to experience financial, emotional, and partner-related stressors, which put them at greater risk for stillbirths. Poverty is a challenge experienced by a greater proportion of Black childbearing women compared to white childbearing women. The US Census Bureau determines poverty level based on family size and income, which includes earnings, social security, unemployment compensation, child support, pensions, veterans' payments, and many

other income sources. Based on 2020 data, the Census Bureau reported that 19.5% of Black Americans lived in poverty, compared to 8.2% of non-Hispanic white Americans, and the median household income was $74,912 for white Americans compared to $46,000 for Black Americans (Shrider, et al., 2020). This disparity is reflected in Figure 3 below. Many studies describe how poverty is linked to poor health outcomes. Impoverished patients may experience poor nutrition and live in unhealthy environments without access to exercise equipment or a safe space to exercise. They may also have low healthcare literacy, lack access to online healthcare resources, lack reliable transportation, lack primary care, or be unable to pay for prescription or treatment copays (Bridges, 2020). These factors contribute to Black women entering pregnancy with pre-existing conditions such as diabetes mellitus, hypertension, and obesity, which predispose them to pregnancy and birth complications. When healthcare providers partner with women to connect them with resources and create realistic health behavior modification plans during the preconception and prenatal period, women can manage or prevent these conditions and increase their likelihood for a healthy pregnancy and birth. Midwives' emphasis on preventative care provides opportunities to assist this population.

Figure 3

Poverty Rate for White and Black Americans, 2020



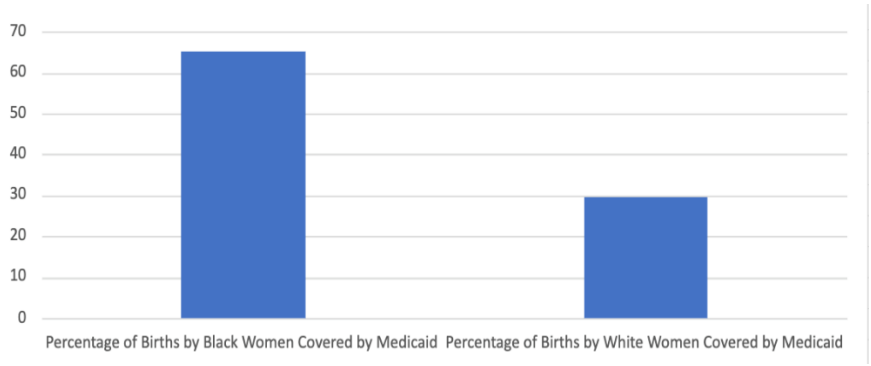
Note. The poverty rate for Black Americans greatly exceeds the poverty rate for white Americans. Poverty is associated with poor health outcomes.

Medicaid qualification is based upon household income compared to the federal poverty level, family size, and presence of certain disabilities or chronic conditions. For a family of four, the established 2022 federal poverty level is a household income of $27,750 ("Federal Poverty Level," 2022). Medicaid eligibility varies by state, but in Kentucky, a pregnant woman or an infant qualifies if their household income is up to 195% of the federal poverty level (Norris, 2021). Parents and other adults qualify if their household income is up to 138% of the federal poverty level. The enhanced eligibility for pregnant women encourages antenatal care usage, but the lower rate for non-pregnant adults disregards the importance of primary care. For instance, a woman living at 150% of the federal poverty level may be unable to afford primary care, but after becoming pregnant, she will be eligible for Medicaid to cover her antenatal care. Her lack of primary care places her at increased risk for entering pregnancy with untreated chronic conditions, which could cause pregnancy complications. There are many Americans who are denied or granted inadequate insurance through their employers and cannot afford private insurance, yet they earn an income too high to be eligible for Medicaid. These Americans may struggle to pay for healthcare and other basic needs. For those with a low enough income to

qualify, many find it difficult to navigate the Medicaid system. In 2019, 32.9% of Black Americans used Medicaid insurance compared to 15.1% of white Americans, so Black patients are more likely to encounter this challenge (Kaiser Family Foundation, 2019). The racial difference in insurance coverage is even greater when it comes to coverage for births. In 2019, 65.1% of births by Black mothers were covered primarily by Medicaid, compared to 29.4% of births by white mothers (Martin et al., 2020). This difference is illustrated below in Figure 4. Providers are often less willing to accept new Medicaid patients because they are reimbursed at lower rates compared to private insurance, and processing Medicaid insurance places a greater administrative burden on healthcare offices. A meta-analysis involving audits of 34 healthcare facilities discovered that Medicaid patients experience a 1.6-lower likelihood of successfully scheduling a primary care appointment and a 3.3-lower likelihood of successfully scheduling a specialty appointment, compared to patients with private insurance (Hsiang, et al., 2019). In Close's (2013) interviews, many Black participants who used Medicaid reported feeling like they received lower-quality care than patients with private insurance. Regardless of whether this gap is real or perceived, the perception can lead to a lack of patient investment in the care process.

Figure 4

Percentages of Births to Black and White Mothers Covered by Medicaid, 2019



Note. Compared to white women, Black women are more likely to use Medicaid to cover childbirth costs.

It can be difficult to differentiate which gaps in care arise from poverty- or insurance-related factors and which arise directly due to race; often, the two factors are intertwined. For instance, 75% of Black and Latina patients in Wang et al.'s (2021) study used Medicaid insurance, while all the white or Asian women used private or commercial insurance. The study could not discern whether this group's poor continuity of care was related to their race or the confounding factor of insurance status. Healthcare organizations should recognize this correlation between racial minorities and lower socioeconomic status, so that they assess financial barriers that may be impairing Black patients' health and ability to comply with care. However, Black women and infants still experience higher levels of morbidity and mortality compared to white women and infants even when controlling income level (Bridges, 2020). For example, a Black middle-class woman is more likely to die during childbirth than a white middle-class woman. Thus, poverty is not the only cause of racial disparities, and other factors such as chronic stress, structural racism with the healthcare system, implicit biases among healthcare workers, and underrepresentation of Black leaders in healthcare should be considered (Bridges, 2020).

While midwifery has roots in the Granny Midwife history, most midwives today are highly educated white women with advanced practice nursing degrees. Many of these midwives practice in settings that are part of a traditional medical practice but offer a more intimate patient experience. This often caters to women who are highly educated, privately insured healthcare consumers, which results in fewer Black women experiencing the advantages of midwife care. Financial factors sometimes deter low-income patients from using midwifery, as only fourteen states' Medicaid programs cover certified professional midwives (CPM) services (National Association of Certified Professional Midwives, n.d.). Medicaid coverage for certified nurse midwives (CNM) is comprehensive throughout all states, but some states reimburse CNMs at lower rates than physicians. State Medicaid reimbursement for CNMs ranges from 75% to 100% of physician rates for the same services (American College of Nurse Midwives, 2013). While established reimbursement rates are usually sufficient to cover CNM costs because midwifery-led care typically costs less than physician-led care, lower midwife reimbursement rates limit the proliferation of midwifery practices as healthcare systems seek short-term cost savings from obstetricians' higher reimbursement rates. Overall, midwifery is more cost-effective than physician-led obstetric care, as midwifery care promotes using fewer pharmacological and invasive medical interventions compared to physician-led obstetric care and may be practiced at alternative locations such as clinics, birth centers or homes rather than solely the hospital (Vedam et al., 2018). Additionally, midwives typically do not care for high-obstetric risk patients whose care inherently accrues more costs. However, in cases where midwifery care costs exceed the Medicaid reimbursement rate, healthcare systems are required to cover the

remaining bill, which discourages hospitals and clinics from incorporating midwives into their practice.

Barriers Related to Midwife Integration into Healthcare Systems

Using regulatory data from a 50-state database to create a Midwifery Integration Scoring System, Vedam et al. (2018) found that states with higher rates of Black births were the states with the poorest integration of midwives into their healthcare systems, the lowest densities of midwives, and the least access to midwives across multiple settings. Therefore, in the states with the highest percentages of Black women, the greatest barriers to midwifery exist. These states include Alabama, Georgia, Louisiana, Mississippi, North Carolina, and South Carolina. This low midwife integration and access is associated with poor outcomes related to birth, neonatal health and breastfeeding, which will be analyzed in the theme *Outcomes for Midwifery Care.* New York state is one exception to the trend of Black births and poor midwife integration; this state is in the study's highest category for Black birth rate, but they are also in the highest quartile for midwife integration (Vedam et al., 2018). The study urges states to improve their midwife integration, stating, "Our results align with this evidence suggesting that increased reliance on midwives could reduce the costly overuse of obstetric interventions, reduce rates of preterm birth and neonatal loss, and improve breastfeeding and vaginal birth rates, thereby helping to address serious maternal-newborn health deficits in the United States" (Vedam et al., 2018). The *Implications for the Future of Care* section explores legislative and regulatory changes that could improve midwifery access and integration in state healthcare systems.

Barriers Related to Underrepresentation of Black Obstetric Providers

Black providers are underrepresented in all forms of obstetrics. They would need to account for 13.4% of obstetric providers to match the United States patient population identifying as Black or African American (US Census Bureau, 2021). However, the obstetric physician specialty actually has better racial representation compared to other medical specialties, with around 11% of American OBGYNs identifying as Black compared to 5% of all American physicians (Rayburn, 2016; Association of American Medical Colleges, 2018). The midwifery field does not mirror these improved rates. Three studies highlighted the underrepresentation of Black women working as midwives, which may discourage Black women from using midwives (Adams & Thomas, 2017; Guerra Reyes & Hamilton, 2016; Serbin & Donnelly, 2016). According to the American Midwife Certification Board, 85.52% of certified nurse midwives (CNM) and certified midwives (CM) are white, while only 6.85% are Black (2020). White midwives may not understand the stress and sociocultural experiences that Black women face, which limits their connection with Black patients (Serbin & Donnelly, 2016). Serbin & Donnelly's (2016) systematic review included 4 studies on midwives of color. In each of these studies, the midwives explained that their experiences as women of color strengthened their ability to care for women of color. These midwives "possess survival strategies for coping with racism and discrimination, which give them awareness and strength that they are able to share with their patients and students" (Serbin & Donnelly, 2016). Another resounding theme from the systematic review was Black midwives' commitment to providing excellent care to Black women and reducing racial disparities in birth outcomes. In Guerra-Reyes & Hamilton's (2016) qualitative study, a similar dominant theme emerged, as Black midwives served as advocates and activists in addition to obstetric care providers. One website in the study included

the following comment on how midwifery has the potential to reduce birth outcome disparities but was not achieving this potential: "The midwifery model of care is a beautiful model of care. I absolutely do believe that it can be a part of the answer to health disparities, HOWEVER, midwives, and their professional associations, have not made this a priority. With due deference to those who have tried to bridge the disparities gap, neither have they made the healthcare impact they should have made by now, leaving the women who might best benefit from midwifery care with the least access to it" (Guerra-Reyes & Hamilton, 2016). A first step towards achieving this impact involves diversifying the midwifery field.

Racial diversification of any field is a challenging process because it often requires people of color to join an occupation where there are few role models or people in leadership who identify with their race. Thus, organizations must create an inclusive institutional structure that welcomes and supports people of color. The midwifery field needs to create an more inclusive environment, as some midwives of color report discrimination within midwifery educational programs, including overt racism from peers, lack of willing preceptors, and lack of representation of Black faculty members and classmates, which can result in feelings of aloneness (Serbin & Donnelly, 2016). Black midwives suggest that midwifery educational programs could be improved by teaching "culturally inclusive curriculum" that encourages midwifery access for all socioeconomic statuses. Black midwives also described experiences of interpersonal and organizational racism within professional midwifery organizations, which manifests in lack of support for issues considered important to people of color and lack of effort towards diversifying the midwifery field (Serbin & Donnelly, 2016). Guerra-Reyes and Hamilton (2016) demonstrate how a supportive, vibrant community of Black midwives is

connected via the internet, encouraging Black midwives to unite to improve natal care for Black women and families. Similarly, midwifery organizations should provide space for Black midwives to connect and should encourage Black midwives' voices to be heard and incorporated into the organization's decision-making and actions.

On their blogs and websites, the Black midwives in Guerra Reyes & Hamilton's (2016) study describe their efforts to bring community-based midwifery care to Black communities that have been overlooked by the American healthcare system, ultimately with the goal to eliminate racial perinatal disparities. One Black woman announced, "[P]olicy makers, health care providers and community leaders must dig deeper to understand the causes and prevention of these poor outcomes...A grassroots movement is underway where women are speaking out against the lack of access to quality prenatal care providers, overuse of interventions during birth and the impact of little to no postpartum support for families" (Guerra-Reyes & Hamilton, 2016). Many midwives' voices also describe their call to the midwifery profession as a continuation of the birth care tradition that originated with Granny midwives or in Africa. Amplifying these midwives' voices may encourage more Black women to join the midwifery profession, which could improve midwifery care for Black patients.

Outcomes for Midwifery Care

Several studies demonstrate how midwifery care is associated with similar or improved birth outcomes compared to physicians for women with low-risk pregnancies, whilst using fewer medical interventions than physicians (Adams & Thomas, 2017; McRae, et al., 2018; Renfrew, et al., 2014; Vedam, et al., 2018; Weisband et al., 2018). However, the review of the literature

did not discover a study that focused specifically on birth outcomes for midwives with *Black* patients, indicating an opportunity for additional research. This gap in the literature is related to the current underuse of midwives by Black women. Such data will not be available until Black women are offered improved access to midwifery care. The current literature demonstrates the safety and benefits of midwifery use, which may translate to the population of Black women.

Birth Interventions

Compared to obstetrician-led care, midwifery-led care is associated with higher rates of spontaneous vaginal birth and lower rates of invasive medical interventions such as cesarean sections, episiotomies, epidural analgesia, and labor induction (Renfrew et al., 2014; Weisband et al., 2018). For example, of the 8779 women with low-risk pregnancies described in Weisband et al.'s (2018) observational study, 16.3% of patients receiving midwifery-led care received cesarean sections, compared to 30.3% of patients receiving obstetrician-led care. Despite the patient population's low-risk status, this obstetrician rate for cesarean sections is similar to the cesarean section rate of 31.8% of all documented American births in 2020 (Osterman, et al., 2022). Midwifery-led care also has higher vaginal birth after caesarean section (VBAC) rates, reducing repeat cesarean sections (Vedam et al., 2018). Midwives' lower rates of invasive intervention reflects the midwifery model's focus on alternative birth intervention strategies, such as breast stimulation for labor augmentation, antenatal digital perineal massage to prevent perineal trauma, varying positioning techniques, and continuous psychological support during labor. The lower rates of epidural analgesia reveal midwives' use of nonpharmacological pain relief methods, such as massage, reflexology, relaxation techniques, water immersion, attention diversion, and acupressure (Renfrew et al., 2014). During antenatal visits, midwives educate

their patients on the pain-relief and birthing method options available to them and create personalized birth plans to ensure the birth experience fits each patient's unique needs. If a serious complication arises during labor, requiring an intervention such as a cesarean section, midwives who are well-integrated into their state's healthcare system transition care to an obstetric team with whom they have a clinical relationship and remain in communication throughout the care (Vedam et al., 2018). A mother who experienced a complication requiring an obstetric intervention may need to be seen by an obstetrician for follow-up, but her original midwife resumes general postnatal care.

Birth Outcomes

Available research reveals that midwives' lower use of invasive medical interventions does not compromise maternal and infant outcomes and is even associated with improvements in certain outcomes, establishing midwifery care as a safe alternative to obstetric care for women of low to moderate obstetric risk. Use of midwifery-led antenatal or natal care is associated with lower rates of preterm birth, low birth weight (LBW) infants, small for gestational age (SGA) infants, and neonatal mortality compared to physician-led care (McRae et al., 2018; Renfrew et al., 2014; Vedam et al., 2018; Weisband, et al., 2018). These improved neonatal outcomes may be related to midwives' emphasis on allowing mothers to reach 40 weeks' gestation. When reaching full-term gestation is not expected to compromise maternal or fetal health, midwives typically do not schedule early cesarean sections or labor inductions. Midwives also provide thorough education and support for healthy lifestyle changes during pregnancy, promoting adequate nutrition, appropriate weight gain, physical activity, and smoking, alcohol, and drug cessation. When comparing physician-led and midwife-led care for low-risk pregnancies,

midwifery care was also associated with fewer or equal severe maternal morbidity events, highlighting the safety of midwifery care for mothers in addition to infants (McRae, et al., 2018; Renfrew et al., 2018; Weisband et al., 2018).

Areas for Improvement in Midwifery Outcomes

Despite most evidence supporting the safety of midwifery, one study did discover an association between midwifery-led care and higher rates of postpartum hemorrhage and shoulder dystocia, both of which reflect midwives' higher rates of vaginal birth (Weisband et al., 2018). The higher shoulder dystocia incidence likely reflects how 48% of patients in the study's midwife group reached 40 weeks of gestation or more, compared to 27% of the physician group. Shoulder dystocia is considered an unpredictable, unpreventable event and it is not recommended to perform a prophylactic cesarean section to avoid shoulder dystocia (Weisband, et al., 2018). Thus, midwives should focus on developing effective management strategies for shoulder dystopia occurrences, rather than avoiding vaginal births. Weisband et al. (2018) found an association of midwifery-led care with slightly increased rates of postpartum hemorrhage, but this correlation was contradicted by Renfrew et al. (2018), as six studies in the meta-analysis associated midwifery care with *lower* rates of post-partum hemorrhage. Nevertheless, Weisband et al's (2018) result emphasizes the importance of preventing post-partum hemorrhage with interventions such as uterine massage, breastfeeding immediately after birth, and prophylactic uterotonic agents.

Breastfeeding Outcomes

Midwives also provide extensive education and support for breastfeeding, which is reflected in the improved rates of breastfeeding initiation and duration seen with midwifery care (Renfrew et al., 2018; Vedam et al., 2018). Colostrum, the initial breast milk, provides maternal antibodies which prevent infection in the neonate. Breast milk also benefits infants by producing less gastrointestinal distress and naturally adjusting its nutrients as the infant ages, and infants who are breastfed have a lower risk of infant mortality, Sudden Infant Death Syndrome (SIDS), and several childhood diseases (Eidelman, et al., 2012). Breastfeeding benefits mothers by reducing postpartum hemorrhage risk, assisting with weight loss after pregnancy, encouraging maternal-infant bonding, and delaying return of ovulation cycles, which helps to elongate the interpregnancy interval (IPI), or the length of time between pregnancies. Mothers who breastfeed also are reduced risk of diabetes such as breast cancer, ovarian cancer, and type 2 diabetes mellitus compared to the general female population (Office on Women's Health, 2019). Breastfeeding can be especially helpful for low-income families because it is inexpensive compared to buying formula; however, the mother must receive continuous postpartum support, especially given the challenges of continuing breastfeeding after returning to work. Referring low-income patients to resources such as the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) can ensure that mothers receive adequate nutrition to produce breast milk. Studies consistently reveal that rates of breastfeeding initiation, duration and exclusivity are reduced for Black infants compared to white and Asian infants in the United States. According to the CDC phone-mediated 2017 National Immunization Survey, approximately 73.7% of respondents reported that their Black infants born that year were breastfed at all, compared to 86.7% of white infants, and only 38.7% of Black infants were

exclusively breastfed at 3 months, compared to 52.4% of white infants (CDC, 2017). Black respondents of the survey have historically been younger, less educated, lower-income, less likely to be married, more likely to be users of WIC compared to white respondents; all these factors are correlated with lower rates of breastfeeding (Beauregard, et al., 2019). Midwifery education and post-natal support for breastfeeding could encourage more Black women to breastfeed, alleviating the financial burden of formula and preventing infant infections that could result neonatal morbidity and missed days of work for mothers.

Outcomes in Vulnerable Populations

Race and poverty are major predictors of maternal and infant outcomes, and obstetricians are more likely to treat Black or impoverished patients compared to midwives, so race and poverty may serve as confounding factors when looking at improved midwife outcomes in observational studies. For instance, in Weisband et al.'s (2018) study, 9.3% of midwives' patients were Black compared to 23.5% of obstetricians' patients, and 24.3% of midwives' patients used Medicaid compared to 34.5% of obstetricians' patients. This study's population reflects current demographic trends of midwifery use. Even so, implementing midwifery care that has been successful for white mothers has the potential to improve maternal and infant outcomes for Black patients. McRae et al.'s (2018) study of childbearing women with low incomes demonstrates that midwifery antenatal care can improve infant health in a vulnerable population. In this study, midwives' low- to moderate-risk patients were 2.5 times more likely to adequately utilize antenatal care compared to physicians' low- to moderate-risk patients, suggesting that midwifery's relationship-based care encouraged active engagement in care and helped low-income patients overcome barriers to care (McRae et al., 2018). The low-income

patients using midwives also had lower rates of small for gestational age (SGA), low-birth weight (LBW) and preterm birth infants compared to patients using obstetricians. This study may translate well to many Black communities because Black Americans have higher rates of poverty compared to white Americans (Shrider et al., 2020). Vedam et al.'s (2018) analysis of midwifery integration highlights midwifery's cost-effectiveness and provides statistical evidence supporting the translation of midwifery's improved outcomes to the Black population. The study concludes, "The additional variance explained when MISS [Maternal Integration Scoring System] scores were added to the equations suggests that, with greater integration of midwives in these states [with high rates of Black births], the associated reduced rates of neonatal mortality, preterm birth, and increased breastfeeding success could confer important long term health benefits for African American mothers" (Vedam et al., 2018). Improving midwifery access could enable more Black women to utilize midwifery care, which will increase availability of data specifically linking midwifery care to Black maternal-infant birth outcomes. The studies in this integrative review establish the safety of midwifery care and suggest that midwives can improve birth outcomes for Black women and infants with low to moderate obstetric risk.

Care for the Whole Patient

A major concern expressed by Black childbearing women in available studies was their lack of a personal, respectful relationship with their provider, which impairs patient trust and patient-provider communication and discourages women from attending care visits (Close, et al., 2013; Tucker Edmonds, et al., 2015; Wang, et al, 2021; Yoder & Harvey, 2018). The compassionate, patient-centered care of midwives facilitates trusting patient relationships, which encourages Black women to consistently attend health visits and improves the quality of care.

Patient-Centered Relationships

The most frequently voiced concern from Black women in Tucker Edmonds' et al. (2015) study was the women's lack of a personal connection or relationship with their obstetric providers. Many women also disliked the discontinuity of care that they experienced and described frustrations with being assessed by trainees and medical students, which resulted in errors and repeat examinations. One patient illustrated how discontinuity of care depersonalized her obstetric experience; she reported, "They have to read up on your chart and you become a paper patient . . . because they briefly read over you know, your diagnosis, what you are going through [but] they have no connection to you, you are this paper patient . . . ." (Tucker Edmonds, et al., 2015). Many women expressed feeling a lack of caring, compassion or respect, or even experiencing judgment and stereotyping from their providers. One woman suggested, "Maybe you know, the prenatal care people could . . . humanize your visits and not make you feel like—well you know you're measuring small or you're not gaining enough weight—more if they shared their stories . . . . I would feel like I could talk . . . about things that I am going through" (Tucker Edmonds, et al., 2015). The desire for trustful patient relationships is emphasized by participants in Close's study, who described their Black community's mistrust in medical providers, rooted in a history of disrespect of Black patients. This mistrust is reinforced when women are forced to wait several hours for rushed prenatal visits, when they experience disrespect from their providers, and when providers don't explain medical jargon, leaving patients confused but too intimidated to ask clarifying questions (Close et al., 2013). This mistrust prevents Black women from seeking healthcare visits, resulting in late or inconsistent prenatal care.

The midwifery model focuses on forming meaningful connections with childbearing women and their families, which facilitates trust. When women in Tucker-Edmonds' study were asked what they appreciated about their prenatal care, their most frequent response was valuing the midwifery model, as women who saw midwives felt more engaged and empowered in their care. Midwives recognize that pregnancy, birth and motherhood are emotional experiences as well as physical experiences, a concept which is often not acknowledged in the medical model (Krausé, et al., 2020; Parry, 2008). Midwives communicate openly with their clients, using active listening and supportive dialogue and body language (Krausé, et al., 2020). They provide emotional support in the antenatal period, encouraging women to open up about their anxieties regarding their pregnancy and ensuring that they do not feel isolated. For instance, one woman described how she shared emotional issues with her midwife that she was not comfortable sharing with her physician: "I kind of had a breakdown at that point, but I feel like I can bring that to her [midwife], whereas, with my physician, who I have had for a number of years, my appointments with her [physician] are always rushed. I'm in/out and I could see myself in a doctor/patient relationship putting a lot of that stuff on the back burner" (Parry, 2008). In the observational study by McRae et al. (2018), patients receiving midwifery-led care were more likely to receive referrals to psychiatric or domestic abuse services compared to patients receiving physician-led care. This may reflect greater patient disclosure to midwives and midwives' emphasis on mental and social health in addition to physical health. Women described how their midwives made them feel strong, confident and capable of undergoing the birth process and becoming a mother (Parry, 2008). Emotional support is also actively provided during labor and delivery, as midwives maintain a continuous encouraging presence throughout

labor, manage pain, allow freedom of movement, reassure women of their strength, cover the bodies of women who are concerned about modesty, and provide comforts such as back massages or wiping the woman's brow between contractions (Krausé, et al., 2020).

Since Black women are at increased risk for financial, emotional and partner-related stressors compared to white women, they may especially benefit from midwives' emotional care (Yoder & Harvey, 2018). Lack of social support and anxiety regarding the pregnancy are frequently cited as barriers that prevent Black women from seeking prenatal care, and midwifery can address both of these issues (Close, et al., 2013; Tucker Edmonds, et al., 2015). For Black women who have experienced disrespect or insensitivity from physicians in the past, midwifery care may rebuild their trust in a medical provider and provide them support that they lacked in previous pregnancies. One midwife described developing trust with childbearing woman who had not been respected in previous encounters with providers: "Caring for a hardened criminal who did not want to engage, by being kind, gentle, inclusive and treating the couple as equals, trust was created, and they engaged. They were very thankful and said they have never been treated so kindly by health professionals" (Krausé, et al., 2020). Midwives consider their relationships with their patients to be partnerships, where patient preferences are valued, and patient lifestyle behaviors are considered in a nonjudgmental manner. Rather than creating a condescending hierarchy between the provider and patient, as is experienced by some Black women with their physicians, midwives aim to be accessible and treat their patients like friends or family, which promotes patients' honest disclosure, comfort with asking questions, and greater involvement in care. These relationships are concordant with the Black participants in Close et al.'s (2013) study, who suggested that medical professionals enter Black communities

with a nonjudgmental perspective and assess where Black families want assistance, rather than prioritizing their own motives.

Women appreciate how midwives individualize care based on each mother's risk factors, preferences, pregnancy progression, and life circumstances (Krausé, 2020). One woman who received midwifery care described, "What it really is, it's the relationships. I cried every time after 6 weeks, after leaving my midwives. In fact, I feel teary-eyed now just thinking about it. I love my midwives. They're very dedicated to what they do, and they really take the time to listen to your concerns and I really feel like they treat you as a person, rather than just a pregnancy" (Parry, 2008). By viewing each mother as an individual rather than providing a blanket-approach to all patients, midwives anticipate and address each woman's specific needs. Midwives also recognize that pregnancy and birth are family events, so partners and children should be involved in the experience. Women explain how their midwives welcomed their partner and children to attend prenatal appointments, where the midwives would explain what was happening, involve them in care-planning, and answer their questions (Parry, 2008).

Tactical Components of Care

Yoder & Harvey's (2018) systematic review describes how midwives' strong patient-provider relationships facilitate improved care practices, such as thorough education. Many of the review's studies focused on a care model called CenteringPregnancy, where pregnant women are grouped with other women with similar due dates and receive prenatal care in an open, supportive format. In all the studies included in the review, the group care was led by a midwife, and the programs were initiated in clinics located in areas with predominantly Black populations.

Participants in CenteringPregnancy developed strong relationships with the midwives as well as other group members. Compared to the standard prenatal care model, they attended more prenatal care visits, were more involved in their care, received thorough education, experienced short wait times, developed healthy behaviors, and experienced improved outcomes such as breastfeeding rates and adequate weight gain (Yoder & Harvey, 2018). One limitation of the studies on CenteringPregnancy is that it is difficult to discern what benefits arose from receiving care in a group setting and which benefits arose from receiving midwifery-led care. In looking at outcomes, synergy is evident. Adams & Thomas (2017) describe how prenatal care groups provide spaces for Black women to share concerns, ask questions, and relieve stress with a group of women with similar backgrounds, racial identities and/or socioeconomic status, giving them personalized emotional support. This concept reinforces the importance of pregnancy care that addresses psychological, social and emotional health, especially since Black women are at high risk for stress, which can negatively impact birth outcomes (Adams & Thomas, 2017; Yoder & Harvey, 2018).

Four studies that compared physician-led prenatal care and midwifery-led prenatal care found that midwife-led education was consistently more thorough and involved a variety of topics on overall health, such as nutrition, breastfeeding, family planning, and available provider types (Yoder & Harvey, 2018). Midwives demonstrate their clinical expertise and extensive knowledge of the pregnancy and birth process, often conducting thorough assessments with noninvasive techniques, such as palpating the fetus (Parry, 2008). Thus, clients trust in their midwives' professional ability and value the information they share with the clients. Thorough education is essential in patient-centered care, as it allows mothers to make informed decisions.

Midwives provide their patients with comprehensive information that enables them to take active roles in their pregnancy and birth and engage in shared decision-making, in which midwives' knowledge as well as patient preferences are incorporated. Some midwifery clinics also offer patient access to a library of books and videos on pregnancy, labor and delivery, and parenting, which helps women feel more knowledgeable and prepared (Parry, 2008).

Midwives designate long appointment times, which promotes thorough educating and attentive patient-provider conversations where patients feel valued. One study found that prenatal care visits with a Clinical Nurse Midwife at a birth center lasted twice as long as visits with an obstetrician at a clinic, which allowed more time for relationship-building, education, and extensive assessment (Yoder & Harvey, 2018). Women in Parry's study appreciated their 30-minute to 1-hour appointments with midwives, which allowed appropriate time for clients to ask questions, discuss issues with their midwives, and plan for the birth without feeling rushed, unlike their previous experiences with physicians. One woman who switched from using an obstetrician to using a midwife stated, "I needed to discuss everything as it happened, and you just don't get that with an obstetrician. You get 5 minutes, if you're lucky. I needed that time to discuss what happened previously to get my confidence up for the birth" (Parry, 2008). For Black women who expressed feeling devalued by rushed visits with obstetricians, midwives' lengthy appointments would demonstrate that they are valued by their midwives. The midwifery model also encourages patient valuation by prioritizing continuity of care. Across various settings, most clients see the same midwife during their entire prenatal care period. The midwife remains present throughout their entire labor and delivery process and then follows up with maternal and neonatal check-ups in the postnatal period. Women in Parry's study describe their

insecurities with fragmented hospital care, rotating obstetricians, and unfamiliar, rapidly changing nurses. These women opted for midwifery care because, during the antenatal period, they developed a close relationship with the midwife that would attend their birth (Parry, 2008). For patients in Tucker Edmonds' study whose physician relationships lacked continuity or a personal connection, they expressed appreciation for their relationships with nursing staff who they saw repeatedly during antenatal visits. One participant remarked, "Their experience, the way they connected to us, they didn't hear us, they listened to us. They took it upon themselves to take it a step further when we needed that extra . . . . We were human. We were like a sister, a mother, a friend, we were somebody to them" (Tucker Edmonds et al., 2015). By consistently seeing the same patients for long, thorough prenatal appointments, midwives similarly develop caring relationships that humanize the obstetric experience.

Rather than seeing pregnancy as a disease, midwives view pregnancy and birth as an important physical, social and emotional event situated within the greater context of the woman's life, requiring consideration of the woman's overall health and wellbeing. According to The Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) position statement, "[m]idwifery practice facilitates natural processes with an emphasis on the holistic care of women within the context of their families and communities. Midwives partner with women to provide evidence-based, individualized care" (AWHONN, 2016). From this perspective, midwives provide preventative and primary care such as family planning, preconception care, nutrition and health behavior modification, sexually transmitted disease prevention and treatment, and gynecological care. Since unwanted pregnancies are a common factor that discourages Black women from seeking prenatal care, midwifery care that implements birth

control strategies could prevent these situations (Close, et al., 2013; Tucker Edmonds et al., 2015).

Patient Autonomy

Powerlessness during the antenatal and labor and delivery processes was a recurring theme expressed by Black women, as providers did not continuously inform of their evolving plan of care, and they were not included in decision-making (Farrish et al., 2014; Parry, 2008; 2018; Tucker Edmonds, et al., 2015; Wang, et al., 2021). This lack of autonomy mimics the disrespect that many Black women have experienced in the American healthcare system or other aspects of American society, due to their race and gender not being associated with positions of power. Midwives' focus on maternal autonomy offers women the opportunity to be more involved and empowered in their care. By improving access to midwifery care, midwives could increase autonomy for Black women by prioritizing maternal choice in the pregnancy and birth plan and providing thorough, continuous education to enable women to make informed decisions.

Desire for Control in the Birth Process

As introduced in the theme *Barriers to Quality* care, Black women describe obstetric care in which they did not have the control over their own body, health decisions, and birth plan as they desired (Farrish et al., 2014; Tucker Edmonds, et al., 2015; Wang et al., 2021). The traditional medicalized hospital approach to birth felt like an assembly line or a company serving customers, where they were forced to relinquish their own control as they stepped into the hospital's domain (Farrish et al., 2014; Wang et al., 2021). In Wang's (2021) study of women

who experienced a severe maternal morbidity event in the hospital, participants felt fearful, as they were not provided emotional support, uninformed about the emergency procedures they were receiving, and helpless, as they were not given choices in the evolving plan of care despite being alert and oriented. A Black woman recounted how she was not informed during an emergency cesarean section, which left her confused and afraid: "They just rushed me to the OR, and that was it. I was just lying there like I'm cold. I'm shaking. I know I'm not feeling good, but nobody is telling me anything. Nobody is telling me what's wrong with me. Nobody is giving me medication. Nobody is doing anything but putting a blanket on me" (Wang et al., 2021). Emergency situations require quick decision-making on the part of the provider, which presents risks for gaps in communication and disregard of patient autonomy. However, healthcare teams can practice and plan for maintaining patient autonomy during these events, and women's birth plans can be created to include their wishes for certain emergency situations, such as if a postpartum hemorrhage occurs. Midwives create extensive birth plans which consider potential complications. By planning for emergencies that would require transfer to a different care setting or an obstetrician, such as in the need for an emergency cesarean section, midwives can provide a seamless transition of care (AWHONN, 2016). This transition does not result in patient abandonment on the part of the midwife; rather, the midwife often remains involved in care even as a physician assumes responsibility.

While patient autonomy can be difficult to maintain in life-threatening circumstances, the women's concerns about lack of autonomy often began during their hospital stay before the emergency arose. They saw their doctors infrequently and were not getting their physical needs, such as pain relief, or their emotional needs met. When patients voiced their concerns about new

onsets of subjective physical symptoms, which could indicate an impending complication, their comments were often disregarded; for instance, one woman described, "I was expressing how I was feeling, and the nurse ruled it off as anxiety. And then I don't even remember how many hours later, they checked my hemoglobin, my hemoglobin was 5, and then all of the sudden it was like oh my god, oh my god, oh my god, what's going on?" (Wang et al., 2021). In this example, dismissing the patient's voice led to poor quality of care and threatened patient safety. Similar testimonies of powerlessness appear frequently in other studies, highlighting the pervasiveness of obstetricians overlooking childbearing women's agency (Farrish, et al., 2014; Parry, 2008). One Black woman recounted, "I was put in a room all by myself with no consultation about how I wanted to give birth. I was given gas over my face and left there. The doctor stayed downstairs, and the nurse did all of the work. No relationship with them. The next time I was pregnant I was shaven and given an enema and an episiotomy without telling me what they were doing or explaining" (Farrish et al., 2014). This Black woman's negative obstetric experiences encouraged her to choose midwifery in subsequent pregnancies, contributing to a trend of women's resistance to the medicalized approach to birth.

After women experience these medicalized, depersonalized births, many desire more control in future pregnancies and births. Farrish's study uncovers how Black women chose midwifery-led home births as an alternative because they desired control in the birth process. Women were comfortable in their own homes, where they had access to personal items and could control environmental factors such as lighting and temperature (Farrish et al., 2014). They appreciated having freedom of movement and being able to eat and drink to maintain strength throughout the birth, which is often restricted by physicians due to high cesarean section rates.

They also were confident in their abilities to overcome pain, as they developed mental coping strategies in preparation and utilized nonpharmacological pain relief strategies during labor. While this study focused on home births, midwives can improve patient autonomy in any setting, including birth clinics or hospitals. Women in Parry's study disliked how Western healthcare often treats pregnancy as an illness rather than a natural event that the female body is prepared for. They felt that the problem-focused medical approach shaded pregnancy and birth in a negative light (Parry, 2008). Meanwhile, midwifery presents pregnancy and birth as a celebration of women's strength, highlighting how women can take initiative to improve their health, work to achieve the birth experience they desire, and build confidence for motherhood.

Prioritization of Maternal Choice and Informed Decisions

Childbearing women across several studies described how midwives' woman-centered care empowered them, which can fulfill Black women's desire for control in the birth process (Farrish, et al., 2014; Parry, 2008; Tucker Edmonds, et al., 2015). Not only do midwives provide women a sense of control over their own bodies, but they encourage women to become more involved in their antenatal and natal care and build women's confidence for becoming mothers. A woman from Tucker-Edmonds et al.'s (2015) study explained how midwives prioritize maternal choice; she said, "You have control of how you want things done when it comes to your delivery rather than obstetri[cians]—they don't give you the option. They tell you how we are going to do it and when . . ..". Women who chose midwifery were dissatisfied with instances where obstetricians seemed to push for interventions during labor and delivery because it was more convenient and efficient for the physician's agenda, rather than for the mother or neonate's benefit (Parry, 2008). Many women opted for midwifery because they wanted to avoid

unnecessary medical interventions, such as epidural analgesia, caesarean sections without medical indication, and medications that could be replaced by nonpharmacological means (Parry, 2008). A theme discovered from Guerra-Reyes & Hamilton's (2016) analysis of midwifery websites was midwives' goals to reduce unnecessary medical interventions and address the stigma of home birthing, as most Americans do not recognize that it can be a safe birthing option. Midwives are more likely to attempt a vaginal birth after caesarean delivery (VBAC) compared to physicians, who often prefer repeat caesarean sections even without specific maternal contraindications to VBAC (Coalition for Improving Maternity Services, 2007). VBACs are often a safe option for most women, especially when the first caesarean delivery was a result of fetal indications, such as macrosomia or fetal positioning.

To enable maternal choice in pregnancies and births, midwives focus on providing thorough education on birth options, pertaining to birth setting, labor techniques, available interventions, pain relief methods, doulas, and family presence (Guerra-Reyes & Hamilton, 2016; Krausé, et al., 2020). Often women learn about options that they did not know existed. One midwifery website from Guerra Reyes & Hamilton's (2016) study described how gaps in education lead to poor quality of care: "Until women and their loved ones feel that they have enough knowledge and agency to be part of the decisions around their care and until they have access to the education and support that they are lacking, they will continue to be at risk" (Guerra-Reyes & Hamilton, 2016). Within their trusting patient relationships, midwives encourage women to express their preferences for their antenatal care and births and enable them to make informed decisions. Midwives consider the women's medical circumstances as they create a plan that fits the woman's wants and needs while remaining financially feasible (Guerra-

Reyes & Hamilton, 2016). In instances where maternal choice is obstructed in the hospital setting, midwives serve as advocates for patient autonomy. Midwives in Krausé et al.'s (2020) study describe several instances in which they shielded women from the "bullying" that occurred when other providers displayed unacceptable behavior towards a patient or attempted to ignore a woman's birth plan. By fulfilling the role of patient advocate, midwives demonstrate how they respect the women they serve.

Implications for the Future of Care

This integrative review demonstrates that available evidence is sufficient to suggest the safety and potential benefits of improving access to midwifery care for Black women. While many qualitative studies demonstrate Black patients' appreciation of midwifery care, and many quantitative studies reveal the birth outcomes of midwifery care, there is a gap in the literature pertaining to the impact of midwifery care upon birth outcomes specifically for Black women and infants. To conduct well-designed randomized controlled trials on this topic, more Black women and infants must be introduced to midwifery care. Structural changes are necessary to remove the barriers currently experienced. To improve midwifery access, federal and state governmental programs must collaborate with healthcare and educational systems to recruit midwives, increase midwife racial diversification, support the integration of midwifery care into healthcare systems, and raise awareness of midwifery as an obstetric option for diverse communities. These efforts will require time, resources, and substantial health policy support, but the investment in midwifery can ultimately save lives and reduce overall healthcare costs, resulting in positive impacts on communities.

To enable increased access to midwifery services, the US needs more practicing midwives throughout the country. As of December 2020, there were 12,805 CNMs, 119 CMs, and 2,600 CPMs practicing in the US (American College of Nurse Midwives, 2021; National Association of Certified Professional Midwives, n.d.). These numbers are growing, but the need for midwifery services is outpacing the growth. Meeting the midwifery demand begins with education programs. Across the country, there are currently 39 CNM and CM education programs accredited by the Accreditation Commission for Midwifery Education and 10 CPM schools accredited by the Midwifery Education Accreditation Council (American College of Nurse Midwives, 2021; Midwifery Education Accreditation Council, n.d.). By supporting existing midwifery programs and creating new midwifery programs in regions with low midwife concentrations, healthcare systems could improve birth outcomes for their patient populations. Midwifery students should also be supported on an individual level, as CNM scholarships could be offered to Registered Nurses who are interested in furthering their nursing education in a way that fulfills their community's needs. Nurses who currently work in labor and delivery or mother/baby units would be important to target. Additionally, CM or CPM scholarships could be offered to doulas, high school and college students contemplating career options, or women working in social services who are interested in other meaningful ways to serve their communities. It is especially important to approach Black women in these positions and amplify the voices of Black midwives who are encouraging more Black women to join them in their field. The National Association of Certified Professional Midwives (NACPM) recently launched a scholarship initiative called the "Bigger Table Fund," which awards women of color with financial assistance for the North American Registry of Midwives (NARM) examination fees

and state licensing fees (n.d.). This program could serve as a model for other professional midwifery organizations to ease financial burdens for Black women joining the midwifery field. Since CPM programs do not require a prior nursing degree or graduate-level education, they may be more accessible for women from low-income Black communities. As expressed by Black midwives in Guerra-Reyes (2016), these women would more closely identify with the communities who are demographically at risk for poor infant and maternal outcomes, which may improve their ability to serve patients in those communities.

Within midwifery schools, mentorship programs between Black students and Black midwives could provide students with a supportive role model, mitigating the aloneness that Black students have felt in midwifery programs (Serbin & Donnelly, 2016). In communities that do not currently have Black midwives represented, this mentorship could be achieved through virtual interactions. Since some aspects of midwifery education already occur in an online format, these relationships would not be dependent on geography. It is also crucial for educational programs to assess their inclusivity, as more Black women need to be welcomed into the midwifery field. With only 6.85% of certified nurse midwives (CNM) identifying as Black, many Black women are discouraged from choosing midwives as providers, and midwifery is less equipped to address the racial disparities in obstetric care (American Midwife Certification Board, 2020). By encouraging and incentivizing more Black women to consider the midwifery field, midwifery would gain more diverse perspectives, improve care for minority populations, and broaden their patient population. Diversification of the midwifery field can be achieved by amplifying Black midwives' voices in professional and educational organizations and offering Black women scholarships to CNM, CM and CPM schools. As described by Serbin & Donnelly

(2016) and Guerra-Reyes & Hamilton (2016), Black midwives have been calling for increased diversification of their field for decades. Many of these women are committed to improving outcomes and experiences for Black patients, but they have not historically achieved their desired influence in midwifery organizations such as the American College of Nurse Midwives (ACNM) and the NACPM. To strengthen organizations' ability and commitment to reducing racial disparities, they can invite more Black midwives into decision-making and leadership roles. Gordon (2016) suggests that midwifery organizations create a "change team," an internal leadership group which ensures the organization is making progress towards its racial equity goals. By creating an "equity advisory group," whose members reflect the diversity of the patient population that the organization serves, organizations can include diverse perspectives into project planning (Gordon, 2016). These groups can use Gordon's "racial equity toolkit" to create organizational intentions for how their organization will reduce racial disparities in obstetric care. They will continually compare their progress to their defined "indicators of success" to ensure that their actions are effective.

The US population could benefit from federal and state-based initiatives to improve midwifery integration in the healthcare system, especially in states with high rates of Black births. Increasing access to midwives requires an initial financial investment, but since midwifery care is more cost-effective than physician-led care, encouraging more women to use midwives can save healthcare systems costs in the long-term. Expanding Medicaid coverage, increasing midwife autonomy policies, and improving birth center access are steps that can be taken to achieve this goal. There are currently 26 states that reimburse CNMs at 100% and only 13 states that provide any form of CPM Medicaid coverage (American College of Nurse

Midwives, 2013). Kentucky, for example, only reimburses CNMs at 75% of the physician charge for the same service and does not offer any CPM reimbursement. When midwives have low reimbursement rates, healthcare systems are discouraged from incorporating midwives into their practice because they will be paid fewer Medicaid funds than they are paid for obstetricians, which results in the hospital or clinic paying more care costs themselves. Increasing Medicaid coverage in states where CNM reimbursement rates are not at 100% of physician reimbursement rates and in states where CPMs receive no Medicaid coverage could expand midwifery services and increase access to women's healthcare. This reimbursement would create a stronger business case for healthcare organizations to employ midwives. Since CPMs typically operate in community centers, clinics, birth centers, and homes, rather than hospitals, they bring prenatal care to women in an accessible, comfortable format while accruing low costs, which is especially important in locations where women have few healthcare options. By entering Black women's communities, CPMs mitigate transportation barriers and build trust as they gain respect within the communities. Thus, improving CPM Medicaid coverage could enable more low-income women to utilize CPMs and make obstetric care available in a wider array of practice settings.

In addition to Medicaid reform, many states could also benefit from expanding CNM autonomy. In independent practice states, CNMs work with full autonomy as a provider and maintain independent prescriptive authority. However, many states require CNMs to enter collaborative agreements or supervision agreements with physicians, requiring midwives to depend on physician approval for certain aspects of care. These agreements foster physician-midwife relationships and encourage seamless transitions of care, but they also restrict CNM autonomy and do not permit CNMs to work according to their full scope of practice, according

to the American College of Nurse-Midwives (ACNM) and the National Council of State Boards of Nursing (NCSB) (ACNM, n.d.). ACNM supports organic collaboration between physicians and midwives as independent providers, rather than required collaboration agreements. Organic collaboration allows midwives to choose different partners in care based on each specific patient's needs, enhancing quality of care. Recognizing midwives as independent providers promotes mutual respect and trust among obstetric providers and enables midwives to fulfill the shortage of maternal care clinicians (ACNM, n.d.) Legislation instituting independent practice of CNMs in all states would improve midwives' abilities to care for their patients while lessening strain on the healthcare system.

Free-standing birth centers offer prenatal, intrapartum, and postpartum care to women with low-risk pregnancies. They produce healthy maternal and infant outcomes while using few or no invasive interventions and accruing lower costs than hospital-based care (Courtot, et al., 2020). Despite the high value of care provided at birth centers, some insurance-related and legal restrictions prevent birth centers from providing desired access to their services. Medicaid reimbursement is much lower for birth centers compared to hospitals—as low as 15% of the hospital rate—which can limit birth centers' ability to provide care for a large population of Medicaid patients. In some states, Medicaid covers an insufficient number of prenatal care visits at birth centers. For example, in Florida, Medicaid only covers 10 prenatal care visits at birth centers, which does not meet established guidelines for adequate prenatal care (Courtot, et al., 2020). Certificate of Need requirements also restrict access to free-standing birth centers, as they require individuals or groups to obtain legal permission to open a birth center. In this process, applicants must convince their county or state court that the community needs a birth center, but

other healthcare entities in the state can challenge applicants, preventing would-be business competition. Due to Kentucky's CON requirement, no birth centers exist in Kentucky, as powerful healthcare systems in the state have challenged all birth center applicants, arguing that the existing hospitals fulfill the state's obstetric needs (Kentucky Birth Coalition, n.d.). The American Association of Birth Centers supports the removal of Certificates of Need so that birth centers can enter communities based on provider availability and patient needs, rather than requiring legal permission.

Along with legislative changes, federal and state healthcare systems must increase awareness of midwifery as a safe, effective, appealing option for natal and gynecological care. The AWHONN "Don't Rush Me....Go the Full Forty" initiative, first launched in 2012, provides a model for this type of campaign. "Go the Full Forty" encouraged women to reach 40 weeks' gestation without scheduling an unnecessary induction or cesarean section, as allowing spontaneous labor at full-term can improve infant and maternal health (AWHONN, 2015). AWHONN released an electronic toolkit for implementing this initiative, including informational posters, social media graphics, educational resources, and education discussion topics to be shared at obstetric care offices, hospitals, clinics, and public health fairs and on social media platforms such as Facebook and Twitter. A public health initiative encouraging the use of midwifery care could follow a similar format. Professional organizations such as AWHONN, ACME, and NACPM may be interested in launching this campaign to meet their racial equity goals. The initiative should target women with low- to moderate-risk pregnancies and should especially focus on Black communities.

Educational resources for this initiative should include evidence of midwifery's safe birth outcomes, using the studies included in this integrative review, as well as descriptions of the midwifery model of care. The education should also explain that most midwifery services are covered by Medicaid or private insurance, as patients may be unaware of the financial feasibility of using a midwife. Social media posts can include patient testimonials explaining the strong relationships, comprehensive family-centered care, and emotional support that women experienced with their midwives. Instagram is commonly used by American women of childbearing age, so this would be a crucial platform to spread information. Featuring Black midwives and Black women who have utilized midwifery care will demonstrate that midwifery care welcomes Black patients. If this campaign is successful in increasing demand for midwifery care, healthcare systems would be encouraged to incorporate more midwives into their practice. This movement may necessitate a separate campaign targeting healthcare providers and systems. This secondary initiative should emphasize the financial feasibility of employing midwives, with information about cost-effective midwifery services and Medicaid coverage for CNMs and CPMs. Midwifery care's safe birth outcomes, high patient satisfaction, and capacity for smooth transitions of care should also be featured.

Conclusion

This integrative review discovered that midwifery is a safe and cost-effective healthcare option which can help Black women overcome existing barriers to receiving quality obstetric care. Midwives emphasize preventative care, build trusting relationships with patients, and provide holistic care, addressing gaps where the current obstetric health system is not sufficiently serving Black women. By better integrating midwifery services into US healthcare systems and increasing

public awareness of available midwifery providers, the US can work towards achieving racial justice in obstetric care. As more Black women utilize midwifery care, research on birth outcomes specifically for Black women and infants can be conducted, which will improve our understanding of midwifery care's impact on Black patients.

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