UNDERSTANDING HEALTHCARE DISPARITIES AND IDENTIFYING SUPPORTIVE SPACES AND SERVICES THAT AIM TO REDUCE MORBIDITY AND MORTALITY AS WELL AS HOSPITAL READMITTANCE OF AFRICAN AMERICAN WOMEN AND THEIR BABIES

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Abstract

Introduction: Black women are more than 3 times as likely to die from pregnancy related deaths, and their babies are more than 50% more likely to be born prematurely(cdc.gov). These realities plague the United States healthcare system as these rates remain high. Supportive spaces for pregnant Black women and birthing persons have shown to increase birthing outcomes within this demographic thus improving patient satisfaction and decreasing patient readmittance and morbidity and mortality rates among their infants and newborns.
**Methods:** A systematic review of 125 articles was conducted using the 2020 PRISMA guidelines to identify the current level of knowledge of maternal mortality among Black women in the United States.

**Results:** Black women are significantly more likely to experience preterm birth of the newborn than are Hispanic and White woman and associated infant hospital readmittance due to this phenomenon. Black infants, have a high infant mortality rate before their first year of life than do other races, as they die at a rate two times that of White infants.

**Conclusions:** With Black women having a more than three times likelihood of dying during birth and Black infants being born prematurely more than 50% more than White and Hispanic infants, there is an identified problem with Black maternal and infant health.

**Keywords:** health disparities, maternal mortality, Black women

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**Introduction**

In 2019, the United Health Foundation recorded that African American women have a total of 12.3% of preterm births out of a total of 13.8% total in the United States (americashealthrankings.org). That calculates to more than 90% of all babies born to African American birthing persons being born premature, compared to the number of babies born to
Whites in America. These outcomes not only exist with preterm birth but also with fetal deaths. In 2003, there were an average of 11.3 African American fetal deaths per 1,000 births compared to 5.0 per 1,000 for Whites indicating nearly double the amounts of fetal deaths in African American infant (Bryant et al., 2010). These problems are compounded by the lack of healthcare equity and implicit biases within the healthcare industry when serving African American birthing persons. These outcomes may be improved by creating alternate supportive spaces and providing culturally relevant support to African American birthing persons during pregnancy and birth to increase patient satisfaction and decrease hospital readmittance.

**Background of the Problem**

There are many factors medically that may lead to preterm birth of the newborn. These medical factors are compounded when African American birthing persons experience significant external stressors and lack of support during the antenatal period. It is hypothesized that constant and extended exposure to stressors such as, discrimination, racism, and lack of voice in the healthcare settings and racial microaggressions can contribute to preterm birth and fetal death in African American newborns (McLemore et al., 2017). Other discussions have suggested that there is a
lack of supportive spaces, and resources for pregnant African American women to seek guidance in tailored settings that support African American birthing persons throughout their pregnancies when they are faced with a myriad of stressors.

**Statement of the Problem**

African American women experience far greater rates of poor birthing outcomes than other women of other racial subgroups. Research has been done to determine what biological, social and cultural indicators may be contributing factors to this ongoing and persistent issue. Additionally, if the eradication of these contributing factors can decrease poor birthing outcomes and hospital readmittance by African American birthing persons.

**Purpose of the Study**

The purpose of this study is to illuminate the need for supportive spaces, and resources available to African American women before, during and after birth to help increase outcomes related to fetal/newborn health. This study will identify potential stressors, obstacles observed by African American birthing persons and how resolving these issues can lead to better outcomes and decrease hospital readmittance for both birthing persons and infants.

**Research Questions**
Do lack of supportive spaces, resources and stressors associated with navigating the healthcare system and racial biases experienced within these systems contribute to poor birthing outcomes and hospital readmittance?

Significance of the Study

Preterm birth remains one of the most complex medical conditions to treat worldwide presently, minute changes have occurred to reduce the rate in which babies are being born prematurely (McLemore et al., 2017). This highly complex medical condition coupled with the high instance of preterm birth in the African American community causes alarm for medical and public health officials. The cause for alarm stems from the examination of statistical information showing that 40.8 non-Hispanic Black women die from pregnancy related complications which is more than half as high than other racial minorities (cdc.gov). Studies have also shown that out of 1,000 live births 10.8 Black infants will die, which is the highest mortality rate among all racial minorities (cdc.gov). This study seeks to examine the impact these factors contribute to preterm birth, morbidity, and mortality of the newborn as well as hospital readmittance. This study will also illuminate supportive spaces that prove to be useful in reducing the instances mentioned above.
Assumptions

The women in these studies reside within the United States, but there are some aspects of the data pulled from others who reside out of the US for comparison reasons. Most of the data compiled from the studies are in the mixed method format and must be assumed the responses for qualitative data are answered truthfully from participants.

Limitations

Limitations include limited information on varying factors that may lead of stress presented from varying sources (besides within the healthcare settings) that may also lead to poor birthing outcomes. The amount in which the participants follow the recommendations from physicians provided during pregnancy that may contribute to the poor birthing outcomes. And the specific elements indicated on surveys and intake that lead to hospital readmittance and the potential impact of overlapping conditions or comorbidities.

Summary

African American birthing persons have poor birthing outcomes in the United States due to many factors, many of which causing extreme stressors that may lead to poor birthing outcomes and the potential for hospital readmittance. Lack of support to help these birthing persons to
mitigate episodes of racism and biases also lead to excess stress and may contribute to poor birthing outcomes and hospital readmittance of the babies and mothers. In the following chapters healthcare disparities, stressors, racism, and biases in obstetrical care, and supportive spaces and people will all be discussed along with their relationship to birthing outcomes and readmittance.

**Methods**

Data for this project was compiled using keyword searches of scholarly articles. These articles were selected due to their relevance of the topic title and associated data that was needed to ensure adequate information was provided to cover all subject in the research questions. Most articles were found using the National University Library search engine, but some were also found using Google Scholar. All articles were scholarly quality and peer-reviewed or for healthcare journals. Additionally, all website information was pulled from reputable sources such as Centers for Disease control.

**Research Questions**

The research question asked was: Do healthcare disparities and lack of supportive spaces in the African American communities lead to poor
birthing outcomes? Another Question that was addressed in this paper was how can this knowledge be used to decrease hospital readmittance and morbidity and mortality of Black infants?

**Description of the Participants**

Participation in the studies examined to compile data for the literature review was voluntary. All participants were approached at local clinics, word of mouth and by usage of posted flyers.

**Instrumentation**

Instrumentation used to compile peer reviewed scholarly articles were found through the search of online sources such as: PubMed, ProQuest, Google Scholar, HHS Public Access, NIH Public Access, and American Journal of Preventative Medicine.

**Data Collection Procedures**

The methods used to collect data for this study were intensive searches done through the National University Library as well as Google Scholar. Other resources that were used were Plos 1, a scientific database of free articles. Keywords used to find articles include Black Maternal Health, Black Infant Health, Black maternal health disparities, Decreasing hospital readmittance, Patient satisfaction and readmittance, hospital readmittance and complex births.
Data Analysis and Results

Data was analyzed using the grounded theory, were the initial conceptualization of the problem and the factors were done months before. The data collected were categorized into different groups, and then common threads were identified, and conclusions made. The first group of articles that were collected consisted of the supporting evidence for the Black infant and maternal health crisis. This information provides the basis for the research and potential leads to why there are stark differences in outcomes among Black women and other racial groups. The next group of articles that were collected were potential factors that lead to poor outcomes before the hospital experience. These articles focused mainly on perceptions of Black women when they sought out medical care before delivering their baby. The third group consisted of articles that detailed the positive effects that women have when they utilize support networks (doulas, maternal meeting groups or public health entities such as Black Infant Health). And the final group were article that indicated a strong linkage between poor patient outcomes and hospital readmittance.

Ethical Considerations

This literature review did not require the approval of the Institutional Review Board (IRB) all information was a compilation of previously
performed studies by previous authors and not human studies were conducted in the process of this review.

**Results**

The data collection for this study was done by compiling data on preexisting research. The data collected to complete this scholarly work includes peer reviewed articles, and data from validated sources such as the CDC. With Black maternal and infant health being a target for improvement in healthcare and recognized as a public health concern, many articles for this topic are available in University libraries as well as sites such as google scholar.

**Poor Birthing Outcomes in African American Women and their Babies**

Preterm birth and poor birthing outcomes have been a prevailing factor of neonatal morbidity and mortality. Black women are significantly more likely to experience preterm birth of the newborn than are Hispanic and White woman and associated infant hospital readmittance due to this phenomenon. Black infants, have a high infant mortality rate before their first year of life than do other races, as they die at a rate two times that of White infants (Alhusen et al., 2016). This phenomenon has been examined to determine the root cause of this occurrence, and the answers are not easily defined. Common themes are illuminated in research show
indications that the following may be contributing factors: socio-economic stressors, lack of supportive spaces, patient-provider interaction/satisfaction, perception of discrimination within the healthcare system. In the following pages, these topics and decreasing hospital readmittance and morbidity and mortality of the black infant will be discussed.

**Socio-Economic Stressors**

Many factors contribute to the stress of African American women during pregnancy. These stressors can arise from factors such as food insecurity, employment status, living in high crime neighborhoods and carceral status. Black women are more likely to live in areas that have abandoned commercial building, litter, and experience racial discrimination than do Hispanic and White women (Giurgescu et al., 2021). The culmination of many stressors can lead to many mothers missing the signs and symptoms that may lead to preterm labor, or the effects that the continued stress has on the mother’s body. A study conducted by McLemore et al. (2018), concluded that many participants in the study felt they were under extreme stress due to lack of support and being single parents. They stated that they believe this extreme stress has negative impacts in their pregnancy. Other contributing factors that were addressed
in the study were, food insecurity, joblessness, and inability to obtain childcare for other children in the household (Mkandawire-Valhmu, 2018). In another study, many if the women were multigravida and the difficulty in obtaining childcare for their children prevented many of these mothers from attending prenatal visits. These three factors showed that the intersection of low paying jobs, difficulty in obtaining childcare and inability to make prenatal visits were a significant issue and could lead to poor birthing outcomes (Mkandawire-Valhmu, 2018).

Many Black women also expressed that they felt extreme stress from carceral involvement, whether that be from their partner or their own. In a study conducted by Monica McLemore et al. (2018) participants commented on fear the felt experienced in confiding in healthcare providers about their pregnancies for fear that they would be reported to public agencies about their ability to care for their unborn babies. This stress is also echoed in another study that stated Black women experience depression due to their inability to seek help for constant stressors due to their fear to confide in healthcare professions due to the stigmas about having their children taken away from them (Dove-Meadows et al., 2020). Carceral involvement can lead to undue stress for some Black women and many women that expressed this stress, either for themselves or their
partner expressed significant stress about being stigmatized in the healthcare setting (McLemore et al., 2018). This prolonged stress led to an allostatic load that could be a contributing factor to poor birthing outcome and preterm birth (McLemore et al., 2018).

Another issue that arose due to socio-economic factors that many Black women experience, was environment. Many Black women, reside within urban areas due to income, and this sole factor regardless of educational attainment was a major indicator of hazardous to the health of the unborn fetus (Emanuel et al., 1989). This environmental factor is not just strictly in relation to the time around birth, but also regarding the mother’s development and the environment in which she grew up in and the effects on her reproductive health, as it may also have contributed to exposure to hazardous environments that may further lead to adverse maternal health (Emanuel et al., 1989).

Another aspect associated with socio-economic status and environment that arises for black women is crime experienced in the areas in which Black women reside. Violent crimes for black women are intense sources of stress, homicide is the second leading cause of death and sexual assault is third for violent crimes committed against Black women (Giurgescu et al., 2021). Black women are exposed to violent crimes four
time more likely than are Hispanic and White women within a half mile radius of their homes (Giurgescu et al., 2012). With the added stress that these factors contribute Black women those that frequently experienced medium to low violent crime rates within their community were more likely to suffer from preterm birth (Giurgescu et al., 2012).

Support Systems

The lack of healthy and strong support systems during pregnancy and after birth can lead to an immense support of stress on Black mothers. In the African American community, it seems that there is an increased expressed issue with support systems for these women during and after birth. These disparities in support systems are not just familial support but also support in the community as well. In a study conducted in Milwaukee, a group of researchers organized a support group for Black women in an urban environment to mentor pregnant woman over the duration of their pregnancy. This was done to see if there were increased birthing outcomes in these Black women with community support, and decreased instances in preterm birth and low-birth weight. Though the groups were small, the outcomes were promising, as they noted that many of the women were able to carry their pregnancies to full term. Not only were they able to promote positive birthing outcomes for these women, but they were also
able to complete an assessment of services and resources that are needed in these communities. Within this study, they were able to have a resource member attend appointments, the resource staff would help the participants in understanding information being conveyed in the appointments and assist in conveying needed information to healthcare professionals that the participant was not comfortable or able to tell medical staff on their own. The participants were essentially given access to a support system they would otherwise not have access to had they not been involved in the study. Overall, the study shows that when communities find creative ways to actively engage women in interventions that will assist in health promotion it will not only aid in enhancing birthing outcomes, but also establish community cohesiveness (Mkandwire-Valhmu, 2018).

The resounding motif that can be found in many of these studies is that involvement from the community to help Black women in need easily seek out and connect to needed support is essential. Community involvement provides a rare opportunity to provide disadvantaged groups with essential needs that help to improve birthing outcomes such as housing, referrals to social services, assistance with food insecurity (SNAP), and many other important and needed supportive services to
maintain their health and prepare for the coming of their newborn and alleviate undue stress (Mkandawire-Valhmu, 2018).

Another source of support for Black women in the healthcare system can come from the use of doulas in the healthcare setting. Doula’s can bridge the gap between the patient and healthcare provider and healthcare systems by imparting knowledge to their clients about aspects about pregnancy and pertinent healthcare decision and the natural progression of pregnancy (Kozhimannil et al., 2016). A doula can be an integral part of the healthcare team that assists Black women with many services, such as educating them on how to navigate difficult pregnancy outcomes, care for their newborn, development of a birthing plan, and healthy management of their birth. Increasing literature and studies have shown that the presence of a doula during pregnancy and after pregnancy has the potential to disrupt the process of poor birth outcomes and provide much needed support to Black women during pregnancy (Kozhimannil et al., 2016).

**Patient- Provider Perceptions of care and Feelings of Discrimination**

One of the prevailing themes in the research done was that Black women felt that they were being dismissed or discriminated upon when receiving prenatal care. Many Black women stated that they have experienced racism directed at them or some sort of institutionalized racism.
while receiving prenatal care (Alhusen, 2016). In many of the studies conducted, women spoke of feeling like they received different care since they were using Medicaid, compared to other patients in the clinics. Some women describe going into their doctor’s office with concerns of cramping and bleeding (which could be possible indicators that the woman is going into preterm labor) and feeling as if they were being dismissed. These experiences lead many Black mother’s to not want to return to their physicians or a lack of trust in judgement in the physician overall. Many Black women spoke of the impersonality of the whole situation as well. One woman spoke of the birth of her child and the situation being so impersonal, and since she was on Medi-cal, when she delivered her baby, she had another physician there so she didn’t know the physician at the delivery and it was a mechanical process, that she perceived would have been different had she been in different circumstances (McLemore, 2018).

Though many women had very cold, discriminatory experiences some offered hope and guidance on how to improve interactions with Black women in perinatal settings. Listening to the concerns of black women was one of the biggest steps. Many women expressed feeling like they were dismissed in the offices and essentially rushed through an exam and out of the office. Black women would like to be provided the time to be listened to,
to express their concerns about their pregnancy and have questions answered. Providing women with the information that they need to have a healthy pregnancy and seek help when needed. Many women felt after being rushed through the exam they didn’t know what the next steps were. They were just told to schedule another appointment and that was all. This left women with a feeling like they were leaving the exam with nothing (Roman, 2017). Black women would like to be provided with the information needed to have a healthy pregnancy whether that is information on how to monitor and maintain a comorbidity during pregnancy (hypertension, diabetes) or access to counseling services as they are feeling more stress since conception, providing women the time and the tools will help foster a healthy patient-provider relationship. Lastly, many women that experienced a healthy relationship with their provider indicated that communication had a significant impact on the satisfaction of prenatal care satisfaction. This was also an indicator of quality care and a key component in a long-lasting relationship with the provider (Dahlem, 2015)

Given the marked disparities in Black maternal and infant health many communities have taken action to implement support program to try and improve birthing outcomes. Black Infant Health is a community-based program that is set to provide information and support for Black pregnant
women. This organization held listening session in which they sought to gain information about these women’s experiences while pregnant. These women were provided childcare so that they were able to attend these sessions and transportation if that was a barrier for them to participate. These sessions were a safe space for these women to speak about experiences they had in healthcare settings, healthcare discrimination and birthing experiences (McLemore et al., 2018).

**Navigation and Access to Healthcare**

Many Black women who do not have access to health care find accessing public insurance to be a huge detriment to initiating and keeping up with prenatal care. One of the first steps towards getting the care they need is recognizing they are in fact pregnant. This first step for some women, is the first time they will access healthcare on their own since they were children. This process can be lengthy and difficult, especially if there is a difficulty with transportation and access to childcare (McLemore, 2018).

Once in the door, many women experience an overwhelming experience of paperwork on their first office visit to the doctor. This for many women, they stated was very confusing and led to a massive amount of stress. Since they had to complete a lot of paperwork, that made for a long initial doctor visit and then to be rushed in and out of the doctor’s
office. This made a lot of women feel as if they were just a number and being grouped into a “Medicaid” group and not seeing the individual. In fact, it was noted that positive experiences were noted by women that reported they had well-established relationships with their physicians and care teams (Roman, 2017).

Lastly, a portion of pregnancy not investigated is postnatal care. To follow up on the care of the mother and her health as well as well baby visit to assess the growth and development of the newborn. These visits can cause stress for some of the same reasons mentioned above, access to childcare and ability to find transportation to the visits. Women reported that with the follow up appointments for the mother’s if they did not have a well-established relationship with the physician during the pregnancy the mother was less likely to show up for postnatal visits. This could often lead to missed interventions for possible infections, postpartum depression symptoms, chronic illnesses, and future contraceptive use (Roman, 2017). On the other hand, women were more than likely to show up for the well-baby visits for their children, and often felt comfortable in their skill to care for their newborns.

**Decreasing Hospital Readmittance**
Preterm birth is one of the largest adverse birthing outcomes of Black women (cdc.gov). When Black women give birth to a preterm baby, they have a higher instance of problems occurring with their preterm infant. Many preterm babies experience health issues such as, infections, cardiorespiratory issues, sudden infant death syndrome (SIDS), gastrointestinal issues, hernias, anemia, hearing and neurological and neurodevelopment sequelae (Blackburn, 1995). These are major issues that if not properly treated in the hospital setting may lead to the readmittance to the hospital of a newborn child.

To decrease the potential of hospital readmittance in Black women, the first step needs to address adverse health outcomes, and patient satisfaction. With many of the adverse outcomes with Black women stemming from poor interactions with the healthcare system, these need to be addressed first. Studies done have concluded that there tends to be a correlation between patient satisfaction, patients’ safety, and patient outcomes (Kennedy et al., 2014). Capturing the patients voice when they have experienced adverse health outcomes and poor experiences in the hospital setting is so important, as it will help to determine the changes that need to make within the healthcare setting to ultimately decrease hospital readmittance.
Currently hospitals are required to report survey results that they conduct on the patient’s perception of care. These surveys are important as they provide invaluable information to CMS, that can offer incentives if they meet or surpass the standard for the year (Tripathi et al., 2021). These surveys can then be used to determine the inadequacies of care that black women are experiencing during their pregnancies and enact tangible change that can not only increase birthing outcomes, but also decrease the instances of readmittance of their infants.

Discussion

This section will identify the conclusions drawn from data that was compiled in the process of researching the problem of poor birthing outcomes in Black birthing persons and how supportive services and patient satisfaction may help decrease hospital readmittance. This section will review some recommendations that can be made for further study on the above listed topics. With the information found in researching the problems listed within this capstone, additional research may be completed to further illuminate the problem as a whole and the factors that may be contributing to the problem.

Recommendations for Further Study
Further recommendations for future research would need to examine resources that should be available to Black women that would further aid in promoting better birthing outcomes in these women and their babies. With the information that was included in the research done to complete this project, there was not a specific list of resources that may be needed to improve the birthing outcomes. Knowing that many of the items that can contribute to poor birthing outcomes, there needs to be further research into resources that need to be available due to identified risk factors that lead to negative outcomes. This includes resources for mental health, addressing food and housing insecurities, resources to help with following specific plans of care for high-risk pregnancies, and many more. This research could be illuminating and provide the framework for enacting change at the patient level.

Additional research should also be done to see what healthcare facilities are actively doing to decrease these health disparities. This should detail the plans that are being enacted at the practitioner level. Since, most of the research provided information on the perceptions of Black women and their interaction with medical staff, this is an area that needs to be examined and evaluated to determine if the changes need to be made.

Conclusions
To draw conclusions from the research that was done to illuminate the problem with poor maternal and infant outcomes in Black women, the lack of supportive services for this demographic and impact on hospital readmittance we can first address that there is a significant problem with birthing outcomes. In nearly all the articles found in the completion of this work, there are numerous statistics that point to poor outcomes for Black women and babies. This issue is compounded by the extreme racial healthcare disparities that are also seen within this demographic. With Black women having a more than three times likelihood of dying during birth (CDC, 2022) and Black infants being born prematurely more than 50% more than White and Hispanic infants, there is an identified problem with Black maternal and infant health. Appendix 1 shows some of the stark realities of pregnancy related death between three racial groups.

Another conclusion that was illuminated by research was that supportive services for Black women help to improve the birthing outcomes of Black women and babies. These supportive services can range from public health entities such and Black Infant health or the availability of a Birth Doula. According to research, these services provide women with support in the healthcare setting by advocating for their needs, providing explanation to medical information relayed from the physician and with
planning their birth and making sure that the care is in line with the patient’s cultural practices. These supportive services can also provide information and resources for Black mothers when they are in need, and to improve maternal health and access to care. There are numerous benefits that can be had by having supportive services for Black mothers during pregnancy, and all of them lead to better patient outcomes, better patient satisfaction and less hospital readmittance.

A conclusion that can be drawn from the research, is that by increasing patient outcomes, hospitals can decrease the instance of hospital readmittance. Studies reviewed in this work have shown that the more satisfied a patient is with the care that they received there is more patient autonomy in care and a decreased instance of hospital readmittance. In the image below, you can see that when patients were more satisfied with their overall care and if they feel like the physician listened to their needs, they had a higher likelihood of not being readmitted to the hospital.

Patient satisfaction is assessed on many different categories, and patients that are provided culturally competent and holistic care tend to have better experiences with birth as they feel “heard” and recognized as an integral part of their own care.
Conflict of Interest to Declare

The authors have no conflicts of interest to disclose.

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References


https://doi.org/10.1097/nna.0b013e31825738ed

https://doi.org/10.1177/0193945914533747

https://doi.org/10.1097/nmc.0000000000000589


to address maternal outcome disparities. *International Journal of Environmental Research and Public Health, 18*(9), 4933.

https://doi.org/10.3390/ijerph18094933


https://doi.org/10.1016/j.ajog.2015.08.019


https://doi.org/10.1371/journal.pone.0237314


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Appendix 2: Patient Satisfaction

Patient Satisfaction Impacts Readmissions

30-day Readmission Likelihood

40
38
36
34
32
30

Patient Satisfaction

Very satisfied with their care

Physician listened carefully


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Appendix 3 PREGNANCY RELATED DEATHS

This graphic shows the relation between pregnancy related deaths between women of three different racial backgrounds.
This chart shows the relationship between patient satisfaction and the likelihood of hospital readmission within the following 30-day time frame. Patients that were very satisfied with their care were 39% less likely to be readmitted to the hospital in 30 day and patients that indicated that their
provider listened carefully to their needs were 32% less likely to be readmitted to the hospital in the next 30-da