


2021

Racial Disparities Among Black Women in Maternal Health: A Literature Review

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RACIAL DISPARITIES AMONG BLACK WOMEN IN MATERNAL HEALTH: A
LITERATURE REVIEW

by


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A thesis submitted in partial fulfillment of the requirements
for the Honors in the Major Program in Nursing
in the College of Nursing
and in the Burnett Honors College
at the University of Central Florida
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Spring Term, 2021



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Abstract

African American women are at a higher risk of experiencing maternal health complications than women of other races. Determining the factors that contribute to the severity of their maternal health complications can help bring awareness and exposure to the disparities among black women in maternal health. The purpose of this study was to explore the various elements that contribute to the high pregnancy mortality ratio and infant mortality ratio in black women and black infants. The secondary purpose was to determine the relationship between stereotypes about African American women as healthcare consumers and the disproportionate percentage of black women experiencing fatal maternal complications.

A literature review examining the effects of physiological differences, external stressors, stigmas and stereotypes, and miscommunication with health care physicians was conducted from various online databases. Peer reviewed, research articles published in the English language from 1992-2020 that focused on factors during the prenatal and perinatal period that influenced the pregnancy-related mortality ratio were included for synthesis. Results from 14 studies that examined factors resulting in maternal health disparities in African American women were compared to determine accuracy and consistency with the data. The studies suggest that smaller pelvic structures, stigmas that label black women as over exaggerative, and distrust within African American communities with health care staff contribute to the different maternal outcomes in black women. Although the data remained consistent and proved there are similar factors that cause disparities in maternal care, many of the studies had small sample sizes indicating the need for further research on the subject.

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Introduction

The Center for Disease Control and Prevention reports over 3 million births per year in the United States (CDC, 2019), of which Non-Hispanic Black women account for 15% of births. Racial disparities in health care continue despite efforts to improve maternal-child outcomes and decrease complications after birth. Black women are two to three times more likely to die from maternal health complications and have birth related complications than their non-Hispanic, White counterparts (CDC, 2020). Birth related complications contributing to pregnancy-related mortality (PRM) include hypertension, pulmonary embolism, and heart muscle disorder. Despite significant advances in women's care for complications during pregnancy, black women are continually underserved, and preventive treatment for adverse conditions during pregnancy is often below the standard of care.

Factors contributing to an increase in PRMR are negative stereotypes, social stigmas related to black women as healthcare consumers, and economic status assumptions. These factors determine the type of psychosocial and physiologic treatment black pregnant women receive and can affect the birthing process's outcomes. Identification of racial disparities in pregnant, black women can be used to improve discourse about care expectations and standard of care in the clinical setting and to recognize untreated physiologic conditions leading to poor outcomes in maternal-child health.

Background

Several physiological differences can contribute to the presence of maternal complications in African American women. Radiographic studies show that black women have different pelvic structures from women of other races. Magnetic resonance imaging findings suggest that African American women have a narrower transverse diameter of the pelvic inlet and a deeper anteroposterior diameter of the pelvic outlet (Handa et al., 2008). Black women also have a smaller pelvic floor area than women of European descent. The smaller pelvic structure and lack of pelvic floor laxity in black women can increase the likelihood of developing pelvic floor dysfunction after childbirth. Pelvic floor dysfunction leads to fecal incontinence, pelvic organ prolapses, and obstructive defecation. The disorders caused by pelvic floor dysfunction can complicate recovery after birth and drastically reduce the quality of life.

Studies suggest a correlation between African American women having physically smaller pelvic diameters and the occurrence of pre-term delivery. Black women have a three times higher chance of having a premature birth at 20-34 weeks gestation and four times higher at 20-28 weeks gestation than their white counterparts (Osterweil, 2007). Smaller pelvic diameters can cause discord amongst the maternal and fetal relationship. To avoid significant labor complications and maternal stress, the fetus of black women tends to mature faster and methods to promote an earlier delivery are employed. (Patel et al., 2003). Infants born to black women pass meconium before birth and earlier than infants born to women of other ethnicities and races, signifying their early maturational age (Mehtar, et al., 2016). The early maturation of the fetus can increase the incidence of pre-term labor, leading to a higher risk of meconium

aspiration and perinatal asphyxia in the infant, and emergent cesarean sections amongst African American women, which can have drastic effects such as obstructed labor and higher risk for maternal mortality.

Physiological Difference

Black women have a higher incidence of a mal-adaptive fetal lie and presentation due to a narrow and deep pelvic outlet, referred to as an anthropoid pelvis. A gynecoid or android shaped pelvis is favored for labor. The pelvic inlet is more rounded, and the pelvic cavity is shorter and duller, allowing an easier passage for the newborn. Pelvic differences in black women lead to the fetus developing a head tilt back in a brow or face presentation during labor with the infant in an occiput posterior (OP) or 'back' labor position (Shaffer et al., 2006). Face presentation is usually diagnosed in the later second stage of labor and is detected by examining the vagina. Instead of the baby's preferred head-down presentation, the infant's head is shifted back in face presentation, and the spine is extended, forcing the newborn to come out face first. Fetuses with face presentation were more likely to have lower APGAR scores, a test used to determine the baby's health by observing the baby's appearance, pulse, grimace, activity, and respiration. They also suffered from facial edema, ecchymosis, and facial bruising, contributing to complications with breathing. Infants with abnormal positioning during birth and with face presentations, are more likely to be delivered by cesarean section and require respiratory support after birth.

The overall physiological difference in African American women affects the total outcome of births. With a smaller pelvic structure, black women develop pelvic floor

dysfunction, undergo more cesarean deliveries, have premature births, and encounter problems with their newborns. Additional psycho-social factors can add to maternal complications amongst black women, such as mistrust in health care providers due to discrimination and communication conflict, socioeconomic status, and external stressors.

Stigmas and Stereotypes

Communication is critical when providing care during labor and can be misinterpreted between women and health care providers. Miscommunication between black women and providers frequently occurs during care encounters. Ineffective communication creates a chain of issues that can negatively impact a person's trust in their health care providers. The trend is seen in pregnant black mothers and leads to preventable health related complications or deaths. Studies show that black women are more likely to report discrimination than their white counterparts due to race, language, and culture (Attanasio & Kozhimannil, 2015). Racial discrimination is increased in pregnant women with co-morbidities, such as hypertension and diabetes.

Negative stigmas of black women may drive inefficient communication as healthcare consumers. Research suggests healthcare providers display an unconscious bias toward minority groups (Sacks, 2018). Health care providers tend to utilize group-level biases to prescribe individualized care, ultimately skewing the treatment outcome. Indiscriminate bias not only raises the risk of malpractice, but it interferes with the connection between the provider and the individual. The provider and the individual can build a respectful and trustworthy relationship in a clinical setting to provide the best treatment option and plan. The more negative the interaction

is between the individual and the providers, the less likely outcomes will be optimized. Lack of trust and biased, racial dynamics can have unfavorable consequences in maternal care. Biases by healthcare staff can lead to assumptions about black women being overdramatic or exaggerative when expressing physiologic conditions, such as pain experiences. Lack of response by healthcare providers to indicators of potentially harmful conditions can cause poor outcomes and result in long-term complications. Exploration of subpar maternal health outcomes is of value to improving maternal-child health and the labor experience.

Mistrust

A woman's bias has an impact on the provider-client relationship as well. There is a higher overall mistrust of health care providers seen amongst African American patients. Mistrust creates biases in individuals and can decrease the use of preventative health care services along with decreased use of "high-volume hospitals" (Armstrong et al., 2006). Bias and mistrust in black populations has led to a lack of health care treatment and strained relationships with the healthcare community. Mistrust can promote a higher incidence of misinformation or dishonest communication, causing a risk for lower quality of care. The mistrust of healthcare providers in black populations is multifactorial and stems from historical degrees of bias and race degradation, such as unethical experimentation involving black populations, black individual's perceived stereotypes, and a lack of diverse healthcare staff (Kennedy, Mathis, & Woods, 2007).

Past medical experimentations such as the 1932 Tuskegee study serve as representations of mistreatment of African Americans in unethical and unmitigated medical research. Many black individuals refuse to participate in studies beneficial to the future research of remedies to

diseases that plague black communities. Stereotypes also continue to build the level of mistrust in black populations. Studies show that black women as health care consumers, no matter the socioeconomic status, feel the need to perform and fight for recognition with their healthcare providers (Sacks, 2017). Black healthcare consumers are forced to alter the way they dress or be cognizant of certain mannerisms they display to avoid various judgments by the healthcare team. A negative historical foundation deepens the lack of trust in the healthcare system to provide equal levels of care no matter the individuals culture, background, or race. African Americans' distrust can even derive from an absent culturally diverse medical staff. A non-diverse health care staff can have challenges with providing culturally competent care which can result in missed verbal and nonverbal cues and a general misunderstanding of the Black individuals and populations healthcare needs.

External Stressors

Stress also plays a critical role in adverse maternal outcomes. Studies reveal that Black women reported experiencing greater anxiety levels when waiting to see a health care provider (Abdou & Fingerhut, 2014). Stress accounts for the majority of pre-term births in Black women and can lead to increased infant mortality (Hogue & Bremner, 2005). Risk factors related to the stressors experienced amongst maternal African American women can be broken down into education levels, insurance types, and encountering racism. It has been found that higher-educated black women have reported higher levels of discrimination and, ultimately, higher levels of stress during pregnancy (Hogue & Bremner, 2005). Stress during pregnancy can prematurely age the fetus and cause the mother to be more susceptible to stress-induced

pregnancy complications. Higher stress levels increase the risk of a black mother developing various co-morbidities during pregnancy, such as hypertension and diabetes.

External stressors also plague lower-income mothers and drastically affect the occurrence of pregnancy-related complications in black women. Financial instability, uncertain living arrangements, and relationship problems are among the many issues surrounding black mothers with low or absent salaries. A lower income can put the mother in an uneasy state when contemplating how to pay for medical bills, the appropriate care for the infant, and the means to provide herself with the proper intrapartum and postpartum care. Black mothers with lower socioeconomic status (SES) have difficulty accessing resources and lack a strong support system (Suplee, 2014). Financial stressors can cause missed provider visits during primal pregnancy periods and poor nutrition throughout the intrapartum period, which interferes with evaluating the health of the mother and the baby during the pregnancy.

A lower (SES) places black mothers at high risk of an unstable living situation, further adding to the mother's stress levels. Relationship dilemmas also add to the stress of black women during their pregnancy. Support from a spouse or significant other during pregnancy alleviates the physical and emotional strain of childbirth. Lack of support from a partner or trusted companion can increase anxiety and tension, raising the prevalence of pregnancy related complications. The combination of the components, lack of support, low SES, and uncertain housing, increase anxiety, and the prevalence of depression in black mothers, which is associated with poor fetal growth (Sheffield, 2019). The assessment of stress in black women is essential to the determination of complications in the postpartum phase. Early identification of these

stressors can eliminate certain complications and address black women's high mortality rate during labor.

Overall Factors

The pregnancy-related mortality ratio (PRMR) is the number of pregnancy-related deaths per every 100,000 live births. The PRMR measures pregnancy-related deaths for each ethnic group and can reflect the presence of health and racial disparities in black women. Currently, the PRMR of black women is four to five times higher than their white counterparts. Of every 100,000 live births, the PRMR for black women was 40.8 and 12.7 for white women (CDC, 2019). Cardiomyopathy, thrombotic pulmonary embolism, and hypertension contributed to the high pregnancy-related mortality ratio in black women (CDC, 2019). The combination of pelvic structure, ineffective communication, external stressors, and socioeconomic status affects the high PRMR in black women and contributes to the development of comorbidities during pregnancy.

Black women experience unfavorable maternal health outcomes, which increases their chances of adversity in health outcomes while giving birth. Black women experience more maternal complications than white women, a factor that connects to their high PRMR. African American women are more likely to develop fibroids during pregnancy, which increases the risk of postpartum hemorrhage (Eltoukhi, 2014). Black women also show earlier signs of preeclampsia, which leads to high blood pressure and can result in fatal complications. Due to chronic stress levels and socioeconomic disadvantages, black women undergo "physical weathering" of their bodies, making pregnancy riskier (Geronimus, 1997). The alarming

inconsistencies with black women provide insight to assist providers to seek out equitable and appropriate individualized maternal care. The current statistics prove the devastating racial discrepancies in maternal healthcare and have been continually increasing instead of declining over the years. Many of the outcomes are completely preventable, and actions must be taken to provide the best overall care for all women regardless of race, culture, or background.

Problem

Black women have pregnancy related complications and maternal death at a comparatively high rate during childbirth and pregnancy than women of other ethnic backgrounds. Many of these deaths have proven to be preventable if recognized and treated earlier. Black infants have more post-natal complications and higher infant mortality rates than infants born to mothers of other races and ethnicities. In 1,000 live births, 11 black infants were likely to die during birth or in the immediate post-natal period, which is two times more than non-Hispanic, white infants (CDC, 2017). Various factors contribute to the cause of racial discrepancies in maternal health; however, specific cause of infant mortality in black populations have yet to be identified. Black mothers of different education levels, income status, and cultures endure similar complications of pregnancy.

There is insufficient evidence on the racial disparities in maternal health. Though the maternal-child differences in pregnancy outcomes in ethnicity and race are known, many of the proposed causative factors for the disparity have not been explored in detail. Identification of factors leading to poor outcomes in black women during pregnancy and labor is of value to improving complications and death in the maternal-child dyad. Identifying risk factors and implementing preventive measures to improve intrapartum and post-partum care in black women can have a positive effect on fetal development and life after birth. Exploring the disparities in childbirth and post-partum outcomes in black women and their infants can prevent poor outcomes and improve quality of care.

Purpose

The primary purpose of this literature review is to explore the factors leading to disparities black women experience in maternal health care. The secondary purpose of this review is to examine fetal birth-related complications, including fetal demise, and the relationship to disparities in maternal care. It is expected this research will identify risk factors surrounding disparities in the health-related indices of black women during pregnancy and preventive strategies to reduce poor outcomes.

Method

A literature review will be performed using research articles available from 1992 to 2020 regarding the factors influencing the high pregnancy-related complications and adverse outcomes in African American women. The focus will mainly relate to the disparities of black women compared to women of other racial cultures. Databases used to search for articles include EBSCOhost databases, Medical Literature On-Line (Medline), Cumulative Index to Nursing and Allied Health Literature (CINAHL), Google Scholar, and PsychInfo databases. Searches will use a combination of the following terms: 'Black women', 'maternal mortality', 'infant mortality rate', 'health disparities', 'Racial disparities', 'Stress', 'Discrimination', and 'Physiological differences'. Inclusion criteria will consist of 1) research articles using child-bearing participants of ages 18-45, 2) research journals published in the English language, 3) Research published from 1990 and onward. Articles that were excluded did not answer the study's research question and had little-to-no focus on the components that could affect the high pregnancy-related mortality and complication rates of black women.

The extracted data will be conformed into tables that synthesize maternal health discrepancies between black women and women of other racial backgrounds. The tables will also highlight the various factors affecting these discrepancies and their connection with pregnancy-related mortality and black women complications. Any additional information on maternal health disparities based on racial discrimination, physiological factors, socioeconomic status, and external stressors will be tabled based on the data. The data will be utilized to display evidence

that could help develop new research and solutions that could decrease the maternal mortality and complication rate of African American women.

Table of Evidence

Author (s) Year Location	Study Design & Purpose	Sample Size & Screening Measures	Results
Abdou, C. M., & Fingerhut, A. W. (2014)	<p>Cross-sectional survey research</p> <p>Wanted women in the experimental condition to be primed to think about: (a) their ethnicity and (b) popularly held negative stereotypes of Black females.</p>	<p>Black ($N = 94$) & White ($N = 68$) women</p> <p>Participants ranged in age from 22–82 ($M = 42.36$, $SD = 12.42$)</p> <p>Study procedures were approved by the Institutional Review Boards at the University of Michigan, the University of Southern California, and Loyola Marymount University.</p>	<p>For those high in ethnic identification, there is no difference in anxiety between Black and White women who do not experience threat.</p> <p>There is a significant ethnic difference in anxiety levels for strongly identified Black and White women who do experience threat, with Black women experiencing more anxiety than White women.</p>
Attanasio, L., & Kozhimannil, K. B. (2015).	<p>Cross-sectional, nationally drawn, web-based survey</p> <p>To assess ethnic disparities among patient-reported perceived discrimination in maternal care and measure the racial variations and the</p>	<p>Women age 18-45 who gave birth in US hospitals in 2011 and 2012 ($N=2,400$).</p> <p>The LTM 3 survey uniquely addresses factors not captured in other national</p>	<p>African- American and Hispanic women were more likely to report higher incidence of discrimination related to race, language, and cultural barriers. Women of these ethnic backgrounds without insurance reported experiencing twice as much discrimination in maternal health.</p>

	connection of the outcomes.	data sources, such as perception of communication with providers and perceptions of discrimination, and also collected detailed information about women's experiences before, during, and after their recent birth.	
Eltoukhi, H. M. et al. (2014).	Literature Review Examine the burden of disease from fibroid tumors in the African American population and review the natural history, diagnosis, and treatment of uterine fibroid tumors, with emphasis on how these can differ, depending on race.	Literature review of 55 articles published from 1988 through July 2013. Key words searched: Disparity, Hysterectomy, Leiomyoma, Patient Protection and Affordable Care Act, uterine fibroid tumor	Fibroid tumors are more common in African American women compared with women of other races and thus can present major health problems among African American women. African American women have higher rates of surgery for fibroid tumors and therefore may have more postoperative complications than other racial groups. More studies are needed on medical treatment options for African American women with fibroid tumors because similar treatments have different results in African American and white women.
Geronimus, A. T. (1992).	Systemic Review To examine if the health of African-American women begins to deteriorate in early adulthood as a	Systemic review of 297 articles published.	Non-Hispanic white infants, African-American infants with teen mothers experience a survival advantage relative to infants whose mothers are older.

	physical consequence of cumulative socioeconomic disadvantage.		<p>The black-white infant mortality differential is larger at older maternal ages than at younger ages.</p> <p>While African Americans and non-Hispanic whites differ on which maternal ages are associated with the lowest risk of neonatal mortality, within each population, first births are most frequent at its lowest-risk maternal ages.</p>
Handa, V. L. et al. (2008).	<p>Single Site, cohort study</p> <p>Use static and dynamic magnetic resonance imaging (MRI) to compare dimensions of the bony pelvis and soft tissue structures in a sample of African-American and white women.</p>	<p>This study used data from 234 participants in the Childbirth and Pelvic Symptoms Imaging Study, a cohort study of 104 primiparous women with an obstetric anal sphincter tear, 94 who delivered vaginally without a recognized anal sphincter tear and 36 who underwent by cesarean delivery without labor.</p>	<p>The pelvic inlet was wider among 178 white women than 56 African-American women (10.7 ± 0.7 cm compared with 10.0 ± 0.7 cm, $P < .001$). The outlet was also wider (mean intertuberous diameter 12.3 ± 1.0 cm compared with 11.8 ± 0.9 cm, $P < .001$).</p> <p>There were no significant differences between racial groups in interspinous diameter, angle of the subpubic arch, anteroposterior conjugate, levator thickness, or levator hiatus.</p>
Hogue, C. J. R., & Bremner, J. D. (2005).	<p>Systemic Review</p> <p>To examine the effects of maternal stress on preterm birth.</p>	<p>Systemic review of literature published from 1965 through July 2003.</p>	<p>Clinical trials are needed to pilot test methods to increase host immunity to stress through a variety of approaches (such as interdisciplinary studies of spiritual and meditation interventions, targeted blame reflection, increased</p>

		<p>Key words searched:</p> <p>Preterm delivery Stress Black race Racism</p>	<p>physical activity, and decreased social isolation).</p> <p>Preliminary indications suggest that stress reduction improves the health of hypertensive individuals of black descent. Investigations of these approaches might prove useful for pregnant black women.</p>
<p>Kennedy, B. R., Mathis, C. C., & Woods, A. K. (2007).</p>	<p>Literature Review</p> <p>This paper is a historical perspective of the African Americans relating to their distrust of research and the traditional health care system.</p>	<p>Literature review of literature published from 1972 through July 2004.</p> <p>Key words searched:</p> <p>African Americans, Health Care System, Distrust</p>	<p>The legacy of mistrust by African Americans has a long-standing history and will not be shed overnight.</p> <p>African Americans must be encouraged to pursue careers in the sciences to explain research to their communities and get minorities involved.</p> <p>The shortage of African American physicians and other health care providers partly explains why many blacks distrust the medical establishment.</p>
<p>Mehar, V. et al., (2016).</p>	<p>Hospital-based retrospective observational study</p> <p>The aim of this study was to find out immediate fetal outcome in meconium-stained amniotic fluid in relation to perinatal asphyxia</p>	<p>The study population included patients admitted to Neonatal Intensive Care Unit (NICU). Data were collected from the medical record department of the patients of NICU. The variable collected were age, sex, weight, mode of</p>	<p>Postterm (odds ratio [OR] =3.50 [CI: 0.39-31.42]) and term [OR = 2.58 [CI: 1.16-5.75]) babies were having more risk of developing MAS compared to preterm ($P < 0.01$)</p> <p>Postterm (OR = 9.15 (CI: 1.91-43.75)) and term (OR = 2.67 [CI: 1.41-5.08]) babies were having more risk of developing perinatal asphyxia compared to preterm babies ($P < 0.01$). MAS baby is having 6.62 (CI: 2.85-15.38) times more risk of developing perinatal asphyxia ($P < 0.01$).</p>

		delivery and GA.	
Patel, R. R. et al. (2004).	<p>Cohort Study (Prospective Observational Study)</p> <p>This UK-based study compares gestational length amongst a cohort of white European, Black and Asian women.</p>	<p>Analysis was performed on the nonattributable data set of 439 425 women who delivered between 1 January 1988 and 31 December 1998.</p> <p>Women with missing ethnic group data or ethnic groups not in our study were excluded (51 402). Other exclusions were women with multiple pregnancies (4727), antepartum stillbirths, or stillbirth of indeterminate timing, and induced or spontaneous abortions (964). Only nulliparous women (218 194 multiparous women excluded) and those who labored spontaneously</p>	<p>Black women with normal body mass index (BMI) (18.5–24.9 kg/m²) had increased odds of preterm delivery (odds ratio [OR] = 1.33, 95% CI: 1.15, 1.56, adjusted for deprivation and BMI) compared with white Europeans.</p> <p>The OR of preterm delivery was also increased in Asians compared with white Europeans (OR = 1.45, 95% CI: 1.33, 1.56, adjusted for single unsupported status and smoking).</p> <p>Meconium-stained amniotic fluid, which is a sign of fetal maturity, was statistically significantly more frequent in preterm Black and Asian infants and term Black infants compared with white European infants.</p>

		(excluded 41 723 women with induced or no labor) were included for analysis as previous preterm delivery is a risk factor for subsequent preterm delivery and those induced or who did not labor would not address the study aims.	
Sacks, T. K. (2018).	Single site, Individualized interview Study explores stereotyping, bias and the use of cultural health capital as a strategy to mitigate them.	The findings are based on 19 in-depth interviews and two focus groups, one with African-American lower-middle-class women and one with upper-middle-class women. In total, 30 respondents were enrolled in the study.	This study considered Black women's efforts to resist discrimination in health care settings. All study respondents acknowledged the pervasiveness of stereotypes of Black women, and the importance of adopting certain behaviors to mitigate discrimination.
Shaffer, B. L., et al. (2006).	Retrospective cohort study Examine factors that were associated with mode of delivery in the setting of face presentation.	Women in labor with cephalic, live, no anomalous, singleton fetuses who were diagnosed with a face presentation at	Fetuses in face presentation were more likely preterm, <2500 g, and black. An Apgar score of <7 at 5 minutes was more common in face presentation (10.9%) compared with vertex presentation (4.4%; $P = .018$).

		the University of California, San Francisco between 1976 and 2001	Rates of umbilical artery base excess <-12 or pH <7.0 were not different. Cesarean delivery was less common in women who received oxytocin (adjusted odds ratio, 0.18; 95% CI, 0.03-0.95) and in women with mentum anterior (14%) as compared with mentum posterior presentation (85%; $P < .001$).
Suplee, P. D., et al. (2014)	Multiple site, Individualized interview To describe the self-care and infant-care perception of first-time mothers from urban, low income areas during the first 6-month postpartum	13 women from ages 19 to 32, 6 black women and 7 Hispanic women, recruited from churches and local communities in Northeast America, participated in a 8-25 minute interview.	Participants identified financial concerns and living arrangements as major stressors. Participants, however, did not report discrimination due to language, race, and culture but did express seeking assistance with families before going to their health care providers.

References

Abdou, C. M., & Fingerhut, A. W. (2014). Stereotype threat among Black and White women in health care settings. *Cultural Diversity and Ethnic Minority Psychology, 20*(3), 316.

Attanasio, L., & Kozhimannil, K. B. (2015). *c Medical care, 53*(10), 863.

CDC. (2019, September 06). Racial and ethnic disparities continue in pregnancy-related deaths. Retrieved October 11, 2020, from <https://www.cdc.gov/media/releases/2019/p0905-racial-ethnic-disparities-pregnancy-deaths.html>

CDC. (2020, October 09). NVSS - Birth data. Retrieved October 11, 2020, from <https://www.cdc.gov/nchs/nvss/births.htm>

Eltoukhi, H. M., Modi, M. N., Weston, M., Armstrong, A. Y., & Stewart, E. A. (2014). The health disparities of uterine fibroid tumors for African American women: a public health issue. *American Journal of Obstetrics & Gynecology, 210*(3), 194-199. Retrieved 30 March 2018.

Geronimus, A. T. (1992). The weathering hypothesis and the health of African-American women and infants: evidence and speculations. *Ethnicity & Disease, 2*(3), 207-221.

Handa, V. L., Lockhart, M. E., Fielding, J. R., Bradley, C. S., Brubakery, L., Cundiffy, G. W., ... & Richter, H. E. (2008). Racial differences in pelvic anatomy by magnetic resonance imaging. *Obstetrics and gynecology, 111*(4), 914.

- Hogue, C. J. R., & Bremner, J. D. (2005). Stress model for research into preterm delivery among black women. *American journal of obstetrics and gynecology*, 192(5), S47-S55.
- Kennedy, B. R., Mathis, C. C., & Woods, A. K. (2007). African Americans and their distrust of the health care system: healthcare for diverse populations. *Journal of cultural diversity*, 14(2).
- Mehar, V., Agarwal, N., Agarwal, A., Agarwal, S., Dubey, N., Kumawat, H. (2016). Meconium-stained amniotic fluid as a potential risk factor for perinatal asphyxia: A single-center experience. *Journal of Clinical Neonatology*, 5(3), 157-61
- Osterweil, N. (2007, February 09). Black Women Have Excess Risk of Preterm Babies. Retrieved December 01, 2020, from <https://www.medpagetoday.org/obgyn/pregnancy/5031?vpass=1>
- Patel, R. R., Steer, P., Doyle, P., Little, M. P., & Elliott, P. (2004). Does gestation vary by ethnic group? A London-based study of over 122 000 pregnancies with spontaneous onset of labour. *International journal of epidemiology*, 33(1), 107-113.
- Sacks, T. K. (2018). Performing Black womanhood: A qualitative study of stereotypes and the healthcare encounter. *Critical Public Health*, 28(1), 59-69.
- Shaffer, B. L., Cheng, Y. W., Vargas, J. E., Laros Jr, R. K., & Caughey, A. B. (2006). Face presentation: predictors and delivery route. *American journal of obstetrics and gynecology*, 194(5), e10-e12.

Suplee, P. D., Gardner, M. R., & Borucki, L. C. (2014). Low-Income, Urban Minority Women's Perceptions of Self-and Infant Care during the Postpartum Period. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 43(6), 803-812.